2 Design

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Design is the process whereby information about a problem or challenge, its context, and relevant stakeholders is gathered, assessed, and then used to plan an intervention that addresses the problem, whether fully or partially. It is a multi-step process that includes parallel activities of context assessment, root cause analysis, the development of an intervention logic or theory of change, and laying out plans for monitoring, evaluating, learning from, and modifying the intervention as it is implemented.

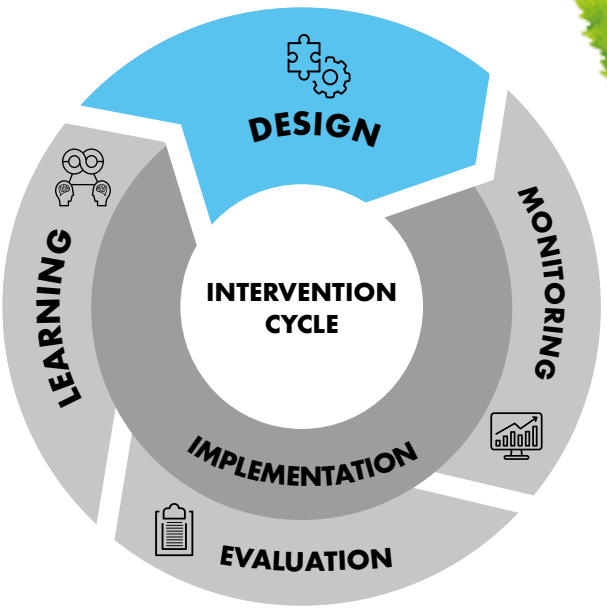
This chapter will help you:

- Be aware of the monitoring, evaluation, and learning dimensions to consider when designing environmental peacebuilding interventions.
- Be familiar with the four core context analysis activities that inform design processes, namely, needs assessments, stakeholder identification and analysis, conflict analysis, and environmental and social impact assessment.
- Understand the key considerations—including systems theory and complexity, gender, participation and inclusion, and conflict sensitivity—to bear in mind when designing environmental peacebuilding interventions.
- Develop appropriate theories of change for environmental peacebuilding interventions.
- Develop appropriate indicators for environmental peacebuilding interventions.
- Develop appropriate plans for monitoring, evaluation, and learning as part of the design process.

2.1. Introduction

For purposes of this Toolkit, **"design" is the process whereby information about a problem or challenge, its context, and relevant stakeholders is gathered, assessed, and then used to plan an intervention that addresses the problem**, whether fully or partially. It is a multi-step process that includes parallel activities of context analysis (including root cause analysis), the development of an intervention logic or theory of change, and laying out plans for monitoring, evaluating, learning from, and modifying the intervention as it is implemented. A good design process that is intentionally undertaken in an inclusive, participatory, and conflict-sensitive way is essential for relevant, effective, and sustainable interventions that avoid doing harm. It is also imperative for good monitoring, evaluation, and learning, since it is challenging to monitor and evaluate an intervention that lacks clear logic. Developing a plan for monitoring, evaluation, and learning at the start also helps ensure that there are shared expectations about the process of collecting information on and assessing the intervention and that sufficient resources are available to undertake these activities.

While the specific designs of environmental peacebuilding interventions (i.e., projects, programs, and other activities) are beyond the scope of this Toolkit, the design phase also includes many dimensions related to monitoring, evaluation, and learning. This Toolkit, and particularly this chapter, focuses on those dimensions.



Design of environmental peacebuilding interventions is different in three important ways. First, there are often **blind spots**. While environmental peacebuilding interventions are at the intersection of environment/natural resources/climate change and peace/conflict/security, the people and organizations designing an intervention often come from a particular sector (environment, peace, etc.). They have specific training, expertise, and mandates that can leave gaps when it comes to the multi-dimensional work of environmental peacebuilding. The various context analysis tools outlined in this chapter help to identify and address potential blind spots (e.g., a conflict analysis that helps a conservation organization to understand conflict dynamics and risks). Second, as a new field, **environmental peacebuilding theories of change are often under-developed**. There is evidence to support these theories of change, but it

tends to be anecdotal, so we do not reliably know when a particular theory of change will work under the circumstances of a particular conflict context. Third, there is a paucity of **indicators** that span both the environmental and peace/conflict dimensions, and there is a dearth of overarching indicators that would be relevant across all environmental peacebuilding theories of change and activities (and indeed there is a question regarding whether overarching indicators are something to strive for).

This chapter on Design has two major sections: first, preparing for design, and then undertaking the design itself.

The section on preparing for design focuses on what a practitioner needs to know as they design the intervention and the accompanying monitoring, evaluation, and learning dimensions. These include four common assessment tools: needs assessment, stakeholder identification and analysis, conflict analysis, and environmental and social impact assessment (ESIA). It also includes four key considerations: systems theory and complexity, gender, participation and inclusion, and conflict sensitivity.

The design section focuses on three elements that are particularly important to designing environmental peacebuilding interventions: theories of change; indicators; and plans for monitoring, evaluation, and learning. For each of the three elements, we describe general good practices and then consider the environmental peacebuilding dimensions.

Environmental peacebuilding is a meta-framework that comprises a wide range of activities across the conflict life cycle operating at different scales and using different natural resources and environmental features. As such, there is a substantial and diverse range of theories of change, each with its accompanying indicators. Annex 2-I provides an illustrative list of environmental peacebuilding theories of change, and Annex 2-II provides an illustrative list of indicators that may be used for monitoring and evaluating environmental peacebuilding interventions. At the end of this chapter, there are worksheets to guide practitioners on theories of change, indicators, and integrating gender.

2.2. Preparing for Design

Before actively undertaking the process of designing an intervention, it is necessary to collect and synthesize information on the context, including the needs for the intervention, the conflict context, and the potential environmental and social impacts of the intervention. It also requires consideration of key dynamics, including systems and complexity, gender, participation and inclusion, and conflict sensitivity. These are discussed in turn.

A. Context Analysis

Environmental peacebuilding interventions often take place in contexts that are complex, multi-scalar, and multi-layered. As a result, it is essential that practitioners have a comprehensive and holistic understanding of the context in which they work in order to effectively develop those interventions and their underlying theories of change. This understanding encompasses contextual information such as

- the root causes and drivers of conflict and environmental challenges,
- current governance institutions and mechanisms,
- existing environmental features and natural resources, and
- sociocultural norms, as well as any other dynamics that have the potential to either exacerbate conflict and environmental challenges or promote peace and sustainability.

Depending on resources and the need to implement an intervention on short notice, it may not always be

feasible to develop a full, comprehensive context analysis (see Box 2.1).

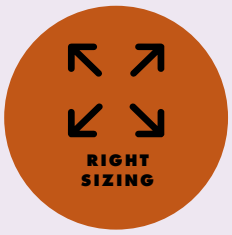
For this reason, **context analysis is a fundamental step in preparing to design an environmental peacebuilding intervention.** Because of the multi-faceted nature of environmental peacebuilding work, a comprehensive context analysis needs to address the conflict, the environment, and the needs of relevant stakeholders. A context analysis could therefore include any of the following analytical activities:

- A needs assessment
- A stakeholder identification and analysis (SHIA), including the personas tool
- A conflict assessment
- An environmental and social impact assessment (ESIA)

These assessments focus on specific aspects of the intervention context and ultimately contribute to the identification of clear and attainable environmental peacebuilding objectives or outcomes, the pathways to achieving those outcomes, and indicators for measuring results (UNDG 2017).

In addition to providing information for good intervention design, context analyses also generate contextual and system awareness among staff and stakeholders who may not fully understand the current dynamics without such an analysis. If done well, context analyses—and particularly needs assessments—can also build stakeholder buy-in for the intervention; if stakeholders are involved in the process and if it results in an intervention grounded in their needs, they are more likely to support that intervention. Finally, context analyses may also produce information for baseline values for quantitative or qualitative indicators (discussed in Section 2.3). A similar analysis repeated periodically throughout the intervention can help to map the intervention's progress and any evolving challenges; it is also a good tool for monitoring.

Box 2.1: Something to Consider – Right-Sizing your Context Analysis



It is important to adapt the assessments discussed here to your particular context, including the available resources, conflict constraints, and cultural norms. Choose processes or methods that are based on your specific intervention's needs. That said, it is generally helpful to spend some time on each type of assessment; when combined, they provide a more exhaustive picture of the context and, thus, a better starting place for intervention design.

Objectives of a Context Analysis

While there are many general resources available on different types of context analysis such as those described here, these analyses serve several particularly important functions within the scope of environmental peacebuilding work. One of these is **understanding the linkages between environmental changes, environmental governance, and natural resource management on the one hand and conflict and peacebuilding on the other** (Le Billion 2001; Kovach & Conca 2016). Research has found that historically some post-conflict assessments often overlooked or failed to appropriately prioritize key environmental concerns (Kovach & Conca 2016). Conducting a comprehensive context analysis allows one to understand not only what the environmental concerns are but also how they may be intertwined with conflict dynamics.

Additionally, **environmental peacebuilding work is likely to benefit from participatory and inclusive context analyses that involve multiple stakeholders with different perspectives and areas of expertise.** Each stakeholder's unique perspective and specific skillset or experience helps to develop a more complete picture of the context, including crucial elements that can make or break an intervention. Additionally, as mentioned above, participatory and inclusive processes can (if done in a conflict-sensitive manner) improve the likelihood of an intervention's success.

A context analysis grounded in systems thinking can also help the intervention to more accurately and fully capture important contextual dynamics. Using systems thinking, a context analysis can map and help to prioritize the myriad social, economic, cultural, and geographic aspects of the context and produce an awareness that can further augment the relevance, effectiveness, and sustainability of an intervention while also setting the stage for capturing the impacts of intervention activities on those systems over time.

Timing

It is recommended that you conduct a context analysis prior to designing an intervention and then update it regularly (and as appropriate) during the intervention's implementation. This helps to proactively ensure that the resulting intervention is grounded in that context and designed to be responsive to key context dynamics, which in turn means it is more likely to be relevant, effective, efficient, sustainable, and impactful. When you conduct a context analysis, it is important to acknowledge that it will necessarily rely on imperfect information, and (depending on the fluidity of the context) it will likely need to be completed quickly in order to be of use.

Context analyses can also be used reactively to respond to changes in the context and undesirable intervention results or continuously as a component of the monitoring and evaluation (M&E) plan. Since analysis of an intervention's operating context significantly shapes its theory of change and selection of activities, regular review and reassessment of that operational context once the intervention is underway has the potential to transform the intervention's future direction and implementation (see Figure 2.1). This reassessment of an intervention's context—known as "triple-loop learning"— is explored in more depth in Chapter 5 (Learning).

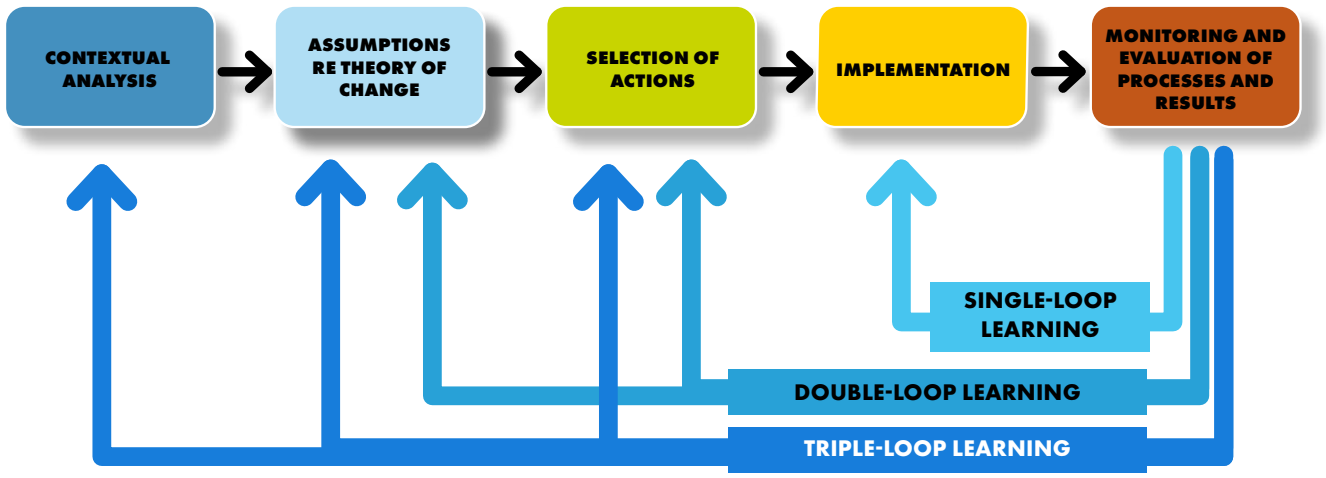


Figure 2.1: Learning Feedback Loops
Source: ELI, drawing upon Tamarack Institute (n.d.).
Note: This figure does not show the more complex dynamics often present in learning processes.

Needs Assessment

A needs assessment is a process for identifying, understanding, and prioritizing gaps between the current situation and the desired situation or results (Kaufman et al. 2003; Watkins, Meiers, & Visser 2012). As such, needs assessments are precursors to and essential for defining the appropriate strategies, solutions, or activities for an intervention. They provide value by offering logical, rigorous, and structured methods for collecting information and making decisions based on that information[1]. It is important to note that the gaps identified in a needs assessment will differ based on who is defining the current situation, the desired result, and the ways of achieving it. See Box 2.2 for examples of different needs assessments.

How to Conduct a Needs Assessment

To ensure an appropriately full understanding of intervention-related needs, a needs assessment generally consists of the following steps:

1. **Identify scope:** As a starting point, determine what decisions the assessment is meant to inform, and based on that, the boundaries of the assessment. These boundaries will be geographic (where), thematic (what), and they should also address methodology (how) and beneficiaries, participants, and stakeholders (who, with particular consideration of gender). An assessment of scope should adopt a systems approach to assess risks, impacts, and opportunities. For environmental peacebuilding interventions, needs assessments need to capture the conflict dimensions of environment and natural resources as well as the environmental dimensions of conflict. Similarly, it can be valuable to incorporate stakeholder perspectives early on, including at the scoping stage. That said, both the broader systems approach and stakeholder engagement can take substantial resources, so it behooves intervention designers to right-size these steps.

1. Post-conflict needs assessment processes have included Post-Conflict Needs Assessment (PCNA), a Poverty Reduction Strategy Paper (PRSP), and a UN Development Assistance Framework (UNDAF) (Kovach & Conca 2016).

Box 2.2: Types of Needs Assessments

This section focuses on project-level needs assessments. However, there are several other types of needs assessment tools and frameworks depending on the scale and size of the project. The following is an illustrative list of other types of needs assessments:

Strategic Needs Assessments:

- World Bank Post-Conflict Needs Assessment (PCNA): http://web.worldbank.org/archive/website00523/WEB/PDF/PCNA_TOO.PDF
- Post-Disaster Needs Assessment (PDNA): https://www.who.int/publications/i/item/post-disaster-needs-assessment-guidelines
- Poverty Reduction Strategy Paper (PRSP): https://documents.worldbank.org/en/publication/documents-reports/documentdetail/681651468147315119/macroeconomic-and-sectoral-approaches
- The UN Development Assistance Framework (UNDAF): https://unsdg.un.org/resources/united-nations-development-assistance-framework-guidance
- Environmental Needs Assessment in Post-Disaster Situations: https://wedocs.unep.org/bitstream/handle/20.500.11822/17458/env_needs_assmt_post_disaster.pdf?sequence=1&amp%3BisAllowed=

Project-level Assessments:

- World Bank, A Guide to Assessing Needs: Essential Tools for Collecting Information, Making Decisions, and Achieving Development Results: https://documents1.worldbank.org/curated/en/644051468148177268/pdf/663920PUB0EP-l00essing09780821388686.pdf
- UNDP, MDG Needs Assessment Tools: https://www.undp.org/publications/mdg-needs-assessment-tools
- Operational Needs Assessment: https://www.forvis.com/article/2022/04/how-operational-assessment-can-help-plan-future

2. **Consult stakeholders:** Broad-based stakeholder participation during a needs assessment will allow practitioners to triangulate information, synthesize a more comprehensive and accurate contextual understanding, and yield more constructive dialogue and cooperative decision-making. Ask the following questions:

    a. Who needs to be involved, particularly from the perspective of the intervention's likely sustainability? Make sure to consider those who have been historically marginalized, who have the power to support or undermine the intervention, and who have a unique perspective to contribute.

    b. What role do these stakeholders play?

    c. Who are the spoilers?

    d. Who will serve as partners or provide expertise?

    e. How can these stakeholders be engaged in a conflict-sensitive way?

3. **Identify needs:** Needs are gaps in results. Processes, activities, or resources are the means to move from current conditions to desired results. Therefore, for this step, you should focus on the underlying needs (gaps in results) rather than the mechanisms (processes, activities, or resources) to address them. To do this:

    a. Explore and gather information about current conditions or state of affairs, including both environmental and conflict dynamics.

    b. Explore desired or optimal conditions or states of affairs.

    c. Utilize a participatory and inclusive approach when possible. Remember that different stakeholders or stakeholder groups will likely not agree on the most important needs.

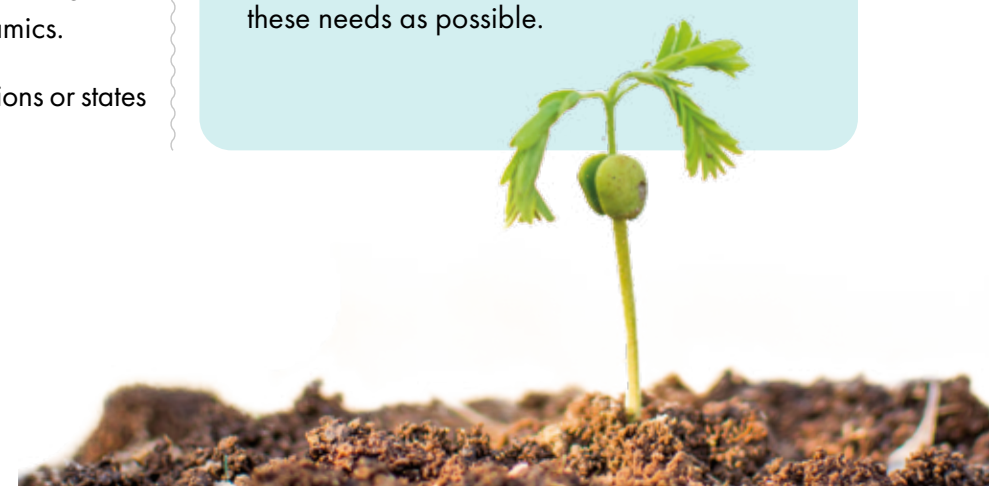
    d. Remember to explore the different kinds of needs (see Box 2.3).

Box 2.3: Something to Consider—Different Types of Needs

Remember that needs may differ depending on who articulates them and how. There are four types of needs to consider when conducting a needs assessment (Bradshaw 2013):

1. **Normative needs** are those that an "expert" may identify, such as those related to achieving or maintaining a nutritional or ecological standard.
2. **Felt needs** are what an individual or group wants or feels is important. It is based entirely on their perceptions.
3. **Expressed needs** are needs that an individual or group explicitly asks for in some way.
4. **Comparative needs** are those that arise when one group is lacking something that another, similar group has.

When conducting a needs assessment, be inclusive of different stakeholder groups and use multiple methods to capture as many of these needs as possible.



4. **Analyze**

   a. Analyze the information collected to understand the difference or "gap" between current and desired conditions.

   b. Prioritize identified needs and "gaps." Environmental peacebuilding work engages and affects a variety of stakeholders and systems, and it is important to remember that different stakeholders will likely have different priorities.

   c. Think through systems dynamics: How do the various components or pieces of the systems interact or affect each other, and how might they in the future? How might an intervention interact with the conflict and environment context and vice versa?

5. **Decide/Design**

   a. Design the intervention to address (diminish or eliminate) the gap between existing and desired states (Altschuld & Watkins 2014). In environmental peacebuilding work, this will likely mean a diversity of activities to address the various environmental and conflict conditions and their root causes.

   b. Prioritize decisions based on stakeholder consultation, available resources, feasibility, systems analysis, and the degree of potential impact. Stakeholder buy-in at this stage can increase the effectiveness and sustainability of your intervention.

Stakeholder Identification and Analysis

This Toolkit emphasizes the importance of both participation and inclusion throughout the M&E process. But how do you know if you are including the right people? Or if you have inadvertently missed important groups? Moreover, different groups may require different approaches to engagement. For example, there may be language considerations or gender considerations.

Box 2.4: Selected Stakeholder Identification and Analysis Resources

- Babiuch, William M., & Barbara C. Farhar. 1994. "Stakeholder Analysis Methodologies Resource Book," https://www.nrel.gov/docs/legosti/old/5857.pdf
- Bryson, John M. 2004. "What to Do When Stakeholders Matter." Public Management Review 6(1): 21-53.
- Carribean Natural Resources Institute. 2004. "Guidelines for Stakeholder Identification and Analysis: A Manual for Caribbean Natural Resource Managers and Planners," https://www.betterevaluation.org/sites/default/files/Guidelines_for_stakeholders.pdf

A critical starting point for participation and inclusion is identifying who the various stakeholders are and understanding their interests. Stakeholder identification and analysis (SHIA) is a process by which a team developing an intervention identifies, seeks to understand, and emphasizes the various groups who may be affected by or affect an intervention (Bryson 2004). SHIA examines the nature of a particular group's interests (livelihoods, health, religion, food security, etc.) and how those interests may interact with the intervention. SHIA also examines how much power (and the nature of that power) a stakeholder group wields. There are a variety of toolkits and guidance—many of which are tailored to environmental interventions—to assist teams in conducting SHIA (see Box 2.4). As Box 2.5 illustrates, cross-border interventions can be particularly challenging, although the dynamics illustrated in Box 2.5 may also be found within a single country.

When conducting a SHIA in a fragile or conflict-affected setting, it is important to consider:

- **What are the stakeholder's interests in a resource/this intervention *in relation* to other groups?**
  - Have different stakeholders fought over the resource?
  - Are there competing claims and narratives?
  - Even if there is no historical interest in a resource, how would this stakeholder group view the situation if another stakeholder group benefitted? [In polarized settings, a gain by one group is often interpreted as a loss by a competing group.]
- **How much power does this group have *in relation* to other groups?**
  - And is the power positively aligned with certain groups (allies)? Negatively aligned (competitors)? Neutral?

Box 2.5: Understanding Different Perspectives for Cross-Boundary Cooperation

Incorporating different perspectives is especially important for environmental peacebuilding interventions. Actors within an environmental peacebuilding intervention can have different agendas regarding what constitutes "peace" or what the pathway toward "peace" is. Indeed, the concept of peace and whether it is a good idea may be contested. Therefore, framing a project as "environmental peacebuilding" (or even peacebuilding more broadly) may not be as important as focusing on framings that help intervention staff and evaluators understand what is important for the various groups that the intervention aims to help.

For example, a study done on transboundary cooperation projects between Israel and Palestine found that "the true peacebuilding significance of cooperative environmental initiatives is often ambiguous, largely dependent upon the context in which the initiatives are carried out" (Aryaeinejad et al. 2015, p. 77).

Cooperation held different meanings for different actors, with peacebuilding being only one of the many meanings. Palestinian beneficiaries perceived cooperation mainly as a means of meeting immediate water needs. Israeli institutional actors, on the other hand, found these projects to primarily symbolize Israeli humanitarianism and political obstacles, while weakly symbolizing peacebuilding and survival. At the same time, other groups such as Palestinian institutional actors and the Israeli technical community held other, different perceptions.

This study illustrates that cooperation is often a strategy that actors are willing to work through to achieve their own objectives, rather than a pathway to peace. Recognizing the different motivations for cooperation within and between groups may help practitioners address the concerns of actors, even if they are not directly peacebuilding concerns. Addressing these concerns may improve cooperation, and eventually peacebuilding (Aryaeinejad et al. 2015).

Persona Tool

The persona tool (see Figure 2.2) is a specific form of SHIA that is particularly useful for designing and implementing situations that may be fragile or conflict-affected because it walks you through a process for understanding a variety of characteristics of each stakeholder group that can contribute to conflict but are sometimes not immediately obvious when engaging with that group.[2] While a group's behavior or position is observable, the beliefs and assumptions, values or aspirations, and needs that underlie that behavior may be more obscure; yet, it is these beliefs, values, and needs that often drive conflict.[3] The persona tool also includes practical and logistical constraints that can affect how you engage with a stakeholder group.

2. This tool was inspired by design thinking principles; see, for example, https://www.innovationtraining.org/create-personas-design-thinking/.

3. This is often referred to the "Iceberg Model," whereby behavior or positions are above the water (i.e. visible), while beliefs, assumptions, values, aspirations, and needs are below the water (i.e. less obvious). This model has been adopted and adapted by a number of fields

The persona tool is used for designing an intervention, and it should be updated throughout an intervention. It provides a reference to **ensure that you are responsive to each stakeholder group or "persona" (or at least considering them)** when, for example, you design an environmental peacebuilding intervention, develop participatory and inclusive ways to monitor your intervention, or develop relevant evaluation questions. It is also **useful for testing your assumptions about these groups**. Additionally, if you **develop each persona in an inclusive and participatory way**, you may identify certain blind spots or unanticipated challenges, including information about a stakeholder group that you do not have but need to gather.

Although this tool focuses on stakeholder groups, it is important to note that no group is homogenous. Use this tool at a level that makes sense for your context, and do not consolidate groups in a way that is either too high-level or so specific as to be unhelpful.

To use the persona tool, complete the table below for each stakeholder group. These will be the "personas" you reference throughout the intervention cycle. Remember that people from these stakeholder groups are the experts, so you will likely want to engage them in a conversation when completing the tool. If you are struggling to fill in any part of the table, you may consider the following scenarios:

- How a stakeholder group (i.e., persona) might respond to or participate in a certain intervention design.
- How a stakeholder group could reasonably participate in gathering and analyzing monitoring information.
- How a stakeholder group could receive evaluation results.
- How a stakeholder group could contribute to a learning process.

Persona Name	*Name the stakeholder group. Make sure the name is appropriate and inclusive.*
Background and Context	*Describe the context or lives of the stakeholder group in general. Where do they live? What language(s) do they speak? What do they do? You will want a story that represents, broadly speaking, the people in this stakeholder group, with special attention to the context related to the conflict and the environment. That story will help you think through the below pieces of the persona.*

 **Positions and Beliefs**	*These are the implicit and explicit positions, beliefs, stances, goals, or aims of the stakeholder group. What do they want to achieve? What do they seek? These should be explored in terms of the natural environment, the conflict, and any other relevant factors, keeping in mind that things that may seem irrelevant at first may prove to be important.* *These should be captured, to the extent possible, in the design of your intervention as well as your monitoring, evaluation, and learning plans. Remember, each stakeholder group will have different positions or goals when it relates to not just the intervention, but the information or evidence generated from it. For example, one group may believe land should be conserved for grazing while another is more concerned with forest preservation.*
 **Values and Aspirations**	*These are the relevant and important underlying principles, standards of behavior, thoughts, or viewpoints that might affect this stakeholder group's positions and objectives and will therefore potentially influence the intervention in less direct ways, including in interactions with other stakeholder groups. These should be considered throughout the intervention cycle, from planning to implementation, monitoring, evaluation, and learning plans. For example, one group may value data that is collected via Western scientific methods, while another values Indigenous knowledge and stories.*
 **Needs**	*These are the underlying needs that stakeholder groups hope to meet and often include basic needs such as shelter and food as well as feelings of security and belonging. Groups often build their values and aspirations on these needs. It may be more challenging to identify these needs, but addressing them can be key to environmental peacebuilding work.*
 **Challenges and Limitations**	*These are the logistical, cultural, political, and economic obstacles that may get in the way of the stakeholder group engaging with or benefitting from the intervention; participating in monitoring, evaluation, and learning processes; or receiving or understanding key information. This might include a lack of access to certain spaces or technologies, language limitations, conflicts with other stakeholder groups, and even weather patterns.*
 **Key Considerations**	*List the key considerations you should bear in mind as you design, implement, monitor, evaluate, and learn from your intervention. For example, this may include how frequently the stakeholder group may want to engage with intervention information, any important gatekeepers to consult, etc. This, like the other parts of the Persona Tool, can and should be updated as new information is gathered or the context changes. Reference these key considerations often.*

Figure 2.2: Persona Template
Source: ELI.

Conflict Analysis

A conflict analysis is a systematic study of the conflict dynamics that contribute to conflict, fragility, peace, and/or ecological degradation (Hume 2018). See Box 2.6 for examples of conflict analysis tools.

Objectives of a Conflict Analysis

A conflict analysis informs decisions at all stages of a project cycle. It allows evaluators to:

- Understand the background, history, and drivers of conflict including actors, issues, regional dimensions of conflict, and conflict-environment linkages, which could impact the outcomes of the intervention under assessment (Ajroud et al. 2017).
- Provide information on conflict actors, issues, regional dimensions of conflict, and conflict-environment linkages that should be considered when selecting team members, preparing data gathering, and preparing for stakeholder consultations and validation workshops.
- Inform decisions on the monitoring and evaluation process, particularly which stakeholders to involve and the process for involving them.
- Focus needs assessments on critical peacebuilding and environmental issues (Kievelitz et al. 2004).

Box 2.6: Selected Conflict Analysis Tools

- Ajroud et al. 2017. "*Environmental Peacebuilding: Training Manual*," module 3: https://drive.google.com/file/d/1LoIcV_JJPJN-jq2tWUJtYLhnnoI9MNesE/view
- Hammill et al. 2009. "*Conflict-Sensitive Conservation*," particularly section 3. IISD: https://www.iisd.org/system/files/publications/csc_manual.pdf
- UN Development Group. 2016. "*Conducting a Conflict and Development Analysis*": https://unsdg.un.org/sites/default/files/UNDP_CDA-Report_v1.3-final-opt-low.pdf
- USAID. 2012. "Conflict Assessment Framework: Application Guide": https://pdf.usaid.gov/pdf_docs/PNADY740.pdf

How to Conduct a Conflict Analysis

While there is no single way to conduct a conflict analysis, the following section describes tools and core principles that can be adapted as necessary.

1. **Consider the following questions:**

   - Who should participate in the conflict analysis? It is important to be as inclusive and participatory as possible while balancing that participation with cost considerations and conflict-sensitive methods of engagement.
   - When should you conduct a conflict analysis? Ideally, a conflict analysis should be conducted prior to designing an intervention and then regularly and/or in response to changes in the conflict as the intervention progresses.
   - How do you engage participants? You should design a conflict sensitive process that does not exacerbate tensions in the process of gathering information and doing the analysis.
   - How much information should you gather? You will need to balance the need for a timely analysis with the need to be holistic. You should also right-size the analysis based on your available resources (time, financial, and human).

2. **Review readily available open sources of analysis and data:** Organizations like the International Crisis Group, the Uppsala Conflict Data Program (UCDP), and the Armed Conflict Location and Event Data (ACLED) project regularly update their conflict analysis data. Additionally, some aid agencies have developed conflict assessment tools that can be accessed and adapted.[4] Using these secondary sources of information can save time and money.

3. **Conduct a root cause analysis**: In any conflict-affected setting, there may be many conflicts, issues, or problems, each with its own narrative. A root cause analysis can help you to unpack the different contributing factors for each issue. A common tool is a conflict tree, which identifies the core problem/conflict you want to focus on, the root causes of that problem/conflict, and the various effects (Hammill et al. 2009). This root cause analysis can then be useful as you reflect on how your ongoing or planned work relates to the conflict:

4. See, for example, UNDG 2017; Saferworld 2015; USAID 2012; Hammill et al. 2009.

- Will your work address the (root) causes of the conflict? If so, how?
- Will your work address the effects of the conflict? If so, how?
- Will your work reinforce the (root) causes of the conflict? If so, how?
- Will your work reinforce the negative effects of the conflict? If so, how?

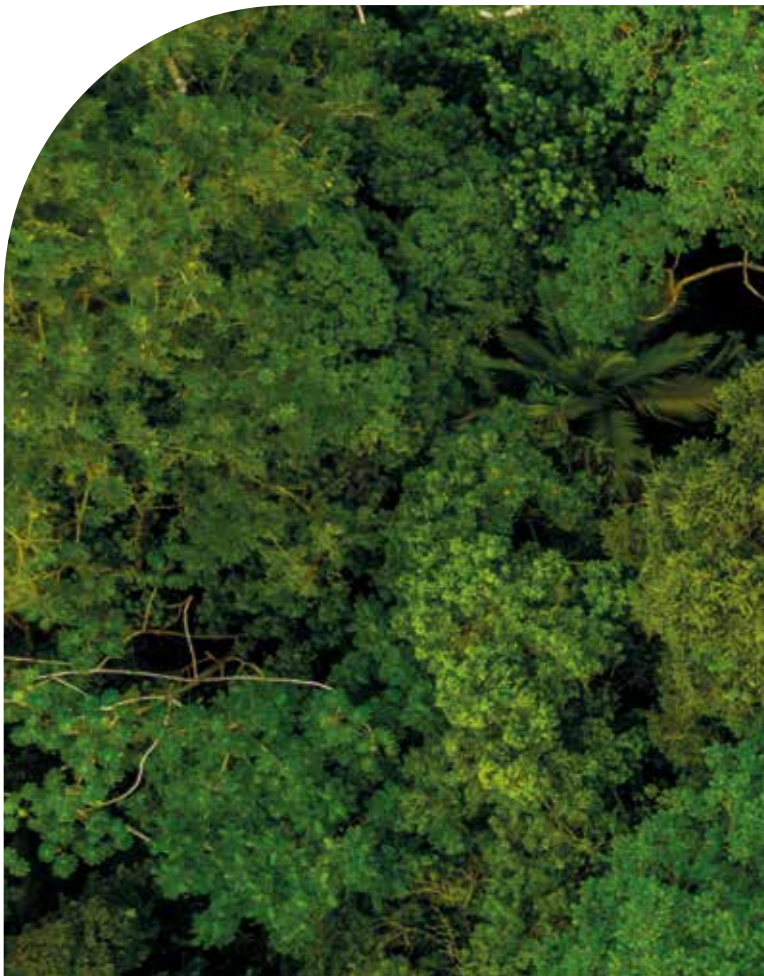
4. **Conduct a stakeholder analysis** (see discussion above)

5. **Conduct a peacebuilding architecture analysis:** Increasingly, institutions are conducting a separate peacebuilding architecture analysis that complements the conflict analysis. The goal of the peacebuilding architecture analysis is to better understand the ongoing peace process and how your intervention might feed into or otherwise support the building of peace. Key questions to ask in this analysis are:

   - What kind(s) of peace is being built? Try to define the nature of peace as precisely and clearly as possible. Are you trying to stop the fighting? Resolve underlying grievances? Reweave the fabric of society?
   - Is there a peace agreement or comprehensive peace plan that guides peacebuilding?
   - What are the key institutions involved in peacebuilding? What are their roles and capacities? Where and how are they functioning? At what level? These institutions may be divided into those focusing on security, social, economic, political, and environmental dimensions.
   - How effectively is the peace plan being implemented?

   Analysis of the peacebuilding architecture often focuses on effectiveness (nature of outcomes and their durability or sustainability) and satisfaction by diverse stakeholders (with the process, relationships, and outcomes).

6. **Ensure that gender considerations are included**. Men, women, boys, girls, and sexual and gender minorities often experience conflict differently. Including gender considerations can help you to understand how the environment and conflict dynamics interact with prevailing gender norms and behaviors (Hassnain, Kelly, & Somma 2021). It can also expose unequal power dynamics and make visible the violence (overt, structural, psychological, etc.) used to maintain power, therefore highlighting opportunities for environmental peacebuilding. Questions can include:



- How do women, men, and gender minorities experience the conflict differently? How does the conflict affect gender roles?
- How do women, men, and gender minorities interact with the environment? How does the conflict affect these interactions?
- What different roles do or can women, men, and gender minorities play in facilitating a peaceful resolution?
- How might the ways in which women, men, and gender minorities interact with the environment be leveraged as a tool for building peace?
- Are there any linkages between the environment and the broader conflict? How are women, men, and gender minorities impacted by these linkages?

For additional examples of conflict analysis tools, including those specific to conservation, please see Box 2.6.

Environmental and Social Impact Assessment

Grievances related to interventions usually relate to (1) the impacts of the intervention, (2) the inequitable sharing of benefits from the intervention, or (3) some combination of the two. Environmental and social impact assessments (ESIAs) are key tools for identifying and assessing social and environmental risks and benefits of an intervention. As such, they can help to identify issues to consider in intervention design, implementation, monitoring, and evaluation. The vast majority of countries have mandatory environmental impact assessments (EIAs) for interventions that are likely to have a significant impact on the environment (UNEP 2019). Increasingly, these assessments have expanded the scope of analysis to include the social impacts of a proposed interventions – hence ESIAs.

Box 2.7: Selected ESIA and SEA Resources

ESIA Resources

- African Development Bank. 2001. *Environmental and Social Impact Assessment Procedures (ESAP).* https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/SSS_%E2%80%93vol1_%E2%80%93_Issue4_-_EN_-_Environmental_and_Social_Assessment_Procedures__ESAP_.pdf
- Vanclay, F., A.M. Esteves, I. Aucamp, & D. Franks. 2015. *Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects.* Fargo ND: International Association for Impact Assessment. https://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf
- World Business Council for Sustainable Development. 2016. *Guidelines for Environmental and Social Impact Assessments (ESIA).* http://docs.wbcsd.org/2016/08/Guidelines_for_Environmental_Social_Impact_Assessment.pdf

SEA Resources

- OECD. 2006. *Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-operation.* https://www.oecd-ilibrary.org/development/applying-strategic-environmental-assessment_9789264026582-en
- OECD DAC. 2012. *Strategic Environmental Assessment in Development Practice: A Review of Recent Experience.* https://www.oecd.org/dac/environment-development/strategic-environmental-assessment-in-development-practice-9789264166745-en.htm
- UNEP. 2004. *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach.* https://www.unep.org/resources/report/environmental-impact-assessment-and-strategic-environmental-assessment-towards
- World Bank. 2008. *Strategic Environmental Assessment for Policies: An Instrument for Good Governance.* http://hdl.handle.net/10986/6461

ESIA is an important planning tool that aims to inform governmental decision making (Should the project be approved? Should it be amended? How might we mitigate the environmental and social impacts? etc.). In addition, ESIAs provide an **important opportunity for the public to review the draft assessments and provide input**. The government must take these inputs into consideration (or explain why it disagrees) *before* it makes its decision on the merits of the underlying project. Failure to conduct an ESIA, inadequate ESIAs, failure to consult the public, and failure to meaningfully consider public input are all common reasons that courts have overturned governmental decisions (UNEP 2019). Moreover, the failure to involve the public or to consider public input can aggravate conflict dynamics (Bruch, Muffett, & Nichols 2016).

For larger-scale interventions such as policies, programs, and plans, **strategic environmental assessments (SEAs)** provide an analogous process for identifying diverse environmental (and often social) impacts and developing mitigation measures (Therivel et al. 2013).

While detailed guidance regarding the scope, criteria, and process for undertaking ESIAs and SEAs is beyond the scope of this Toolkit, Box 2.7 provides links to some relevant resources and guidance documents.

B. Key Considerations

When conducting a context analysis to inform the design of an environmental peacebuilding intervention and the accompanying M&E system, there are four key cross-cutting considerations to be incorporated: systems and complexity, gender, participation and inclusion, and conflict sensitivity. These are discussed in turn.

Systems and Complexity

In designing an environmental peacebuilding intervention, it is essential to adopt a systems approach that accounts for complexity.

Simple problems are those that can be solved by mastering simple techniques or applying known rules. There is typically one solution, and cause-and-effect is linear. The classic example of a simple problem is following a recipe. **Complicated** problems also have known rules, but they require specialized knowledge or training. Complicated problems are not simple, but they are ultimately knowable. An expert—or group of experts—will likely be able to reach a high degree of certainty about the outcome. The classic example of a complicated problem is sending a rocket to the moon. **Complex** problems are interdependent problems that cross multiple areas of expertise. The problem exists in a system that is often in flux, and even experts cannot predict how the application of a known rule will impact the system. These problems inherently have significant ambiguity and uncertainty; cause-and-effect is difficult to understand. Moreover, complex problems are often non-linear, requiring an adaptive approach. In a complex system, a technique or rule that worked out well in the past does not guarantee a similar positive result when applied in the future. The classic example of a complex problem is raising a child.[5]

Dynamic contexts present additional challenges. A context is **dynamic** when there are developments that take place beyond an intervention's sphere of control

5. Adapted from Glouberman & Zimmerman 2002; Hogarth 2018; Patton 2008; *see also* Simister 2009; Vester Haldrup 2022.

or influence and affect its performance and outcomes; moreover, these effects can happen rapidly, with little notice. They may relate to the situation that the intervention aims to address, changes in the development of areas associated to the intervention or changes in political, economic, social, cultural, environmental, administrative, religious, or media sectors.

Dynamic systems are often due to non-linear complexities (Hunt 2016). That said, not all dynamic contexts involve complexity. This differentiation is relevant throughout the intervention because each level of complexity requires a different approach in the monitoring and evaluation processes. An intervention context could have simple, complicated, complex, and chaotic aspects. Dynamism refers to the likely or actual changing context, while complexity refers to the relative uncertainty (understanding of the cause-effect relationships) and agreement (between stakeholders about how to define a problem and how to solve it) of some aspects of the intervention context (see Figure 2.3) (STAP 2017). Considering these two elements, a simple aspect is characterized as such because the cause-effect relationship is well understood (certainty) and stakeholders agree about the best way to achieve results (agreement). On the contrary, a chaotic aspect is when there is uncertainty about the cause-effect relationships and stakeholders do not agree about how to solve the problem.

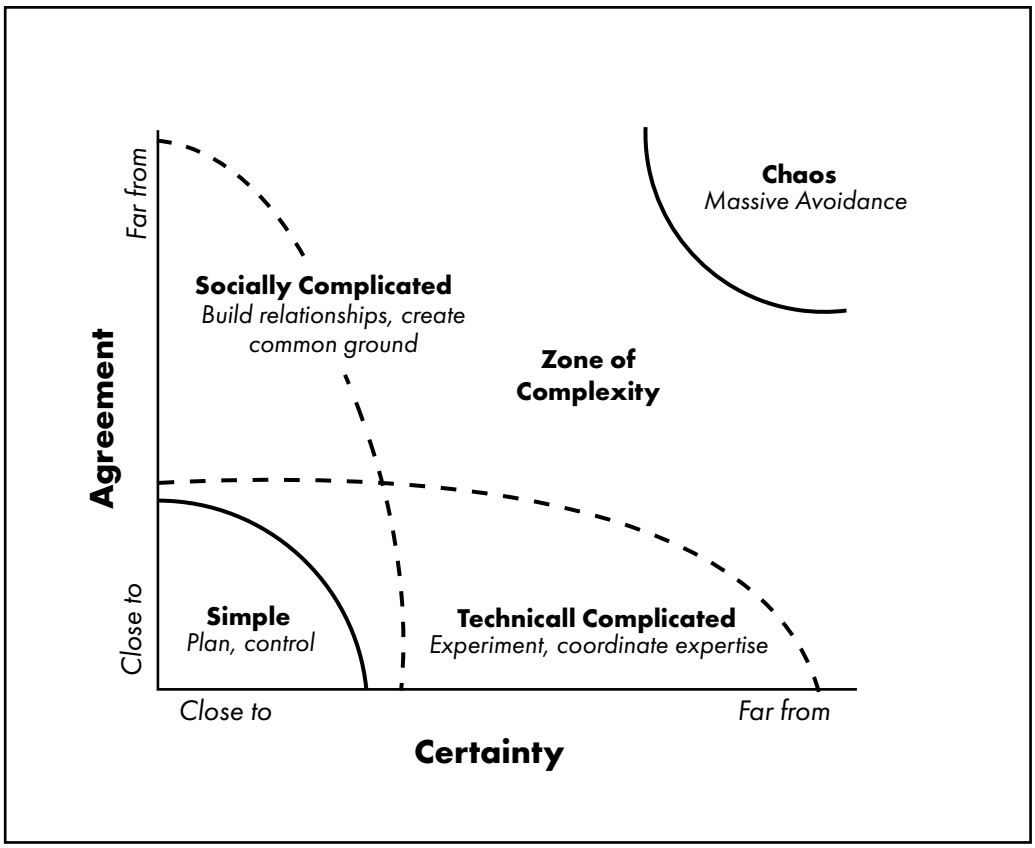


Figure 2.3: Agreement and Certainty Matrix.
Source: Quinn Patton, 2011, p. 94 (reproduced with permission)

In the design phase, the complicated and complex nature of environmental peacebuilding requires particular consideration for engaging a diverse range of views and of managing potential bias. Because multiple perspectives are present in complex systems, bias can be a challenge. When faced with multiple perspectives each with its own narrative, it can be difficult to ascertain "the truth." Coming to a conclusion about what was done, what the impacts were, what the significance was, and where the intervention is going without representing other perspectives can open an intervention to assertions of bias.

Environmental peacebuilding is both complicated and complex.

Environmental peacebuilding is a complicated problem because it links a wide variety of fields, actors, mandates, and dynamics. As such, it requires more than simple techniques. Environmental peacebuilding interventions impact and are impacted by livelihoods, economic growth, natural resources, conservation activities, conflict narratives and dynamics, basic services, and more. They also often cut across a wide range of resources that are used for multiple and diverse peacebuilding objectives. Designing successful interventions requires specialized expertise or knowledge; the expertise could be formally acquired, such as a university degree in a related field, or it may be in-depth knowledge of the region, conflict, or people involved.

Environmental peacebuilding is also a complex problem because environmental and human conflict systems are in constant flux separately, as well as overlapping each other and creating multidimensional challenges. The interactions between these systems and their components generate feedback loops that are difficult to understand.

Expertise—in the tactics deployed or the targeted area—does not necessarily increase the ability to predict how the systems will respond. Furthermore, past success in environmental peacebuilding does not guarantee that applying the same techniques and interventions will lead to future successes, even in the same geographical areas.

Because environmental peacebuilding is both complicated (due to the intersection of many different sectors and actors) and complex (due to the nonlinearity of feedback loops), it can be challenging to develop an effective M&E framework. Working with flexible and often decentralized M&E frameworks is necessary (Rogers 2008). Recognizing that substantive change takes a long time, the framework will likely need to consider a longer timeframe and the impact of multiple projects on the system as a whole. Further, given that both positive and negative feedback loops are likely at work in environmental peacebuilding systems, practitioners should not assume that short-term progress is indicative of positive long-term change. Strategies and tactics for how to approach environmental peacebuilding M&E through a complex systems lens are captured in Figure 2.4. The topics presented in this figure are also explored more in depth throughout the chapter and Toolkit.

Embrace the idea of interacting complex systems.
This includes considering and integrating across:

- Scales (top-down and bottom up)
- Timelines and time horizons
- Sectors
- Geographies
- Objectives

Conduct an analysis to identify key entry points.

- Identify high-value areas for coordinating interventions at the junction of environment and peacebuilding
- Ask "Are certain aspects or dynamics of a complex system more important to outcomes than others?"

Use narratives to connect environmental change with changes in peace and security.

- Develop theories of change based on context, literature, and learning from previous experience
- Refine theories of change based on learning

Expand the timeline for evaluation.

- Include programmatic and thematic evaluations
- Review previously completed interventions to capture learning

Mainstream gender.

- Gender-sensitive indicators
- Gender-disaggregated data

Employ adaptive management.

- Mandate to adjust course if necessary
- Employ holistic and well-resourced monitoring processes
- Implement early warning systems and interventions
- Incorporated pause points
- Foster learning, including social learning
- Capture unintended consequences, including through open-ended questions

Capture complexity.

- Focus on contribution rather than attribution
- Evaluate the process as well as the outcome
- Account for feedback loops and non-linearity

Incorporate multiple perspectives.

- Triangulate data collection methods and approaches to gather diverse information from multiple perspectives

Right-size.

- Tailor these strategies and tools to fit your particular context, organization, and intervention

Figure 2.4: Approaching Environmental Peacebuilding M&E through a Complex Systems Lens
Source: ELI.

At the outset, an intervention should clearly define its purpose. The M&E details can then be customized to measure interim goals, with the understanding that the goals may shift as the project develops further (Simister 2009). Particularly in complex systems, the M&E framework should focus on how project components are contributing to the aggregate impact, rather than trying to parse the results of each component in isolation (Vester Haldrup 2022). As quantitative indicators alone will not account for a full picture, particularly when evaluating complex systems, M&E frameworks should include quantitative and qualitative indicators.

One M&E framework that is well-suited to complicated and complex problems is **developmental evaluation**.[6] Developmental evaluation applies assessment processes to support the simultaneous, ongoing development of a particular intervention. These assessment processes are developed and tested within an ongoing intervention to identify—in real time—areas of improvement and adaptation. Innovation is supported, as the learning process is ongoing and flexible to allow for changes in both the direction and goals of the intervention. Developmental evaluation is designed to capture system dynamics and interdependencies, yielding a context-specific understanding that can further inform innovation.

In developmental evaluation, the evaluator is often part of the team instead of an external, third party. Developmental evaluation allows the evaluator and intervention proponents to remain committed to their fundamental values, rather than focusing on external

6. Developmental evaluation may also be called real-time evaluation, emergent evaluation, action evaluation, or adaptive evaluation; each of these names emphasize the concurrent nature of the evaluation and the program to be evaluated (Patton 2008; Rogers 2008).

authorities or funders. The intervention can respond strategically to the evaluation and enact change as participants learn from prior efforts. Evaluation is used as a tool for learning and program development, not to punish participants for "failing" to meet a static goal (Patton 2008; Simister 2009; Vester Haldrup 2022).

Undertaken in dynamic contexts, developmental evaluations often rely on context monitoring or complexity-aware monitoring. Both methodologies complement performance monitoring, which focuses on collecting qualitative and quantitative data to assess whether the implementation/pathway of an intervention is on track and if the expected results are being achieved. **Context monitoring** collects information about the external conditions that could impact the environmental peacebuilding intervention or its activities (USAID 2021). Adoption of this approach requires identifying the factors that are most valuable to monitor when there are not enough resources to monitor all the elements of the context (USAID 2022). **Complexity-aware monitoring** monitors projects with uncertain cause-and-effect relationships, where stakeholders have different perspectives that make consensus impractical, or the pace of change is unpredictable (USAID 2021). This methodology is also useful to ensure monitoring for unintended consequences as well as the implementation of adaptive management in a dynamic context, as it provides managers information about the dynamic and emerging aspects that may be used to reconsider intervention design if appropriate according to the situation.[7]

7. For more on complexity-aware monitoring, see section 2.3.C.

RIGHT SIZING

As a final consideration, **right sizing an M&E framework** helps to ensure that environmental peacebuilding interventions are effectively maximizing their available resources. A systems approach can be resource-intensive, considering a wide range of potentially relevant factors, developing indicators for each factor, and conducting comprehensive context analyses. An M&E framework that is too small will not provide adequate information to evaluate the program's success; an M&E framework that is too large siphons resources away from the peacebuilding efforts. The difficulty in assessing cause-and-effect in complex systems makes right-sizing M&E of environmental peacebuilding interventions that much more challenging. See Box 2.8 for more information on right-sizing systems mapping.

Building M&E into the intervention itself—making M&E systematic instead of a separate process—is especially beneficial when intervention proponents undertake multiple roles or when the intervention cannot afford a staff member dedicated solely to M&E tasks. Smaller projects and organizations may lack the resources to collect data and may instead find that narratives related to desired outcomes are easier to compile and analyze. Being creative and flexible in selecting indicators of success may prevent smaller projects and organizations from becoming overwhelmed by M&E responsibilities (Zinn n.d.; Simister 2009).

RIGHT SIZING

Box 2.8: Right-Sizing Systems Mapping

Systems that are both complicated and complex, such as those surrounding most environmental peacebuilding interventions, can be challenging to map and understand. A complex map of the conflict and peace dynamics in Afghanistan led General Stanley McChrystal, then the leader of US and NATO forces in Afghanistan, to quip, "When we understand that slide, we'll have won the war" (Bumiller 2010).

When right-sizing a systems map, there are five aspects on which practitioners should focus:

Practitioners should understand the general system and boundaries in which they are operating.

- How is the primary system connected to or nested within different systems? In complex settings with multiple, nested systems, practitioners must clearly situate and target their primary system/ intervention.

Practitioners should consider the geography of the intervention.

- Is the intervention local, national, regional, or global?

Practitioners should examine important stakeholders and actors within a system.

- Who are the actors? How are they acting? What are their goals? How are they connected?

Practitioners should highlight the rules, laws, and norms of a setting.

- How is the intervention affected by them? How is the intervention aiming to transform them?

Practitioners should identify levers of change, or areas within a system that would create ripple effects if changed.

Of course, there are many other factors which are relevant in right-sizing systems mapping depending on the intervention. For more details on systems mapping, see Omidyar Group (2014).

Contribution vs. Attribution

"Attribution" is the clear and confident ascription of a change to a specific intervention.[8] Historically, M&E has often prioritized attribution. This is largely because donors often want to know that the results achieved are due to the intervention they supported. The difficulty is that there are often hundreds of organizations working in the same space as well as a myriad of socioeconomic and political factors that can affect the intervention. For both reasons of complexity and complication, it is usually impossible to know how much of the progress toward peacebuilding and environmental outcomes is due to your intervention, how much is due to others, how much may be attributed to the synergies between your intervention and others, and how much has been affected by the wider context. While this can be difficult to assess in even one sector, environmental peacebuilding involves multiple actors in both the environmental sector and peacebuilding sector. This makes disentangling which interventions caused which environmental or peace outcomes that much more difficult, especially where they intersect.

Given the difficulties with attribution, M&E is increasingly shifting its focus to contribution. "Contribution" implies that an intervention has helped cause the observed effects; unlike "attribution," contribution does not imply a unique or direct causal link between activities and outcomes. One way, therefore, to assess contribution is a contribution analysis, which is based on the premise that it is often difficult if not impossible to attribute meaningful changes to a single factor or intervention.

An example of contribution analysis is the evaluation of UNEP's Environmental Cooperation for Peacebuilding (ECP) Program, which incorporated a mixed-methods approach with a case study me-

8. See https://one.oecd.org/document/DCD/DAC/EV(2022)2/en/pdf

thodology. Using a theory of change model, narrative and other qualitative descriptions were used to identify causal links and impacts. A contribution analysis was particularly useful in this intervention due to changing circumstances in addition to the non-linearity of outcomes compared to original plans. The mixed-methods evaluation drew upon the perspectives of 225 experts (Acharya 2015).

Lack of Treatment and Control Cases

When designing an evaluation plan, one approach is to use experimental methods that rely on treatment and control "cases" or groups. Treatment and control cases help to evaluate the impact of an intervention by using a counterfactual (where no intervention took place) to compare what the situation would have been if the intervention had not been implemented. By using a counterfactual to evaluate intervention performance, this method assesses if effects are attributable to the intervention based on the differences between the two groups following the intervention (Chigas, Church, & Corlazzoli 2014).

In the context of environmental peacebuilding interventions, however, **control cases can generate serious ethical questions and other problems** because they require practitioners to choose which groups will receive the "treatment," i.e. the intervention, and which groups will not. This decision can have ethical issues regarding, for example, who receives a potentially beneficial (and perhaps even lifesaving) intervention as well as the destination of funding and resources (for example, whether they should be used for monitoring and evaluation of the two groups or for a broader intervention in which all the groups would receive the treatment).

Additionally, randomized controlled trials (RCTs) and other experimental methods using treatment and control groups do not necessarily provide causal explanations of the differences observed, just that there were (or were not) differences. Furthermore, it is difficult to tell whether the results would apply in a different context given the complex contexts in which environmental peacebuilding takes place (Bickman & Reich 2009). In environmental peacebuilding, there are specific methodological challenges because in-

terventions are implemented in dynamic and conflict contexts that involve risks for the security and safety of the staff, beneficiaries or participants, and other stakeholders that can hinder the collection of data in one or both groups, and therefore, might create bias in the results or undermine the validity of the findings. Additionally, external factors related to other aspects of the conflict (particularly the dynamic and insecure dimensions) can impact the context of both treatment and control groups, which might lead to under- or overestimation of the intervention's impacts.

Under certain circumstances, the implementation of treatment and control cases is possible when mixed with other methods to fill gaps and compensate the weaknesses of each process. The data and results obtained by one method can corroborate, help to understand, or complement the results reached by another method, such as participatory approaches. For instance, when RCTs are implemented in combination with another method, it could provide further insights into findings about the impacts of the project (Chigas, Church, & Corlazzoli 2014). A related approach is to sequence the treatment and control cases, so the "treated" participants benefit in the first round of an intervention, while the "control" group benefits in later rounds. With such an approach, effective communication to manage expectations is important.

Gender

It is important to consider gender dynamics when designing an environmental peacebuilding intervention as well as the associated M&E framework.

Research has shown that different genders experience and are impacted by violent conflict in different ways (Hassnain, Kelly, & Somma 2021). Different genders also interact with and use natural resources differently according to their socioeconomic status and socially determined gender roles (Stork, Travis, & Halle 2015). In many contexts, women are the primary natural resource harvesters and are the primary drivers of a country's food production and trade. During times of conflict, women may be forced to take on new economic roles as men join the conflict. For example, women in the Darfur region took on more income-generating responsibilities, such as farming and raising livestock, due to a labor shortage as men left home to fight.

Despite growing recognition that gender-sensitive programming improves the sustainability of peacebuilding efforts (Gizelis 2009; UNIFEM 2010), in practice, **gender concerns are too often incorporated into interventions and M&E frameworks in a perfunctory manner**. For instance, evaluators of the UNEP Sub-Programme on Disasters & Conflicts noted that in many cases, gender was incorporated "into project plans mainly because it was a requirement, without truly examining how the projects could contribute to gender equity" (Carbon & Piiroinen 2012, p. 51).

Including women in peace processes helps peace last longer. This is not just at the national and international level: in the short-term, including women in local peace processes helps establish a more durable peace (Stone 2014). Additionally, UN peacekeeping operations are more effective in societies with greater female public participation and gender equality, which create opportunities for greater economic development (Gizelis 2009). However, about 93 percent of participants in peace negotiations are men, as are 98 percent of peace agreement signatories (UNIFEM 2010).

Incorporating gender concerns into M&E protocols can help practitioners identify if and how an intervention affected people differently because of their gender (Glennerster, Walsh, & Diaz-Martin 2018). It can also help practitioners understand which gender-based approaches work and under what circumstances. Including women in the M&E of environmental peacebuilding is especially important given that women are intimately involved in natural resource management, are disproportionately affected by conflict, and can play crucial roles in peace negotiations (Myrttinen 2016).

Where appropriate and feasible, gender considerations should go beyond binary male/female categories and encompass other groups such as transgender, non-heterosexual, and non-binary people (Fletcher 2015). Deciding when and how to discuss broader views of gender can be both culturally and legally sensitive in certain situations. In many countries, nonbinary gender identities are effectively and/or legally outlawed. In such circumstances, one option is to ask local partners how they conceptualize gender and how broadly it should be framed in a particular context.

There are many ways to incorporate gender into the context analysis. A **gender conflict analysis** can help practitioners understand how the environment and conflict dynamics interact with prevailing gender norms and behaviors (Hassnain, Kelly, & Somma 2021). It can also expose unequal power dynamics and make visible the violence used to maintain power, therefore highlighting opportunities for environmental

peacebuilding. This ultimately helps practitioners to design more responsive, effective, and sustainable projects and programs. If no gender analysis has been done, practitioners should use existing gender assessments to inform themselves of the gender dynamics of the area in which the intervention will be implemented. If no such assessments are available, practitioners should ensure that they engage with a variety of stakeholders on the topic to better understand relevant dynamics.

Collecting gender-disaggregated data is a second key approach in incorporating gender dynamics into the M&E of environmental peacebuilding. Because conceptions of gender extend beyond the male-female binary, allowing participants to self-identify their gender can be an important way to extend inclusion (Spiel, Hamison, & Lottridge 2019). Gender dynamics can be captured through surveys, focus groups, or interviews that ask intervention participants to reflect on issues relating to gender equity and equality. For instance, the Stockholm International Water Institute (SIWI) has developed a survey to assess issues of gender equality and decision-making around transboundary water cooperation. As another example, gender surveys were issued to villages in Botswana and Namibia as part of UNESCO-IHP's GGRETA (Phase II) project to determine whether women or men are mainly responsible for domestic water quality within households (Thuy, Miletto, & Pangare 2019). Data from the surveys demonstrated how women are responsible for water quality and supply within the household and highlighted how gender-disaggregated data can be used to shed light on how gender minorities interact with the environment. Note that surveys or particular survey questions can be included as part of an existing monitoring activity to elicit a higher response rate and avoid overburdening participants.

Making sure women's voices are heard in the M&E processes is crucial. Speaking with both men and women, having female evaluators speak with women, and respecting cultural norms and boundaries can help make the evaluation process more gender-inclusive. Practitioners should be aware, however, that difficulties with hiring female staff are not uncommon, especially when working in areas where women are not traditionally formally employed.

The worksheet on Integrating Gender, at the end of this chapter, provides a range of entry points and questions to consider.

Participation and Inclusion

Participation is the active involvement of stakeholders, in this case as part of the design, monitoring, evaluation, and learning processes. Participation exists along a continuum, from informing and consulting to collaborating and empowering, and can involve different stakeholder groups, including intervention staff, partners, country-based officials, and participants or beneficiaries (INTRAC 2020).

Inclusion means ensuring equal access to opportunities "regardless of differences in personal characteristics or identities" (USAID 2020, p. 1). Inclusion means both including various stakeholder groups—particularly traditionally marginalized groups such as women, minorities, Indigenous people, youth, and people with disabilities—in design, monitoring, evaluation, and learning as well as ensuring that these processes capture the different effects of an intervention on various stakeholder groups (e.g., through disaggregated indicators) and including these groups in the analysis, sharing, and dissemination of information such as evaluation results. Genuine inclusion necessitates the empowerment and authentic participation of various stakeholder groups.

Participatory mechanisms should include as many stakeholders as possible from the early stages of intervention planning. Bringing different perspectives and ideas to planning and implementation provides a broader picture of the intervention context and relevant factors, supports the development of better interventions, and may help address the different risks of the intervention, prioritize drivers of conflict and fragility, and bring specificity to the interventions' protocols and guidelines. In addition, participatory mechanisms should be used to identify the risks that the intervention could impose on different groups and the measures that will be adopted to minimize and manage those risks.

Additionally, when a variety of stakeholders are involved in intervention design and implementation, more information is available to understand the difficulties that could affect data collection. For example, inclusion and participation in the design of an intervention and its monitoring plan can help ensure access to community members and sites, which can in turn reduce the risk of bias in information while supporting the transparency and impartiality of the intervention. Local stakeholders such as civil society can also provide important information on the context that may be particularly important when there is an absence of baseline data. These people also can glean information from locations that intervention staff might not be able to access for security reasons (GEF IEO 2020).

Participation and inclusion must be rooted in transparent relationships based on trust. This is essential to ensuring stakeholders contribute accurate and complete information. Building those relationships requires involving stakeholders from the beginning of the intervention as well as considering the possible negative impacts on them according to the conflict sensitivity analysis, and informing conclusions about the potential risks that they may face during the implementation of the intervention.

Stakeholders such as community organizations and local people can also play a role in dispute resolution mechanisms and mitigating conflict-related risks in intervention implementation. Communities may have well-established processes to reach consensus and agreements between the different conflict parties and can therefore contribute to the resolution of conflicts that arise during intervention implementation.

When deciding how and when to engage different stakeholder groups in the design and implementation of an intervention, it is important to consider how the different groups interact with both you and other groups (e.g., supportive, neutral, antagonist). This will help guide the mechanisms for participation and inclusion. It may be, for example, that certain groups are culturally expected to defer to others (e.g., due to gender or age); to effectively include them, therefore, it may be necessary to engage these groups separately.

Insecure Contexts

Environmental peacebuilding interventions are often in insecure, high-risk contexts with weak institutional capacity (OECD DAC 2012; Bush & Duggan 2013). Insecurity has implications for both an intervention and for its monitoring and evaluation, such as the safety of staff and beneficiaries or participants, obstacles for getting enough good data, the risks of bias, the possibility that an intervention might inadvertently increase tensions and violence, and the challenge of balancing transparency and security.

Insecure contexts pose risks for the safety of both staff and participants in environmental peacebuilding interventions. It may not be safe for staff to undertake activities, monitor, or evaluate an intervention, particularly when armed groups are present or violence is otherwise likely. Moreover, intervention participants might face retaliation by others in their community, armed groups, or the government, especially if there is opposition to the goals (or perceived goals) of the intervention (including peace). Risks include physical attacks, health challenges, being kidnapped or raped, landmines and unexploded ordnance (e.g., cluster bombs), psychological challenges, and trauma (Bush & Duggan 2013). All of this can lead to the relocation of the intervention, suspension of activities in certain locations, or the cancellation of the intervention (GEF IEO 2020).

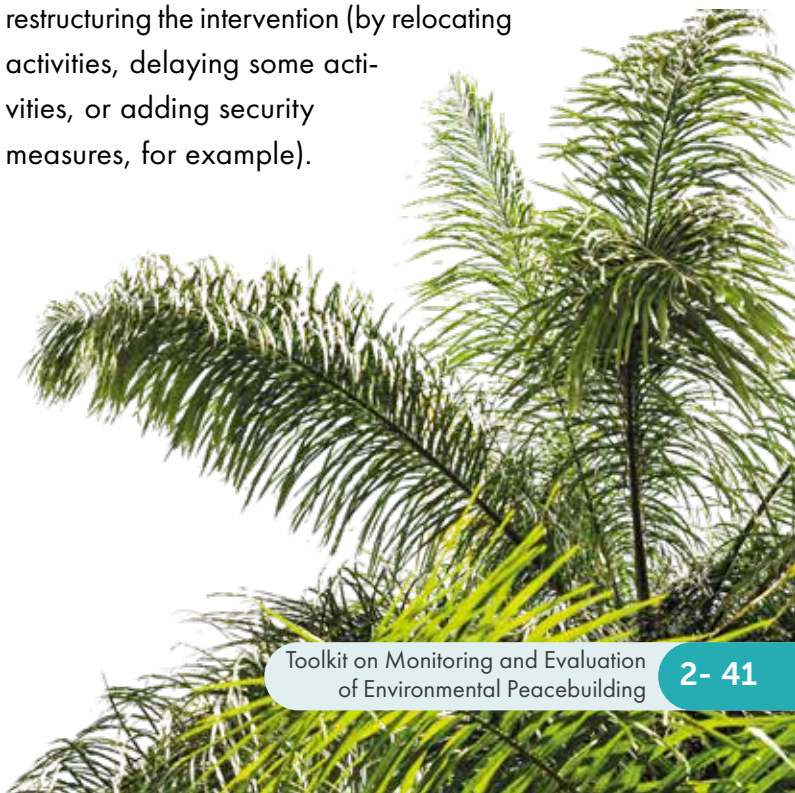
It can be particularly challenging to generate or otherwise obtain sufficient monitoring data (both in quality and quantity). An area can become inaccessible because of the physical risks, the high costs of travel (including security personnel), or censorship by the government. People may be afraid to be interviewed due to safety considerations (Bush &

Duggan 2013). Moreover, the data that is collected might be unreliable because people are reluctant to provide honest responses. In these contexts, those collecting information should pay close attention to the possibility that disinformation is used by the combatants in the conflict (OECD DAC 2007). An intervention and related processes may worsen the enduring and latent causes of the initial conflict or create new sources of conflict, and tensions may result in violence (Bornstein 2010). In addition, insecurity may constrain the publication of findings (OECD DAC 2012).

Challenges associated with insecure contexts can impact the integrity and transparency of the monitoring and evaluation process. Insecure contexts could lead to relying on a methodology that does not include all the key stakeholders, compromising the methodological integrity and the validity of findings, and marginalizing groups or mispresenting the reality and impact of the intervention (Bush & Duggan 2013). The host government or the agency promoting the intervention could insist in vetting drafts for security purposes. The evaluator should consider the complex, multi-layered dimensions of the context and understand the potential impacts on integrity and transparency.

The challenges that insecure contexts create for monitoring and evaluation of environmental peacebuilding can be managed to a large extent by establishing protocols with mitigation measures, early warning mechanisms, training staff about decision-making and conflict-sensitivity, involving a range of stakeholders and local people from the beginning of the intervention to ensure access of data, enhanced dispute resolution mechanisms, and strategically using technology or other alternative methods to access data in unsafe places and improve the communication between the staff and stakeholders. These are discussed in turn.

In the design stage of an intervention, operational protocols and guidelines can help to address insecure situations. These protocols and guidelines provide a consistent set of approaches and should be based on evidence. They can address a range of issues (Asian Development Bank 2007). For example, protocols can articulate which staff are going to receive which training, at which stage, and where. Protocols can create and govern dispute resolution mechanisms that could be activated when the staff or stakeholders identify possible conflicts that could increase tensions or trigger violence situations with direct effects on the monitoring and evaluation project. The use of local and traditional conflict resolution practices can be a reliable mechanism for resolving tensions between groups, especially when participatory mechanisms are also included. Protocols can create a mandate for and provide detailed guidance on adaptative management, including specific ways that an intervention could be adapted if conditions worsen and put intervention staff at risk. When the risks imposed by insecure context are excessive, adaptive management can mean restructuring the intervention (by relocating activities, delaying some activities, or adding security measures, for example).



Protocols could also set forth security measures for international and national staff, beneficiaries, participants, and partners. Some measures could address safe modes of transport, for example, by precluding travel at night, establishing a curfew, or governing overnight stays in certain towns. National staff and local stakeholders are often more vulnerable to reprisals after an intervention closes; protocols can address these vulnerabilities in the planning and implementation of an intervention.

Early warning systems can help to manage the risks associated with insecure contexts (Corlazzoli & White 2013)**.** These are discussed on section 2.3.C, below. Related, creating and maintain, to the extent possible, an **open channel of communications with all the stakeholders** is another way to manage security risks. Inclusion and participation are discussed throughout this Toolkit.

Capacity building is central to navigating insecure contexts. Staff should have capacity in conflict analysis and conflict sensitivity. Training on specific insecure conditions and how to respond to them could reduce the necessity of international experts in some activities such as community visits, e.g., how to conduct surveys about landmines and livelihoods to diminish the risk of possible harm for the staff and beneficiaries of the project (Paterson, Pound, & Ziaee 2023). In addition to staff, leaders and decision-makers should have training on managing tensions and working in potentially dangerous or otherwise sensitive situations in a calm and non-threatening manner (Corlazzoli & White 2013).

Insecure contexts often present unique risks to and opportunities for women. Accordingly, **gender-sensitive approaches are essential to managing gender-related risks and capitalizing on opportunities for women.** These gender-sensitive approaches may include, for example, hiring gender experts, gender-sensitive training, and specific strategies for gender-sensitive engagement.

Conflict Sensitivity

Conflict sensitivity is an approach whereby there is "a sound understanding of the two-way interaction between activities and context and ac-

ting to minimize negative impacts and maximize positive impacts of [an] intervention on conflict, within an organization's given priorities/objectives" (Conflict Sensitivity Community Hub n.d.). Conflict sensitivity recognizes that interventions do not inherently do good and may, in fact, exacerbate conflict (Paffenholz 2005).

Conflict sensitivity can be applied to all contexts or types of interventions and does not necessarily require changing an intervention's mandate or objectives; rather, conflict-sensitive interventions are responsive to the context while seeking to achieve their objectives, adapting to evolving conflicts, and maximizing opportunities for peace and stability whenever possible (Global Affairs Canada n.d.). A related concept is "Do No Harm," which is a minimum standard to avoid doing harm or making a situation worse. However, conflict sensitivity is generally accepted to extend beyond this framework to include the maximization of positive impacts, including for conflict prevention and peacebuilding (Hammill et al. 2009; Saferworld et al. 2004).

A conflict-sensitive approach is key to understanding the dynamics of a conflict, how an intervention might be affected by the conflict context, how the intervention might affect the conflict context, and what measures should be taken to manage conflict-related risks. This means that an intervention must consider the factors that may drive and shape conflict (OECD DAC 2007). Relevant factors include the intervention's activities as well as its processes for design, monitoring, evaluation, and learning.

To promote conflict sensitivity in environmental peacebuilding, **intervention staff should be trained in conflict analysis and conflict sensitivity.** Training should provide staff with sufficient understanding of ways to assess conflict dynamics that allow them to identify early warning indicators and to adapt their work in ways that mitigate conflict-related risks. Training on working in conflict-affected conditions could reduce the necessity of international experts in some activities such as community visits, e.g., how to conduct surveys about landmines and livelihoods to diminish the risk of possible harm for the staff and beneficiaries of the project (Paterson, Pound, & Ziaee 2013).

2.3. Design

This section focuses on how intervention staff take the various context analyses to develop a theory (or theories) of change for an intervention, to develop indicators tied to your theory of change, and then to develop a monitory, evaluation and learning framework for the intervention.

A. Theories of Change

A theory of change is a tool that conveys what you are doing, what results or effects you seek, how and why you will achieve those results, who will be affected, and the assumptions or risks involved. Theories of change capture causal linkages or pathways, often from activities to outputs to outcomes (short-term, medium-term, and/or long-term) and, finally, to impact. Theories of change also help in defining indicators, allocating (human, financial, and institutional) resources, and rethinking and revising interventions at strategically or operationally opportune moments.

There are many ways of developing a theory of change. Theory of change formats range from narrative to visual, simple to complex, and the components will be different depending on the organization, funder, audience, and purpose.[9] Theories of change can also be used at different levels, including for projects, programs, and organizations. A good theory of change will contribute to both internal and external clarity on the "what," "how," and "under what conditions" of an intervention.

9. See, for example, http://awidme.pbworks.com/w/page/36051640/The%20Rosetta%20Stone%20of%20Logical%20Frameworks

The process of developing a theory is as important as the product. An inclusive, participatory, and conflict-sensitive theory of change development process allows stakeholders to build common understandings of the intervention purpose and underlying hypotheses about how it will work. In addition, such a process can unveil assumptions about the factors necessary for success, the resources that are needed, and for what and to whom the intervention will be held accountable (see Box 2.9). Developing theories of change is therefore an important reflective practice for crafting interventions, building stakeholder buy-in, and setting the stage for successful interventions. This contributes to more effective, efficient, and sustainable intervention design and implementation.

Particularly in the context of environment peacebuilding, **theories of change are living documents that should be flexible and regularly reviewed, reflected upon, and updated as necessary**. They should not be static documents that are either unused or inhibit responsiveness or innovation. Rather, as the intervention progresses, theories of change should be reviewed to determine whether they are still both relevant and appropriate and revised accordingly (see Figure 2.5). This is especially necessary because the context in which environmental peacebuilding interventions take place are complex and highly fluid. The situation can change at any time, which means the approach may also need to change. In the field of environmental peacebuilding, theories of change are all the more important because:

- Environmental peacebuilding interventions link together environment- and peace- or conflict-related activities and expected outcomes. Much environmental peacebuilding work takes place without explicit theories or hypotheses about how environmental work can affect peace and vice versa. **Making theories of change explicit and then testing them is therefore essential to ensuring effectiveness, maximizing positive effects, and minimizing negative ones.**
- Similarly, environmental peacebuilding must often link together activities taking place at different geographic or economic levels or across different timelines. For example, community-based interventions may not be sufficient if national or regional policies or institutions are not in place to support them (FAO & Interpeace 2020). At the same time, the shape of environmental challenges and conflict dynamics can be highly localized. **It is therefore important that environmental peacebuilding theories of change explicitly articulate the connections between these various levels and time scales.**

Box 2.9: Something to Consider—Who Participates?

Participatory and inclusive processes for developing a theory of change are important in environmental peacebuilding. Who participates in developing your theory of change will affect the shape that the theory of change takes as certain stakeholders emphasize different needs, activities, outcomes, and assumptions or risks. The dynamics of who is involved should therefore be carefully considered as you plan the development of your theory of change.

- It is important that environmental peacebuilding interventions are conflict sensitive. **The process of developing a theory of change can help to identify potential points at which the intervention may inadvertently negatively affect the conflict context, allowing environmental peacebuilding practitioners to adapt and avoid doing harm.** This process can also help to identify points at which an intervention can amplify peacebuilding or other positive effects.

- **Outlining assumptions and risks in a theory of change entails explicitly outlining the conditions that are necessary for change.** While every good theory of change should have assumptions or risks related to the broader intervention context, documenting these for environmental peacebuilding interventions is even more important since the contexts in which they take place can be fluid, dynamic, and volatile. Once documented, it becomes easier for intervention stakeholders to track and assess changes to the context.

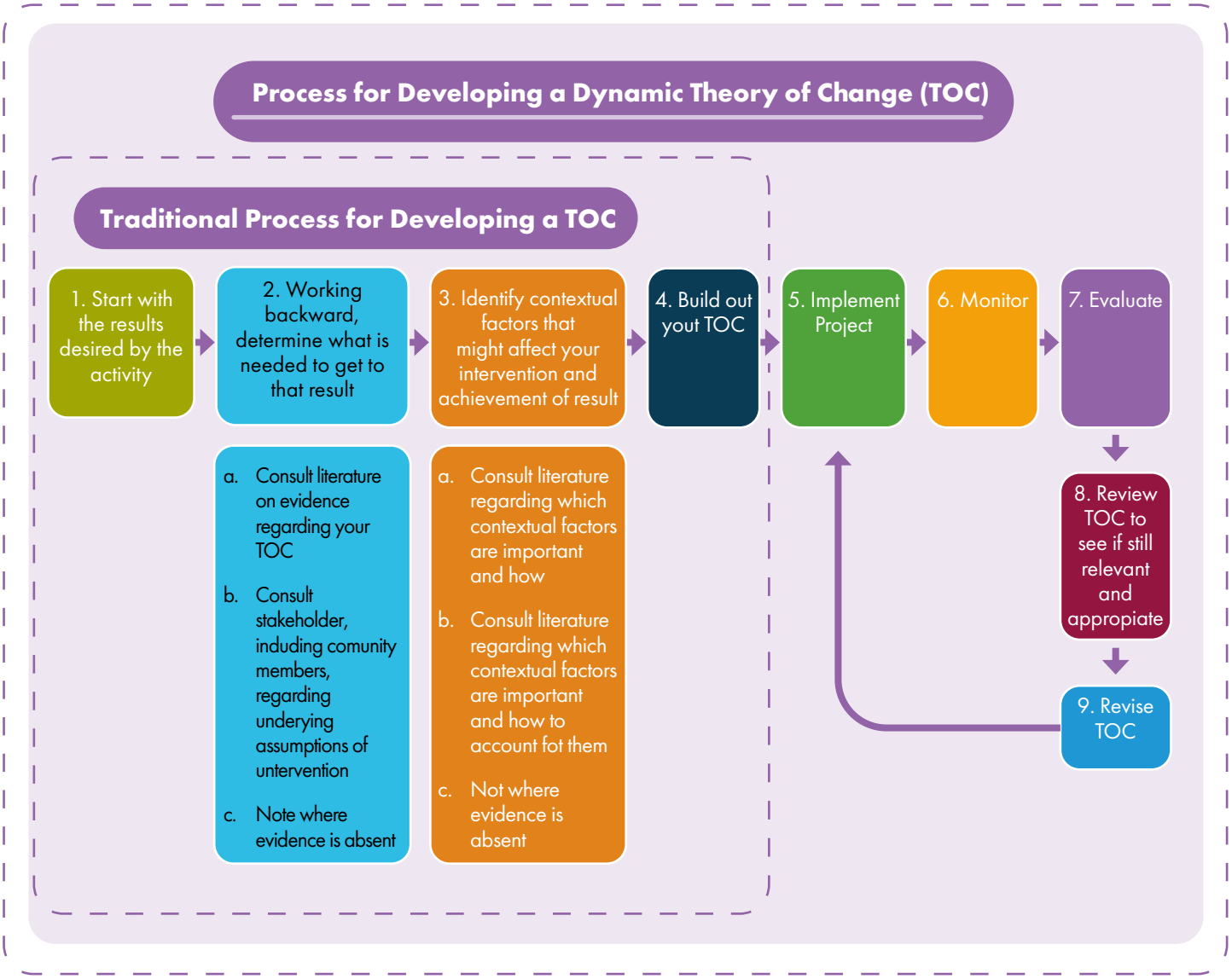
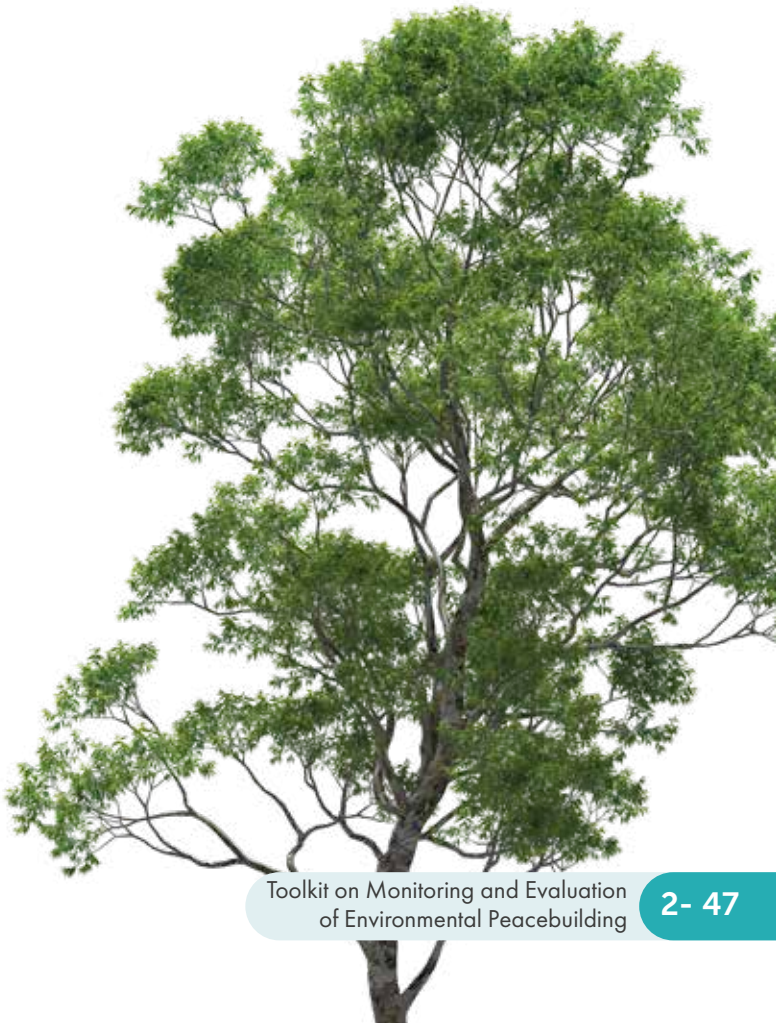


Figure 2.5: Differences in the Development of a Traditional vs. Dynamic Theories of Change
Source: ELI.

Figure 2.5 and Box 2.10 outline the high-level steps for creating a theory of change. Some questions to consider when designing a theory of change include:

- **What kinds of changes or transformations is the intervention looking to effect?** This might include, for example, shifts in power dynamics, the building of communities or institutions, changes to how groups view each other or interact, changes in physical spaces, or economic growth or improved livelihoods.
- **How can you make explicit the connections between the environment on the one hand and peace on the other?** Environmental peacebuilding theories of change may involve more lateral or complex connections than traditional, linear theories of change. Make those connections explicit so that they can be prioritized, measured, and assessed.
- **Document assumptions, risks, and other key contextual factors.** These are the conditions for or potential challenges to achieving your outcomes. Focus on those that are likely to be the most impactful for your intervention and should therefore be regularly monitored and reflected upon. Note that these may change during your intervention's implementation.
- **What are the spheres of control, influence, and interest for your intervention?** These represent various degrees of power your intervention has to effect change. While an intervention can *directly* affect what is within its sphere of control (generally activities and outputs), its effects become less direct and more *indirect* as you move along the change pathway to short-, medium-, and long-term outcomes.
- **Who is the audience for your theory of change, and what are these stakeholders interested in knowing or understanding?** Whether a community, a funder, the government, or a group of partners, you should consider the needs of your audience when developing your theory of change to think through how it should be presented (visually, language, etc.), the level of detail it provides, and the key aspects of your theory that are emphasized.
- **Who should be involved in crafting the theory of change and how?** Remember: who participates will directly affect the output. Additionally, how these stakeholders participate can either contribute to the effectiveness and sustainability of your intervention by increasing its relevance or their buy-in *or* it can exacerbate the conflict, such as in the case that stakeholder groups intensely and directly disagree about an approach.



Box 2.10: How to Develop a Theory of Change

There are many different approaches for crafting a theory of change. The following is a high-level outline of common steps for creating a theory of change:

1. **Start with the results or high-level change you seek.** Define the long-term change or changes to which you hope your intervention can contribute. Questions to ask include:
    i. What would it look like in 2-10 years if we got everything right?
    ii. What is the ideal situation in this space?
2. **Work backwards from there** and identify what is needed to achieve those results. The steps that you identify will become your outcomes and should be informed by your context analysis. Questions to ask include:
    i. What changes in knowledge, attitudes, beliefs, behaviors, or the physical environment would you expect to see if those changes happened?
    ii. Who are the stakeholders involved? Who would benefit from or be included, both directly and indirectly?
3. Now, **think through what your intervention can do** to achieve or contribute to those outcomes. These are your activities and their outputs, or the direct products of the activities. Questions to ask include:
    i. What would activities look like, and who would be involved?
    ii. What activities would be most effective, feasible, and reasonable for your program and organization?
    iii. What outputs would directly result from those activities, such as people trained or agreements established?
4. As you develop causal pathways, **ensure there are no gaps** or leaps in logic. For example, would a training on conflict mediation or the establishment of a conservation agreement directly lead to peace, or is it likely a mechanism such as a change in behavior would need to happen first? You should also double check the available evidence to make sure the steps you propose make sense.
5. **What contextual factors might affect the implementation of your activities or the achievement of results?** You should document these on your theory of change as assumptions or risks.
6. **Build your narrative.** A narrative should describe the intervention context and need for your intervention, the timeline for your intervention, key stakeholders, and the mechanisms (and related evidence) for contributing to the results you desire.
7. In addition, it is important to update the theory of change. Using information gathered through monitoring, evaluation, and learning processes, **intervention staff and stakeholders should regularly review the theory of change** to understand if it still makes sense given:
    i. any contextual changes that affect the intervention's ability to operate, including changes in assumptions and risks, and
    ii. evidence that demonstrates the current approach is not working, not working well, or is resulting in negative unintended consequences.

Figure 2.6 illustrates a dynamic theory of change as both the context and the intervention evolve. It uses a hypothetical intervention that seeks to reduce illegal logging and land clearing by reintegrating ex-combatants to be park rangers. As the intervention proceeds, there are consultations and growing experience, and the theory of change evolves accordingly even as the objective remains the same. This figure highlights a few important aspects. First, as an intervention proceeds, both staff and stakeholders learn more about the context and how the intervention relates to the context. This may reveal assumptions and risks that had not been previously identified. Second, as staff and stakeholders increasingly account for the important dynamics, assumptions, and risks, the theory of change often becomes more elaborate, with additional activities, outcomes, and even impacts. In fact, additional theories of change may be added or integrated.

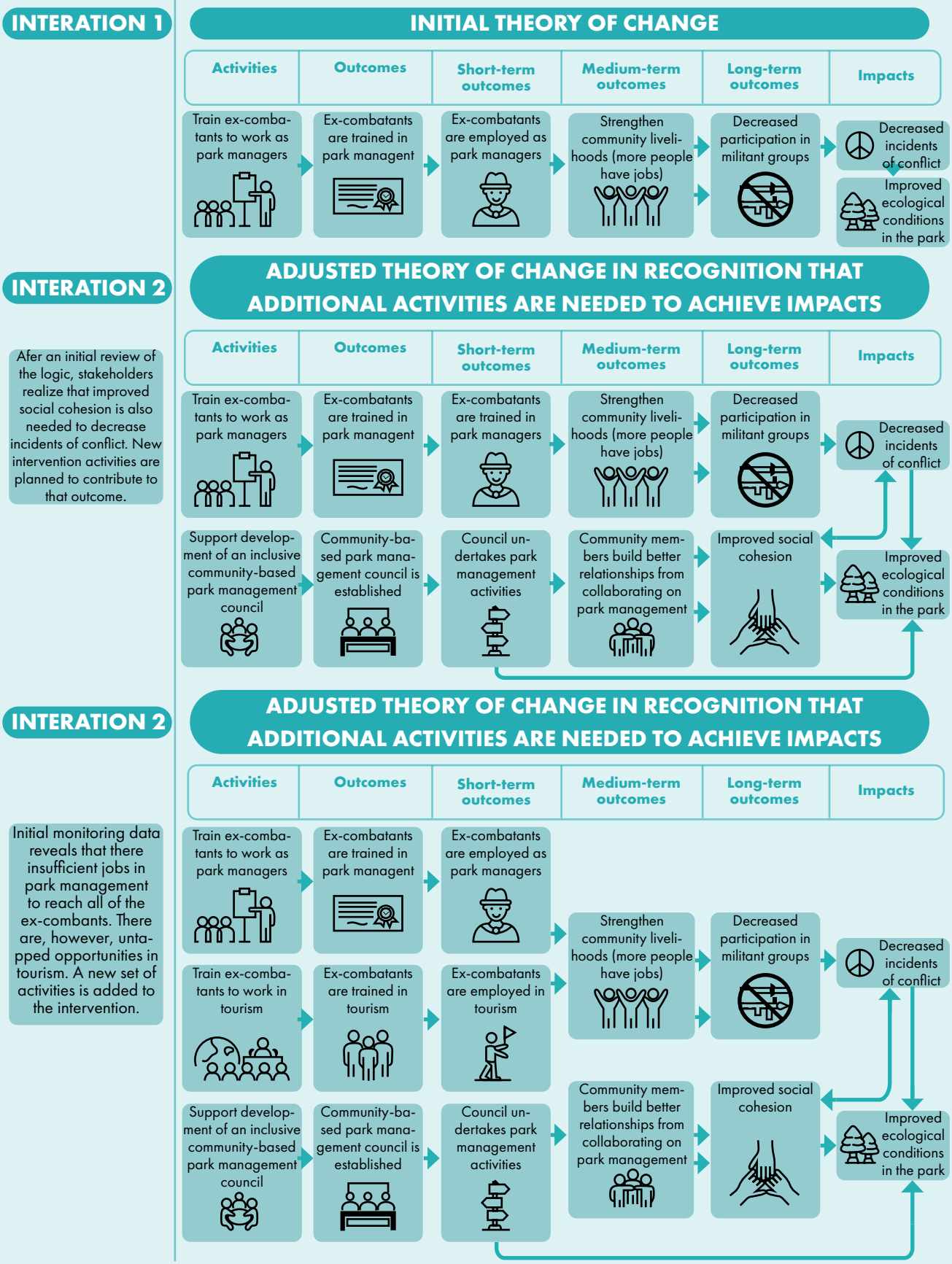


Figure 2.6: An Illustration of How a Theory of Change Responds to an Evolving Context and Intervention
Source: ELI.

Theories of Change in Environmental Peacebuilding

As mentioned earlier, for the purpose of this Toolkit, environmental peacebuilding is defined as a meta-framework that encompasses a wide range of approaches that integrate issues at the intersection of environment, conflict, and peace to "support conflict prevention, mitigation, resolution, and recovery" (Ide et al. 2021). This set of approaches covers the full conflict cycle, comprising interventions before, during, and after a conflict; it also applies to a range of conflicts from wars to violent conflicts to social conflicts and latent conflicts. Moreover, interventions utilize and otherwise engage with a range of natural resources and environmental features, from non-renewable resources (such as oil, gas, and minerals) to renewable[10] natural resources (such as timber, fisheries, water, land, and agricultural products) to ecosystem dynamics and services (such as climate change and flood control) (Bruch, Jensen, & Emma 2022). This section provides a brief survey of ten clusters of theories of change that have been observed so far in environmental peacebuilding, with interventions relying on one or more of the theories.

There are a number of overlaps in theories of change between clusters. The overlap is due to the fact that different groups tend to focus on a particular cluster and orient their activities and theories of change within that cluster (say, resilience or post-conflict peacebuilding); within that cluster, the organizations often address related issues (say, conflict prevention or conflict sensitivity). The overlaps are discussed further in the following subsection.

The first cluster of theories of change relates to **conflict prevention**. Many interventions focus on **early warning mechanisms** in fragile and conflict-affected contexts with the objective that they can monitor situations and ascertain when a dispute might be escalating (Ide et al. 2021; Jensen & Kron 2018). Often complementing early warning interventions are **response mechanisms** to act on early warning information and prevent disputes from escalating to violence (Dumas 2016; OECD 2009). Finally, recognizing that poor natural resource governance is often a major contributing cause of conflict, **good governance of natural resources** often seeks to prevent conflict, for example through benefit sharing, transparency, inclusive participation or management, and accountability (Haufler 2009; Mähler, Shabafrouz, & Strüver 2011).

A second cluster of theories of change focuses on the **use of the environment and natural resources to support broader post-conflict peacebuilding**

10. It should be noted that simply because it may be possible to manage a natural resource renewably does not mean that it is in practice managed renewably.

efforts. These theories of change often start with the four themes highlighted in the reports of the UN Secretary General (2009; 2010; 2012) on peacebuilding in the immediate aftermath of conflict—establishing security, restoring the economy and livelihoods, delivering basic services, and rebuilding governance and inclusive political processes—and then identify the ways that different natural resources and environmental dynamics and services underpin those peacebuilding efforts as inputs, contexts, constraints, or otherwise.[11] Theories of change related to **establishing security** most often relate to reintegration of ex-combatants, security sector reform, mine action, and regaining control of conflict resources that help to finance conflict.[12] Theories of change related to **restoring the economy and livelihoods** often focus on improving resource rights, rebuilding sustainable livelihoods, expanding extractive sectors (particularly for macroeconomic recovery), strengthening supply chains, and development of value-added approaches (e.g., manufacturing furniture, rather than exporting raw logs, thereby expanding the value and number of livelihoods supported per unit of resource).[13] Theories of change related to the **delivery of basic services** focus on water, sanitation, and energy, sometimes restoring services interrupted by conflict and in other instances providing these services for the first time.[14] Finally, theories of change related to **rebuilding governance and inclusive political processes** after conflict variously seek to address grievances related to natural resources and introduce more equitable, transparent, participatory, inclusive, and accountable approaches.[15]

Some theories of change are at the intersection of these themes. For instance, the first two themes—establishing security and restoring the economy and livelihoods—are linked through environmental peacebuilding activities that promote natural resource management as a source of livelihoods for ex-combatants in the context of disarmament, demobilization, and reintegration (DDR) (Boyer & Stork 2015; Pritchard 2015; UNEP & UNDP 2013).

11. See, for example, the 150 case studies found in the six-volume series on Post-Conflict Peacebuilding and Natural Resource Management. Lujala & Rustad 2012; Jensen & Lonergan 2012; Unruh & Williams 2013; Weinthal, Troell, & Nakayama 2014; Young & Goldman 2015; Bruch, Muffett, & Nichols 2016.

12. See, e.g., UNEP and UNDP 2013; Kingma 1997; Colletta, Kostner, & Wiederhofer 1996; Young and Goldman 2015; Unruh and Shalaby 2012; Shimoyachi-Yuzawa 2011.

13. See, e.g., Ide et al. 2021; Garrett 2016; Young & Goldman 2015; Jaramillo Castro & Stork 2015; Pritchard 2015; UNEP & UNDP 2013; Lujala & Rustad 2012.

14. Chen et al. 2023; Cook et al. 2019; Weinthal, Troell, & Nakayama 2015.

15. Ide et al. 2021; Bruch et al. 2019; Nichols & Al Moumin 2016; Bruch, Muffett, & Nichols 2016; Cheng & Zaum 2016.

A third category of theories of change relates to **peace dividends**. In this context, rapid environmental peacebuilding activities can illustrate the benefits of peace, helping to sustain public support for a peace process (McCandless 2012).[16] They often occupy a middle ground between immediate humanitarian assistance and longer-term peacebuilding processes (UN 2013, 2017). Examples include quick impact projects (sometimes referred to as QIPs) to drill water wells, restore degraded water infrastructure, provide temporary employment for ex-combatants, remediate environmental damage or degradation, and provide agricultural inputs to improve livelihoods and food security, all in the aftermath of a conflict (McCandless 2012; Garbino 2015).

A fourth category that represents a significant portion of environmental peacebuilding interventions **address conflict causes and risks to peace**. **Addressing grievances** is often a core element of environmental peacebuilding, and theories of change vary according to the conflict context. For example, historically inequitable distribution of revenues from natural resources have often generated grievances that drove secessionist movements (from South(ern) Sudan to Kurdistan to Scotland) (Collier & Hoeffler 2012), with environmental peacebuilding efforts seeking to redress these grievances through efforts to more fairly distribute and share wealth.[17] Concession reviews and contract renegotiations are other approaches to addressing historic grievances around oil, gas, mineral, and timber concessions (Rochow 2016; Le Billon 2012b). Other environmental peacebuilding efforts to address grievances include **land reform** (Unruh & Williams 2013; Green 2013), **transforming power dynamics** (Ide et al. 2021;

16. This framing of peace dividends expands upon the historic focus on savings associated with the shift of spending from military to social matters advancing peace to include timely and tangible deliverables that reduce social tensions by providing incentives for peace (McCandless 2012).

17. Ross, Lujala, & Rustad 2012; Machonachie 2012; Sandbu 2012; Wennmann 2012; UNEP 2009.

Johnson 2022), implementation of the Extractive Industries Transparency Initiative (EITI) (Rich & Warner 2012; Epremian, Lujala, & Bruch 2016), resolving historic disputes over land and water (Barwari 2013), **accountability** for wartime environmental damage (Payne 2016; De Silva 2016; Vialle et al. 2016), and **transitional justice** (Harwell 2016). Addressing other risks to peace typically focus on regaining control over the extraction, transit, and trade in **conflict resources**[18] and the environmental dimensions of **DDR** (discussed above). One of the key ways that environmental peacebuilding interventions address conflict causes and risks to peace is through the **diffusion of transnational norms**, such as transparency, inclusion, participation, accountability, and rights-based approaches (Ide et al. 2021).

A fifth category of environmental peacebuilding emphasizes **cooperation and confidence building** around shared environmental interests, which have been analyzed through the theories of functionalism, the contact hypothesis, and ideational transformation. The theory of **functionalism** has a long tradition, stemming in part from lessons derived from the creation of the European Union. It is rooted in the belief that technical, non-political, functional cooperation between conflict parties can build technical or epistemic communities across political, community, cultural, and/or other boundaries (Bergmann & Arne 2013; Bruch et al. 2012; Long and Ashworth 1999). Over time, such cooperative practice is theorized to lead to various degrees of institutional integration and new forms of mutual interdependencies, including institutionalized conflict resolution mechanisms (Gehring 1996). Eventually, the very notion that conflicts would be resolved by resorting to force would become unimaginable, or at the very least, impractical (Rosamond 2000; Wolf 1973). While this is a more generalized theory of change, it manifests in the field of environmental peacebuilding, for example, where transboundary forests, water, or other resources and their management in conflict-affected areas are the focus of interventions.[19]

18. Bruch et al. 2019; Lujala and Rustad 2012; LeBillon 2012a; UNEP 2009. The Kimberley Process is a particularly well-known approach to securing conflict resources throughout the chain of custody (Grant 2012; Mitchell 2012).

19. Dresse et al. 2019; Mehyar et al. 2014; Ginty 2012; Bruch, Wolfarth, & Michalcik 2012; Haas 2008; Dolaytar & Gray 2000.

In contrast to functionalism, the **contact hypothesis** and other **ideational transformation** interventions are rooted in the belief that transformative experiences (be they visual, cultural, relational, etc.) can contribute to transforming the ideas that ossify conflict trajectories (Carstensen & Schmidt 2016; Pettigrew & Tropp 2006; Legro 2000). The contact hypothesis focuses on transforming inter-group relationships, often by advancing common goals through cooperation. From an environmental peacebuilding perspective, interventions that focus on cultural and political narratives of place, eco-feminism, bioregionalism, and the construction of unbounded ecological ideas, are believed to create new possibilities of socio-political interaction outside conflictual trajectories.[20]

Social cohesion—the sixth category of environmental peacebuilding theories of change—has similar elements to cooperation and confidence building, as it tries to bridge groups and build trust across them by creating opportunities for more positive engagement and removing negative perceptions and biases. Moreover, it focuses on bonding within communities and increased use of available conflict resolution mechanisms. Social cohesion also seeks to link and strengthen citizen-state relations by improving perceptions of government service providers, local leaders, and national governments (UNDP 2009). Social cohesion is often seen as a common outcome of peacebuilding, and it has been the main theory of change of some interventions, including one led by the Word Bank in the Gulf of Guinea on conflict prevention through enhanced regional collaboration (World Bank 2023).

A seventh cluster of theories of change focuses on **gender equity** in environmental peacebuilding work (Ide et al. 2021). Some of these theories emphasize **protecting women from gender-based violence** linked to the collection of natural resources and when advocating for their environmental rights (IUCN 2020; Karuru & Yeung 2016; UNEP et al. 2013). Others seek to **secure property rights** for women, for example to land and minerals.[21] And others **promote women's involvement** in peacebuilding and natural resource management as a way to improve outcomes and the likelihood that they are sustained (Burt & Keiru 2014; UNEP et al. 2013; Narayan 1995). In many cases, gender is mainstreamed into environmental peacebuilding interventions; in others, though, gender-centric interventions have been adjusted to address, for example, climate security (Gaston & Brown 2023).

The eighth cluster focuses on **building resilience** through environmental peacebuilding (Schilling et al. 2017). There are three broad approaches. A first approach focuses on resilient **livelihoods** (Vivekenanda, Schilling, & Smith 2014). A second set of theories of change focuses on **disaster diplomacy**, where DRR and post-conflict reconstruction address conflict dynamics and promote community cohesion (Peters, Holloway, & Peters 2019; Kelman 2012). A third approach focuses on **building back better**, sometimes referred to as building forward better (Dalby 2022). In addition, other theories of change that build resilience also highlight early warning and good governance. Resilience building efforts tend to address absorptive capacity (to cope with shocks), adaptive capacity (to change to address future shocks), and/or transformative capacity (to change to be less vulnerable to future shocks) (Tänzler et al. 2018).

20. Huda 2021; Conca 2018; Weinthal & Johnson 2018; Ide 2017; Bruch et al. 2012; Conca & Dabelko 2002.

21. Slavchevska et al. 2020; Karuru & Yeung 2016; UNEP et al. 2013; Hayes & Perks 2012.

Climate security, a ninth cluster of theories of change, is a large and rapidly expanding area of environmental peacebuilding. Climate change is seen as a threat multiplier and a conflict accelerant (Goodman & Baudu 2023; Tänzler et al. 2018; Swain 2015). A variety of theories of change seek to address these risks. These include, for example, **early warning and response** (LPI & UNDP 2023; Gaston & Brown 2023), improved **dispute resolution mechanisms and capacity** (Gaston & Brown 2023), **environmental remediation and enhancement** (LPI & UNDP 2023); better **natural resource governance** (Stein, Bruch, & Dieni 2023; LPI & UNDP 2023), protecting **climate migrants** (Gaston & Brown 2023), and strengthened **resilience**, particularly relating to livelihoods (LPI & UNDP 2023; Gaston & Brown 2023). Efforts to address climate change can inadvertently create new conflict—a dynamic often termed "backdraft" (Dabelko et al. 2013). **Conflict-sensitive climate finance**, including the use of conflict analysis/contextual analysis/risk assessment, in designing and implementing climate adaptation and mitigation interventions constitutes an important approach to preventing conflict arising from climate change responses (Meijer et al. 2023; UN CSM 2020). One approach to reduce drivers of conflict often associated with REDD+ is to **co-design sustainable land-use systems** with affected communities to integrate land-based climate mitigation and peacebuilding objectives (Morales Muñoz et al. 2023). A growing number of interventions are pursuing a **just transition** to counter-act the effects of a transition to a carbon-neutral economy (McIlroy, Brennan, & Barry 2022). Given the widely varying views of "climate security," Gaston and Brown (2023) have called for focusing efforts on learning from and refining theories of change in this area.

The tenth and final cluster of theories of change addresses the nexus of **conflict sensitivity**. At its most basic level, conflict sensitivity seeks to do no harm and reduce the impacts of the fragile or conflict-affected context on an intervention. In short, conflict sensitivity at its most basic focuses on risk management (GEF IEO 2020). Other formulations seek to both minimize the risks and capitalize on opportunities to build peace (Hammill et al. 2009). While most of the other theories of change focus on how the environment and natural resources can be used to advance peace, conflict-sensitive theories of change also look at the impacts of conflict and fragility on the environment and seek to prevent and mitigate those impacts.

Reflections on Environmental Peacebuilding Theories of Change

As a meta-framework, environmental peacebuilding comprises—at least by this count—ten categories of theories of change with at least 40 subcategories. These categories reflect different ways that different institutions or actors engage with environmental peacebuilding. They have different mandates to work on peace, conflict, security, the environment, natural resources, and climate change, and often work only in specific contexts (for example, early warning, humanitarian assistance during armed conflict, or post-conflict recovery).

In principle, theories of change are clear and specific; in environmental peacebuilding practice, the clarity of a theory of change can vary widely. Sometimes environmental peacebuilding has a specific theory of change that is clear (such as bringing together communities to cooperate and build trust around their mutual need for water). In many cases, though, a

theory of change reflects the environmental dimensions of a peacebuilding objective that is but one of a suite of peacebuilding objectives. For example, an initiative to build sustainable livelihoods after conflict is the environmental dimension of one of the four priorities articulated by the UN Secretary-General regarding peacebuilding in the immediate aftermath of conflict. The context of the latter initiative (to build sustainable livelihoods) will have four large clusters of theories of change (on security, basic services, economy and livelihoods, and governance and inclusion); the sustainable livelihoods initiative will be one theory of change and related activities supporting the economy and livelihoods cluster.

This leads to an important point: Peace and peacebuilding are complicated, with many dimensions. It may be possible to advance in one of those dimensions (e.g., restoring the economy and livelihoods) independently from how the other dimensions perform. As a result, while food security interventions may be an important component of an environmental peacebuilding intervention (and peacebuilding more generally), it is not sufficient in and of itself to ensure peace, and indicators of peace may not necessarily reflect a causal increase in peace (because other actions could be responsible for the increases in peace) even if that indicator is improved from its baseline. This is but one way that **contribution rather than attribution** becomes important with environmental peacebuilding.

Similarly, environmental peacebuilding is complicated, with many environmental and peace dimensions. It is possible to advance environmental objectives without advancing peace objectives. In the same way, it is possible for both environmental and peace objectives to show progress, but it may be difficult to show that environmental advances are causally

responsible for peace advances. Accordingly, it is important to monitor carefully and use evaluation methods that help us understand the causal pathways and connections.

Second, there is a measure of **overlap** in the various theories of change. Many theories of change relate to natural resources and livelihoods, including those for early warning (particularly as it relates to food shortages), advancing other peacebuilding goals (including livelihoods), peace dividends, resilience, and climate change. It is possible to regroup the specific theories of change to reflect these different sectors, although doing so risks losing sight of the particular mandates, context, and objectives. Annex 2-1 sets forth a reorganized grouping of the theories of change that seeks to combine similar modalities. Figure 2.7 compares the initial mapping of the ten clusters with the regrouped theories of change.

Third, different natural resources and environmental features have different physical characteristics. They may be renewable or non-renewable. They may be diffuse or localized. Their presence may be and stable or they may be ephemeral (such as water or wildlife). They may be common or scarce. They may be readily accessible (lootable) or they may require investments of time, money, and labor to access or utilize. They may be essential to human life or not. **These different physical characteristics mean that a particular resource may be more amenable for certain theories of change** (e.g., cooperation around water because it is essential to life and livelihoods) (Bruch, Jensen, & Emma 2022).

Initial Clustering of Theories of Change (based on practice)	
Conflict prevention	Early warning
	Response
	Good governance
E/NR supporting broader post-conflict peacebuilding	Security
	Economy and livelihoods
	Basic services
	Governance and inclusion
Peace dividends / Quick impact projects	Basic services
	Livelihoods
	DDR
Address conflict causes and risks to peace	Grievances
	Land tenure
	Transforming power dynamics
	Transitional justice
	Conflict resources
	Accountability
	DDR
	Diffusion of transnational norms
Cooperation and confidence building	Functionalism
	Contact hypothesis/Ideational transformation
Social cohesion	Social cohesion
Gender equity	Protection
	Property rights
	Management
Resilience	Livelihoods
	Disaster diplomacy
	Build back better
	Early warning
	Good governance
Climate Security	Early warning and response
	Dispute resolution management
	Environmental remediation
	Natural resource governance
	Resilience
	Conflict sensitivity
	Protecting migrants
	Co-design
	Just transition
Conflict Sensitivity	Managing risks
	Capitalizing on opportunities

Regrouped Theories of Change (to reduced potential overlap)	
Basic Safety & Security	Peace dividends and incentives
	Early warning systems
	Conflict resources
	Remediating environmental damage
	Reintegration (DDR)
	Disaster Risk Reduction
	Protecting migrants
	Reducing gender-based violence
Provision of Basic Services	Basic services delivery
	Climate change adaptation
Sustainable Economies and Livelihoods	Alternative livelihoods
	Strengthening livelihoods and food security
	Restoring and diversifying the economy
Good Governance & Political Processes	Public participation
	Enhancing good governance
	Resource ownership, access, and management
	Rebuilding environmental governance at all levels
	Customary/traditional norms and institutions
	CBNRM
	Transitional justice
	Management of interacting systems
	Diffusion of transnational norms

Figure 2.7: Initial Clustering of Theories of Change (per activity) and Reclustered List
Source: ELI.

B. Indicators

Indicators are variables that can provide evidence that a change has occurred. A good indicator is aligned with your theory of change or the context in which your intervention takes place and provides you with essential information (i.e., what you *need* to know, rather than what might be *nice* to know) for managing an intervention and understanding its effects. There are a few things to remember when developing indicators:

- **Indicators can capture process, product (result or outcome), or context (assumptions and risks). Process indicators** measure your intervention's activities and outputs, while **outcome indicators** measure results which your intervention achieves or to which it contributes. **Contextual indicators** measure the key assumptions or risks that are tied to your intervention context. All these indicators are needed to successfully monitor an intervention.
- **Indicators can track changes at different points during an intervention, with different applications. Leading indicators** track certain changes that are expected to precede other changes (such as drought as a potential precursor to violence). These indicators can be useful for foreshadowing both immediate and long-term change, providing practitioners with both evidence of the likely effectiveness of the intervention as well as early warning regarding the need to respond to potentially negative change trajectories. Meanwhile, **lagging indicators** track changes that actually happened (such as improved environmental governance resulting from restored rule of law). Lagging indicators are particularly relevant when conducting evaluations. Figure 2.8 includes additional examples of both these indicator types.

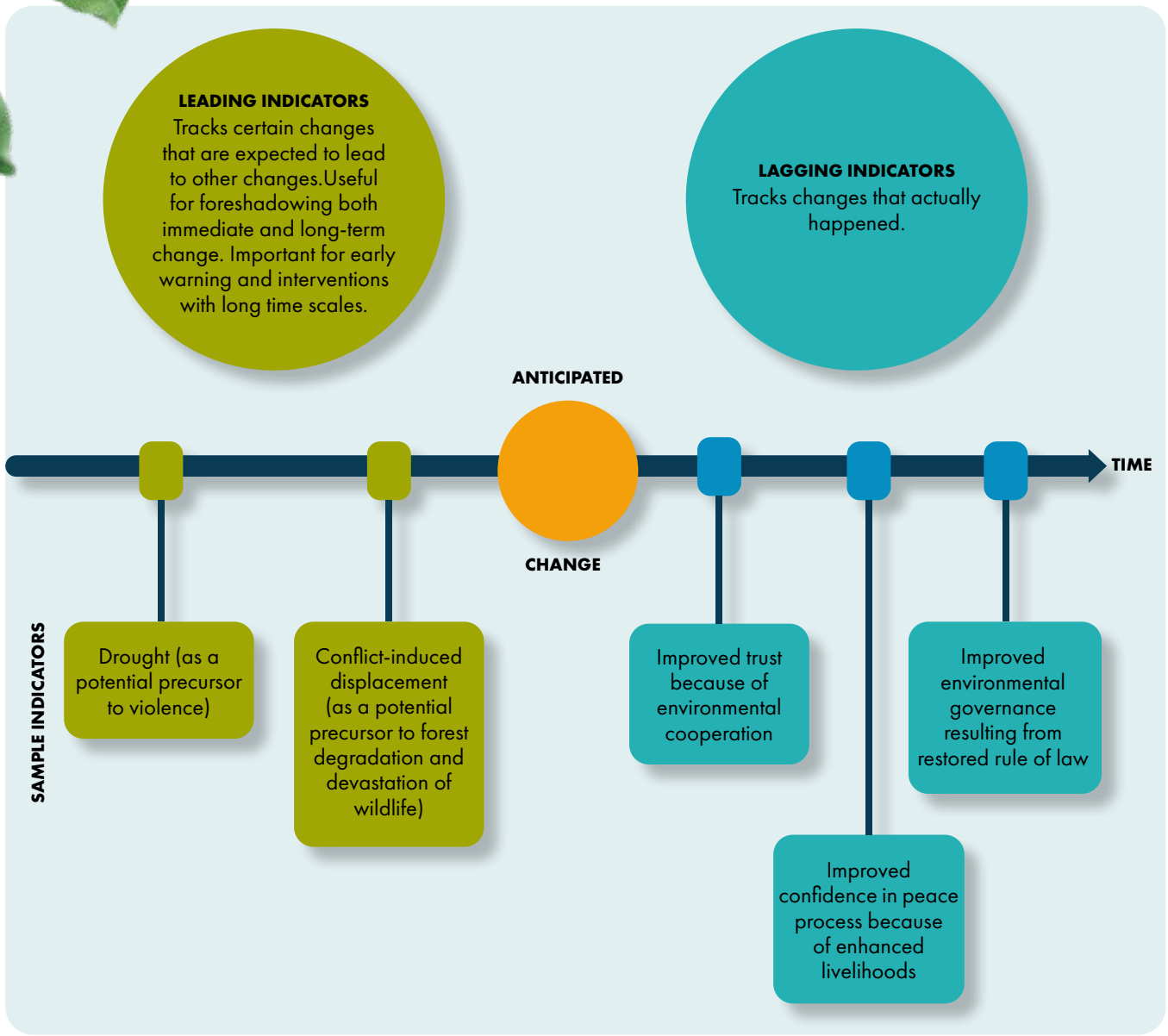


Figure 2.8: Leading vs. Lagging Indicators
Source: ELI.

- **You can (and should) have both quantitative and qualitative indicators. Quantitative indicators** measure things that are amenable to a numerical value (such as crop yields and household income), while **qualitative indicators** measure things like opinions, feelings, or judgments that are often conveyed with words and are not particularly amenable to a numerical value. Quantitative indicators are generally easier to compare than qualitative ones, but qualitative indicators provide depth and context. Qualitative indicators can also be converted into quantitative indicators by creating categories or codes, such as by assigning numerical values to qualitative responses (e.g., "good" = 2 and "OK" = 1). It is a good idea to combine qualitative and quantitative indicators, especially at key "conversion points" or parts of your theory of change for which you really need

information on the causal mechanism for change and whether it works in the way you expected.

- **Many of the most meaningful aspects of an intervention are not easy to measure**; meanwhile, it is challenging to manage factors without measuring them. Figure 2.9 juxtaposes examples of indicators that are easy to measure with examples of meaningful change that can be difficult to measure for a hypothetical post-conflict project to build peace around a national park.

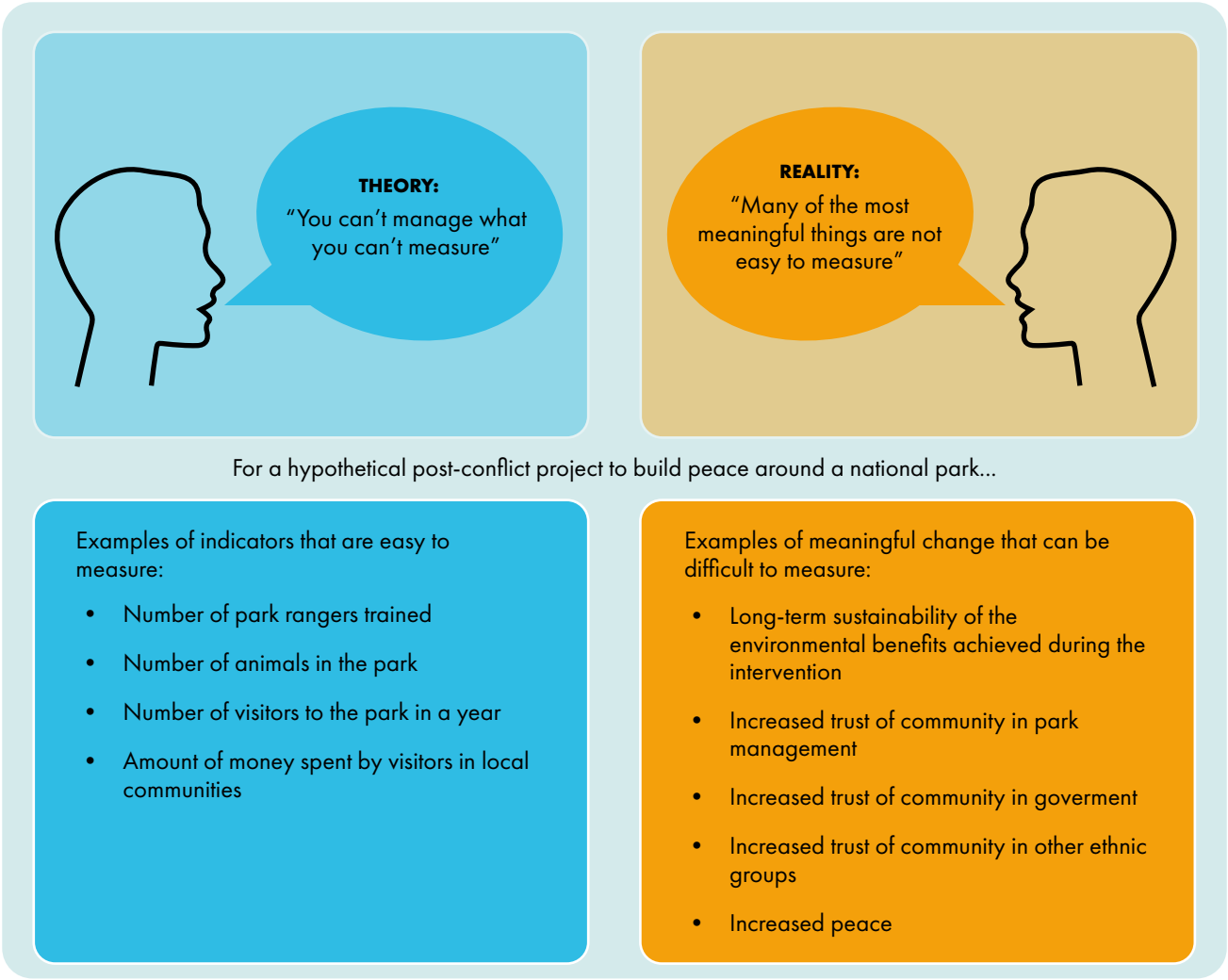
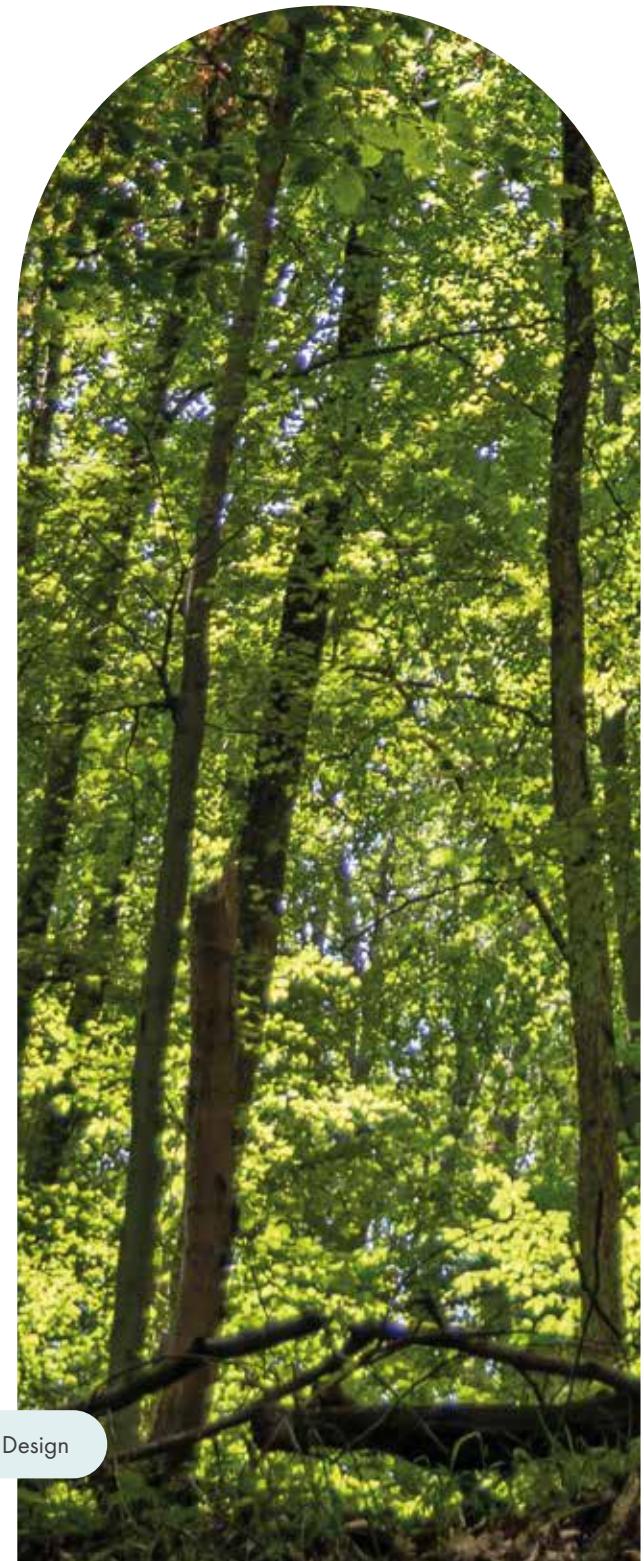
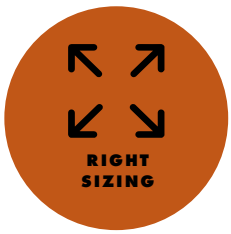


Figure 2.9: Measurable vs. Meaningful Indicators
Source: ELI.

- **Indicators should be unidimensional and specific.** To the extent possible, practitioners should use specific unidimensional indicators (measuring only one thing) with clear thresholds; multidimensional indicators are too difficult to measure objectively. If you are using indicators across a portfolio or program, remember that they should also then be comparable.



- **Indicators should be right-sized to the intervention context and resources.** Develop your indicators based on the resources you have—including time, money, and skills—as well as the context in which you work. For example:



  - Certain intervention sites may be too dangerous for in-depth or in-person data collection; instead of indicators that require detailed surveys or focus groups for information, how can you leverage technology such as drones or SMS to get sufficient (albeit imperfect) information?
  - Some questions may be too personal, culturally inappropriate, or dangerous to ask. Make sure there are ways of gathering information on your indicators that make sense for the context and do not put anyone at risk. You may need to use proxy indicators (i.e., indicators that measure something indirectly) in some cases.
  - Some indicators may require information that takes too long to collect, especially given challenges in the conflict context. Make sure you can collect indicator data in a timeframe that supports your monitoring, evaluation, and learning needs.

- **Indicators should be credible, reliable, and ethical.** Some indicators may not be accepted by certain stakeholders for various reasons, or information for them may be difficult to collect regularly and reliably. Additionally, the methods for collecting some indicator data may be ethically challenging, such as in the case where someone must report a crime if they learn of one. Practitioners should utilize participatory approaches to gain input from stakeholders on what information

they perceive as important to measure as well as the ways in which that information can be gathered. Relevant stakeholders should agree on the indicators before implementation.

- **Indicators should focus on what you need to know versus what is nice to know**. The more indicators you define and commit to tracking, the more resources you will need for monitoring. Too many indicators may also mean that monitoring information is not analyzed quickly enough to be of use, especially for early warning. Additionally, intervention participants can become wary of data collection processes or feel like the information they provide is not being used if there are too many indicators. Always ask why an indicator is necessary before including it.

In environmental peacebuilding work, it is essential that you include indicators that link the environment/climate/natural resource management factors and the peace/conflict factors. For example, did an increase in the number of people with access to potable water contribute to growing trust in a peace process and government institutions? This can be done by capturing the timelines for change and including both objective and subjective indicators about not just *what* changed, but *how* and *why* it changed. When resources are limited or monitoring an intervention is challenging, interventions often fall back on quantitative output indicators, such as the number of people trained, number of wells drilled, or the number of hectares of land put under protection. But this does not tell you *how* that change happened or the effect of that change on people's perceptions, attitudes, and beliefs, all of which could have consequences for the effectiveness and sustainability of your work.

As of 2023, there is no comprehensive collection of indicators for environmental peacebuilding. Some databases include indicators relevant to environmental peacebuilding (see Box 2.11 on the Eirene Peacebuilding Database managed by the Alliance for Peacebuilding). To support the development of this toolkit, ELI and EnPAx convened a hackathon to generate potential indicators for specific environmental peacebuilding theories of change; these are compiled in Annex 2-II.

Box 2.11: The Eirene Indicator Database – Trends for Environmental Peacebuilding

As of mid-2022, the Alliance for Peacebuilding's (AfP's) Eirene Peacebuilding Database included 3,381 indicators from 2,008 publicly available peacebuilding resources, including project reports, performance evaluations, program assessments, surveys, and more. While the database organizes sources into program areas – dispute resolution, governance, perceptions of safety and security, resilience, social cohesion, trust, and violence reduction – indicators with strong environment-conflict-peace connection peacebuilding are not highlighted as such.

A review of the database undertaken by ELI between February and July 2022 identified 72 potential environmental peacebuilding indicators (from 12 projects), more than 50 environment-related indicators, and more than 75 near-miss indicators. The specific indicators are listed in a stand-alone document at https://m-and-e.environmentalpeacebuilding.org/toolkit

Potential environmental peacebuilding indicators

Indicators with the strongest environment-conflict-peace relationships are present in various ways in the database. The indicators clearly related to conflict-relevant principles, such as insecurity, dispute resolution, community dialogue and trust, and government responses to conflict causes. Indicators in the database most relevant to environmental peacebuilding focus on issues of land, including land disputes, land rights, and land reform, looting of natural resources, and agriculture, including cattle raiding, water and grazing rights, and destroyed crops or community pastures. For example, indicators in one project focused on whether insecurity has the capacity to prevent victims of drought from getting water, going to the field, or moving animals. Generally, indicators on livelihoods and basic services had a less clear environment-conflict-peace relationship, sometimes as a smaller part of the indicator or described in a measurement or response option, for instance.

Environment-related indicators

The database has numerous indicators focusing on the environment, most predominantly addressing natural disasters and shocks such as flooding, water quality and access to water, rural areas and urbanization, food security and agriculture, extractive industries and mining, and biodiversity and sustainability. These environment indicators largely focused on environmental governance and economics, and did not explicitly address conflict or peace. In addition, there were many indicators focused on economic resources and services that implicated natural resources.

Near-miss indicators

Near-miss indicators in the database have potential connections for environmental peacebuilding, broadly focusing on economic development, cooperation, livelihoods, and basic services. While the near-miss indicators focus on relevant subjects for environmental peacebuilding, they are inconclusive in their exact environment-conflict-peace relationship and require more elaboration to be useful as an environmental peacebuilding indicator.

In addition to environmental, natural resource, or climate-related indicators (such as those included in the Eirene database), **environmental peacebuilding interventions will also need at least some indicators on conflict and peace**. Common indicators of conflict and peace include the number of violent incidents or the number of casualties. However, these are not useful for understanding more nuanced manifestations of conflict, peace, security, and well-being, let alone their relationship to the environment and natural resources. Table 2.1 outlines some additional ways you may be able to track and understand the conflict context, including factors in people's lives that are directly or indirectly affected by conflict.

Category	Key Considerations	Example Indicators
Conflict	Whether your intervention is intentionally and directly trying to reduce disagreements about resource management or indirectly decrease instances of violence, monitoring conflict is key to any environmental peacebuilding or conflict-sensitive intervention. Remember, though, that conflict is not synonymous with violence. Conflicts can show up in many forms.	• Number of incidences of violence, robberies, assaults, murders, etc. • Percentage of people who feel there has been an increase in violence • Perceptions of violence and its causes
Safety and Security	The degree to which there is safety and security in a given area—and, perhaps more importantly, *perceptions* about safety and security—may serve as a leading indicator for overt instances of conflict. What safety and security look like will vary in any given area.	• Number of people/women/youth accessing markets/schools/etc. by a particular route • Percentage of people who report an increase (or decrease) in feelings of security while at home/in a certain location • Perceptions of the level of security and its causes
Well-being	Well-being is multi-dimensional and includes other aspects of conflict and peace represented in this table in addition to health, housing, social connections, and civil engagement.[22] You can measure a community's overall well-being or differences between groups. You can also check key dimensions of well-being to understand what areas need additional support or investment.	• Number of people with access to stable housing • Number of households (people) with access to clean water • Number of households (people) with access to clean sanitation • Percentage of people who trust their neighbor (of a certain group) to care for their child or watch their home • Feelings of connection to community members, including those of other groups • Perceptions that the changes in well-being are due to peace and the peace process

22. See, for example, https://www.oecd.org/wise/measuring-well-being-and-progress.htm.

Category	Key Considerations	Example Indicators
Livelihoods	Livelihoods can be both leading and lagging indicators of conflict. When drought or other environmental change has a substantial impact on livelihoods, riots, violence, and armed conflict often follow. Similarly, conflict affects livelihoods and food security in multiple ways; and restoring sustainable livelihoods and food security are a priority in post-conflict peacebuilding.	○ Average household income in a particular area ○ Percentage of households (or people) who feel they have improved (or worsened) livelihoods ○ Percentage of people who attribute improved livelihoods to peace and the peace process.

Table 2.1: Approaches for Directly and Indirectly Tracking the Conflict Context
Source: ELI.
Note: For most indicators, it is important to collect data disaggregated by gender, age, ethnicity, and other characteristics that are relevant to your particular context.

One of the best ways to determine what to measure is to ask stakeholders. Conflict, security, and well-being look different in different sociocultural, political, and economic contexts. A great example of this is **Everyday Peace Indicators (EPI)**.[23] EPI relies on a community or other group of people to develop their own indicators about or related to peace. Complex outcomes like security, well-being, accountability, gender, and respect can be made tangible by working with a group to define what these things mean to them and then crafting indicators based on that. Table 2.2 compares indicator themes in Afghanistan and Sri Lanka, adapted from Everyday Peace Indicator codebooks. Box 2.11 provides an example—not associated with EPI—of engaging Colombian stakeholders in the design of indicators and an intervention.

23. See, https://www.everydaypeaceindicators.org

Indicator Category	Afghanistan	Sri Lanka
Safety and Security	The concept of d*aily security* is divided into "mobility" (the ability to safely move about) and "business as usual" (businesses being open or closed). For example: • Number of people who go shopping at a specific place • Percentage of businesses open at night	The concept of *safety* includes physical security and dangers, real and perceived. For example: • Percentage of people who report being able to sleep peacefully at night • Number of people who are afraid to purchase food at a shop owned by another group
Religion	Includes any mention of religion, religious leaders, or religious practices. For example: • Number of households who practice a certain religious activity • Percentage of people who support a specific religious leader	Related to religious practices or institutions. For example: • Number of people who have converted to another religion • Percentage of people who participate in a specific religious practice or attend a specific place of worship
Mobility and Migration	*Migration* is about movement. For example: • Number of families or individuals moving to a specific area	*Mobility* is related to movement as well in terms of someone's willingness or ability. For example: • Number of people who report the ability to move freely from one location to another. • Evidence of certain groups visiting a particular village

Indicator Category	Afghanistan	Sri Lanka
Relationships and Communication	*Interpersonal communications* includes person-to-person interactions. For example: • Number of people hearing about certain ideas directly from others (not through media) *Routine social activities* explores social gatherings. For example: • Evidence of different groups attending social or cultural events	*Intergroup relations* includes interactions between different communities or groups. For example: • Number of intergroup social or cultural activities, e.g., weddings, funerals, or parties • Evidence of different groups working together toward a shared goal or purpose

Table 2.2: Comparison of Peace Indicators for Afghanistan and Sri Lanka
Source: Adapted from Everyday Peace Indicators, 2019.

Box 2.12: Designing an Environmental Peacebuilding Intervention in Colombia

Between 2019 and 2021, researchers working with Biodiversity-CIAT in Colombia undertook an intervention design and evaluation process on sustainable land-use systems (SLUSs) for cacao agroforestry (Morales Muñoz et al. 2023). To design the intervention, researchers undertook a context analysis using various methods such as a World Café, workshops, and semi-structured interviews to understand stakeholders' perceptions of the drivers of conflict, the connectors (opportunities for peace), and dividers (sources of potential tension in an intervention). These stakeholders identified drivers of conflict that included environmental malpractice, corruption, conflicts over water resource management, deforestation, and land grabbing, among others. Potential connectors were grouped into three categories: participation and co-design; spaces for dialogue, exchange, and cooperation; and co-benefits from climate mitigation and social cohesion. Finally, when considering potential dividers in the intervention to be designed, stakeholders pointed to exclusion, individualism, and false or unmet expectations as risks.

Based on this context analysis, the intervention team developed a theory of change for how SLUSs can contribute to climate change mitigation and peacebuilding in cacao agroforestry. Mechanisms or factors in this theory of change included participation, sustainable livelihoods, food security, conflict transformation and dialogue, and increasing trust. Corresponding indicators for each factor were developed and tested at both the individual farm level and at the level of the value chain. These included jobs, forest area change, and income (sustainable livelihoods); food production (food security); number of dialogue processes and conservation agreements signed (conflict transformation and dialogue); and percentages of participation. After pilot testing the intervention and indicators, the researchers determined that SLUS interventions designed for climate change mitigation can contribute to peacebuilding through socio-economic inclusion, conflict transformation and dialogue, and the building of natural resource management institutions.

Context, Risk, and Assumption Indicators

Remember to develop indicators for the context, and particularly for your assumptions and risks. For example, does your intervention logic only hold true if there is sufficient rainfall for those in the agricultural sector to continue to participate? Or if there is not increased recruitment of militia members? Could tensions between groups flare up and make your intervention unlikely to succeed or even impossible to implement? These are things that you would want to track through context, risk, and assumption indicators. For example, you may want to track:

- Changes in weather patterns, such as the amount of rainfall in a given month.
- Changes in migration, such as the number of people leaving or moving into a specific region.
- Changes in militia recruitment patterns, such as the number of posters, meetings, or other recruitment activities.
- Changes in politics, such as membership in a particular political party or the number of political ads on the radio or TV.

Remember, these are not indicators of what you are trying to effect or influence, but instead are entirely outside of your control but have the potential to impact your intervention.

Conflict Sensitivity Indicators

In addition to indicators that explicitly and intentionally measure conflict and peace, **it is also beneficial to include indicators of conflict sensitivity that are about process instead of product or outcome.** Monitoring conflict sensitivity is different from monitoring peacebuilding; conflict sensitivity relates to avoiding doing harm and potentially contributing to peace as a matter of process, whereas monitoring peacebuilding is concerned with peace-related outcomes (Goldwyn & Chigas 2013). Below are a few illustrative examples of conflict sensitivity indicators:

- *Number of conflict or context analyses undertaken* – By including an indicator on the number of context analyses undertaken during the intervention's lifecycle, you are held accountable for regularly assessing the context in which you operate, which in turn provides the information necessary to be conflict-sensitive.

- *Number and types of changes made based on the context analysis* (Goldwyn & Chigas 2013) – How has your intervention adjusted based on the results of the context analysis?
- *Perceptions about / number of people who feel that the intervention contributes to the conflict/is not in their best interest/is exclusionary/etc.* – While the exact indicator will need to be refined based on your context, asking those impacted by your intervention questions about how they feel it is responding or even contributing to the conflict or their level of preference for or frustration with the intervention's activities can be a good indicator of your degree of conflict sensitivity.

Open-ended questions about an intervention's level of conflict sensitivity during regular activities and monitoring processes can also provide invaluable information on whether your intervention is being implemented in a conflict-sensitive manner.

C. Developing a Monitoring, Evaluation, and Learning Plan

Once you have developed your theory of change and associated indicators, the next step is to operationalize them by developing a plan for monitoring, evaluation, and learning or an M&E plan. **M&E plans capture the processes and methods to gather information on, assess, and learn from, and adapt the implementation of your intervention.** An M&E plan is thus an essential part of effective intervention management. It is also important for many of the same reasons that the process and product of documenting your theory of change is essential: an M&E plan creates a common understanding of what will be measured and assessed and how, lays out a strategy for learning and adaptive management, ensures that you have sufficient resources, and supports accountability to a range of stakeholders.

A comprehensive M&E plan often includes:

- A theory of change (see section 2.2.A, above)
- Quantitative and qualitative indicators (see section 2.2.B, above)
- A plan to collect information on those indicators (i.e., a monitoring plan)
- A plan for assessment(s) and evaluation (i.e., an evaluation plan)
- A plan to learn from the monitoring and evaluation, including overarching learning questions (i.e., a learning plan)
- A plan for early warning and response
- A plan for regular reflection and adaptation (i.e., planning for adaptive management)
- A plan to protect staff and participants from physical, mental, and emotional risks.

These plans should clearly outline when and how stakeholders should be involved throughout the intervention. Particular consideration—both substantive and procedural—should be paid to integrating gender considerations (see Box 2.13). Moreover, it is important to consider how to balance the competing priorities of transparency on the one hand and conflict sensitivity on the other (see Box 2.14).

There are many resources available that describe the general components of a M&E plan.[24] Instead of providing basic information on these plans, this section of the Toolkit outlines key considerations for the environmental peacebuilding context.

Box 2.13: Something to Consider – Integrating Gender Considerations

By meaningfully incorporating gender considerations into context analysis, design, and corresponding M&E plans, environmental peacebuilding practitioners can better identify the different effects of their work related to gender. Gender considerations can also lend insight to what gender-based approaches work well and under what conditions or circumstances.

Collecting gender-disaggregated data is integral to capturing gender dynamics in your M&E approach and building gender inclusivity into your environmental peacebuilding work.

25. See, for example, EvalCommunity 2023; tools4dev 2022. BetterEvaluation (betterevaluation.org) also has many helpful resources.

Box 2.14: Balancing Transparency with Conflict Sensitivity

As you develop your monitoring, evaluation, and learning plans, consider how some stakeholders—particularly spoilers—may politicize or otherwise use information about your intervention for their own gain. Transparency is often desirable: it can increase public awareness and accountability, improving the merit of an intervention and strengthen data (GEF IEO 2020; Rathinam et al. 2019). However, in some cases it may make sense to keep information confidential to avoid negative unintended effects. **Monitoring and evaluation methodologies must address tensions between transparency and the sensitivity of information.** Failure to resolve these tensions can skew M&E results and cause harm to stakeholders and intervention participants (Anhalt-Depies et al. 2019). It is crucial that practitioners anticipate tradeoffs between data collection, transparency and openness, privacy, security, and trust and that they develop best practices to address them. Some organizations have used the concept of "responsible data" to acknowledge the tensions among privacy protection, data security, transparency, and openness (Center for Democracy and Technology 2018). Depending on the context, sensitive information can refer to directly identifiable information, such as names and address, demographic data, such as religion or ethnicity, or personal information such as political views (USAID 2019). It could also refer to information that might inflame simmering tensions. It can also include information on positive developments of an intervention, which could lead peace spoilers to target the project or program.

(1) **Understand the intervention's information environment**. Understanding how to mitigate risks around information and transparency starts at the scoping and design of the M&E processes, and the design of the intervention more broadly. Understanding the scope of the intervention will determine the types of information required for the intervention's M&E and indicate potential cultural or legal implications around information sharing. It can also shape staff understanding of how stakeholders interact with each other, the intervention, and information distributed through the M&E process.

(2) **Assess existing legal and regulatory cultural requirements.** Sharing of data and other information must comply with existing legal and policy guidelines. Develop an understanding of the relevant laws, policies, and operational procedures regulating information and data sharing. It is important to note that the relevant laws may include those in the country of the intervention, those governing the actions of the funder, and those governing the implementing agencies. When in doubt about which laws may apply, please consult your organization's general counsel.

(3) Consider the diversity of stakeholders who will participate in the intervention and how best to include the intervention participants and M&E respondents in the M&E process. Addressing tensions between transparency and conflict sensitivity can build trust. Consider including intervention participants and evaluation respondents in the data collection and evaluation process.

(4) Determine transparency and conflict sensitivity concerns using power and stakeholder analysis. Tensions around information sharing and knowledge circulation implicate dynamics around the authority and agency of stakeholders and can highlight cultural norms. A highly participatory M&E approach requires active involvement of stakeholders, respondents, and intervention participants throughout the evaluation cycle. Such participatory mechanisms will raise tensions between transparency and the sensitivity of information. Understanding the concerns of stakeholders, respondents, and intervention participants can provide a better understanding of transparency and security concerns, particularly in the context of natural resources. After conducting a power and stakeholder analysis, assess the transparency concerns.

(5) Conduct a benefit-risk assessment. After understanding stakeholder, respondent, and community member concerns, assess the potential benefits and risk of information use and sharing and consider unintended consequences. The assessment will help to determine opportunities for mitigating or lowering the risk of transparency and to regulate the disclosure of information and data. The following assessment has been adapted from USAID's Toolkit on "Considerations for Using Data Responsibly."

(6) Implement a contingency plan and other mechanisms to address the disclosure of sensitive information. There must be procedures in place to address unanticipated and unintended risk, harm, or consequence results from data and information practices. Several steps should be taken to track and protect sensitive information and mitigate risk, including the application of "Lean Data'' practices. If that fails, there must be a contingency plan to mitigate risks and redress harm. This plan should include a mechanism by which people affected by the disclosure of sensitive information can submit a complaint.

An extended version of this box with additional considerations and resources is available at https://m-and-e.environmentalpeacebuilding.org/toolkit.

Monitoring Plan

Your monitoring plan should be developed alongside your indicators and at the start of your intervention. It is a reference tool that should be consulted throughout the intervention cycle to understand what information you will collect, when, how, and how it will be used and shared. Like with the theory of change, the monitoring plan should be reviewed and revised as needed.

Within environmental peacebuilding, complexity-aware monitoring is key. Complexity-aware monitoring has three key principles: (1) attend to performance monitoring's three blind spots; (2) synchronize monitoring with the pace of change, and (3) consider interrelationships, perspectives, and boundaries (USAID 2021).

Performance monitoring has three broad blind spots. First, focusing on intended outcomes ignores the unintended outcomes of an intervention (whether positive or negative). Complexity-aware monitoring examines both intended and unintended outcomes. Second, there are generally multiple causal pathways leading from an intervention's activities to outcomes.

Accordingly, it is important to identify the possibility of alternative causes and other factors contributing to both intended and unintended outcomes rather than relying solely on a predefined theory of change. Finally, change is often nonlinear, and there is often not a clear relationship between activities and results. Complexity-aware monitoring aims to explore a vast array of possible outcomes, casual factors, and pathways of contribution, which complements performance and context monitoring.

The second principle of complexity-aware monitoring is synchronizing monitoring with the pace of change. This means that monitoring does not follow a pre-defined timeline but instead is based on the pace of change of the intervention and the context. In complex and chaotic situations, intervention teams might face more challenges, and complexity-aware monitoring uses leading indicators that provide data before and during important changes in the implementation and context that help to gather the information in real-time that is needed to act. These can be linked to the conflict analysis work by prioritizing domains of that analysis for increased monitoring and being attentive to any changes. In particular, teams should be attentive to any exceptions or discontinuities in the monitoring data (e.g., look for outliers, exceptions from a general pattern or changes in the usual speed or direction) (USAID 2014).

The third principle of complexity-aware monitoring acknowledges the different perspectives that different actors—including partner staff, beneficiaries, participants, and local populations, among others—have about the intervention and its interrelationships. When

the monitoring and evaluation process incorporates these considerations, it includes diverse interpretations and perceptions of a situation, provokes more creative thinking, and creates a collaborative problem-solving environment (USAID 2014).

Key considerations for developing your monitoring plan include:

- In addition to indicators, you should also **develop a plan for capturing unintended effects and updating your context analysis**. It is essential to know whether your intervention may have inadvertently exacerbated the conflict or fostered cooperation or trust through mechanisms other than those planned. If you only focus on your theory of change indicators, you may miss these unintended effects. While qualitative indicators can be one way to initially identify unintended effects, you will also need a more open-ended approach to gathering feedback from intervention stakeholders. This could be through interviews or surveys or even informal and regular conversations with intervention partners or community members.

Unintended effects go both ways, so you should ensure that you **define a way to document how conflict or fragility have affected your intervention**. You may find yourself unable to conduct certain activities due to insecurity or see limited participation as a result of mistrust or weak governance structures that hinder the implementation of agreements. Documenting these effects on your intervention process will help you demonstrate why an intervention is not achieving its objectives. It can also help future interventions to better identify, understand, and articulate risks.

- After capturing these unintended effects, **ensure that you have a way of systematically documenting them and your response to them**, such as through an outcome journal or outcome register. It should be clear to intervention staff how, when, and where to do this. Systematic and explicit documentation is often useful later (e.g., when reporting back to funders, community members, and partners), for both learning and accountability purposes.

- Be sure to **consider whether you need a baseline, and if so, when and how that baseline will be set**. When dealing with conflicts and the environment, baselines often shift (Klein & Thurstan 2016; Leather & Quicke 2009). While it is common to set a baseline at the very start of an intervention, doing so may not make sense in all environmental peacebuilding contexts. Instead, you may want to set a baseline based on information at some point time in the past (e.g., an environmental baseline prior to destruction caused by conflict). Whatever you choose, make sure the baseline is clear from the start; collecting baseline after an intervention has already had the potential to affect change is detrimental to monitoring, evaluation, and learning processes.
- Remember to **consider your stakeholders as you develop methods for monitoring**. Get feedback on what methods are most appropriate and feasible. Review your personas to see what constraints might affect monitoring processes.

Evaluation Plan

Like with a monitoring plan, your plan for evaluation or other types of assessments should be developed at the start of your intervention (i.e., in the Design phase). While you may not be ready to put together a full evaluation plan, it is still important to identify high-level evaluation needs or objectives. At the start of your intervention, your evaluation plan should include key questions (linked to your learning plan; see below), the estimated timeline or timing of evaluations and other assessments, the resources needed, and the driving forces or values behind your methods and process (including for sharing and using evaluation findings). Once you are ready to undertake the evaluation, you will create a much more concrete and detailed plan or even a Terms of Reference for an external consultant to lead the evaluation.

A few key points for creating an evaluation plan for an environmental peacebuilding intervention include:

- **Consider the possibility of a developmental evaluation or some other type of ongoing assessment process such as after-action reviews**. Depending on the length of your intervention, a traditional mid-term review and final evaluation may not be appropriately timed to provide the information that is needed to keep your intervention on track and avoid doing harm.

- Additionally, what **nontraditional evaluation methods** might be most appropriate for assessing environmental peacebuilding interventions that take place in dynamic, fluid, and complex contexts? Traditional evaluations can take a lot of time, be less participatory, and be expensive. What other approaches might you take to get the information you need quickly and in an inclusive way?
- Evaluations traditionally focus on assessing compliance with intervention objectives rather than broad-based impacts within the societal, regional, or supranational contexts (Carius 2007). **How might your evaluation plan account for larger, interconnected impacts that go beyond your specific intervention?** This also means an emphasis on contribution rather than attribution as part of your evaluation process.
- **Reflect on how your evaluation process—including who leads the evaluation and what methods they use—can reinforce your environmental peacebuilding objectives**. Will the evaluator be trusted, or will their findings be perceived as unreliable? Can you incorporate facilitated, participatory, and inclusive methods that help build confidence in your work and connections between stakeholders? How much of the evaluation results can you share, or may there be spoilers who use findings to undermine your work?
- Linked to this, **consider your stakeholders in developing your evaluation plan.** You can review your personas and think about the various evaluative questions, needs, and processes that might make sense for them. You can, and in many cases *should*, also consult stakeholders directly.

Learning Plan

M&E frameworks function best when accompanied by learning questions and a learning plan that can help focus the plans for both monitoring and evaluation. In environmental peacebuilding, a learning plan is particularly important because of the need for these interventions to be responsive and adaptive to the fluid, dynamic, and sometimes volatile contexts in which they take place.

Acknowledging that many M&E systems are historically designed to focus on accountability, especially to funders, including one or more learning questions can help ensure that learning still happens. Learning questions are high-level questions about an intervention and how it achieves its intended outcomes. They may center on the key part(s) of your theory of change that you are testing through your intervention and, when answered, allow you to be more effective, impactful, and sustainable. They may also center on what key stakeholders are most interested in about your intervention. Often, a learning question stems from asking, "What do I need to know to improve my intervention?"

A few key questions for creating a learning plan for an environmental peacebuilding intervention include:

- **What are your learning questions?** Do they relate to the theory of change? To certain risks and assumptions? To the information needs of certain stakeholders?
- **Who is involved in the learning, and how?** Are they providing inputs to learning (e.g., through surveys, interviews, and small groups)? Are they distilling the learning? Are they reviewing and vetting the learning?

- **How do you anticipate managing the tension between accountability and learning, especially when the learning might reflect negative outcomes?** Evaluation for accountability creates incentives to emphasize successes and downplay problems (let alone failures). Evaluation for learning emphasizes learning from positive and negative experiences alike. How you frame your learning questions can be important in providing space to make and learn from mistakes.
- **How will you manage confidential and/or sensitive information when learning to avoid doing harm?**
- **How will you disseminate your learning?** And to whom?

Planning for Early Warning and Response

Early warning consists of "data collection, risk analysis, and providing information with recommendations to targeted stakeholders" (Rohwerder 2015, p. 1). Often, early warning includes a combination of tracking key leading indicators (that may be expected to presage an escalation to violence) and an open channel of communication with stakeholders who may alert intervention staff to emerging risks. Effective conflict early warning and early response approaches are participatory and inclusive, adaptive, integrated, and supported by good monitoring (Rohwerder 2015).[25]

Clear conflict and insecurity indicators and processes are needed to review and modify strategies to prevent conflict issues. During the intervention's design, staff should define indicators that will be the basis for early warning. They can be developed based on the priority issues identified in the conflict analysis completed at the beginning of the design process (see above) and based on the most likely scenarios that can emerge in the conflict context. Another approach is to identify the key drivers of change and create a matrix of scenarios with indicators of change that are reviewed regularly to enable staff to decide if the plans should be modified (Goldwyn & Chigas 2013). For each possible issue, the response could be "no reaction" or "action" depending on the effect that it could have on the intervention; if it represents a negligible risk, the answer is "no reaction," but if the outcomes of the issue could be significant, "action" is likely needed and should be managed based on the early warning processes put in place (Goldwyn & Chigas 2013).

25. For more discussion on early warning systems, see section 3.2.B of this Toolkit.

A few key questions to ask yourself when planning for early warning and response include:

- **Should you establish a new early warning mechanism, or is there an existing mechanism that you could engage?** In many instances, it is more cost-effective, legitimate, and sustainable to engage and work through an existing mechanism.
- **Who is collecting and processing the information to ascertain if disputes might soon escalate to violence?** Experience indicates that local engagement is essential to understanding the warning signs.
- **What are the leading indicators on which you will base your early warning detection and action?** These leading indicators may relate to, for example:
  - Changes in societal processes, particularly those related to power relations and inequalities.
  - Large movements of people, such as refugees, internally displaced persons, or military groups.
  - Significant changes or predicted changes in the environment or weather (including extreme weather events).
  - Information on the management or distribution of key resources, such as land reform.
- **Are there mechanisms for members of the community to air their grievances?** Do they trust these mechanisms? Are these mechanisms truly accessible? Does the community use them?
- **What are the response options?** In practice, one of the key challenges is translating early warning into action that actually prevents escalation to violence. To address this, consider brainstorming possible responses in advance, as well as the possible effects and implications of those responses.

Planning for Adaptive Management

Based on the various characteristics of environmental peacebuilding already discussed in this chapter, **adaptive management is central to environmental peacebuilding.**[26] Environmental peacebuilding seeks to navigate and influence multiple complex systems: the natural system, the social and cultural system, and the political system. Each of these are non-linear systems, where seemingly minor issues can quickly become important—a characteristic that is popularly known as the "butterfly effect" (Lorenz 2000).

26. In the context of environmental peacebuilding, adaptive management draws upon both the environmental concept of adaptive management (see, for example, Hartwell et al. 2017; Williams 2011a; Lee 2001; Walters 1986; Holling 1978) and adaptive peacebuilding (see, for example, De Conig 2018; Morris & Baumgardner-Zuzik 2018; Brusset, De Conig, & Hughes 2016; Valters, Cummings, & Nixon 2016).

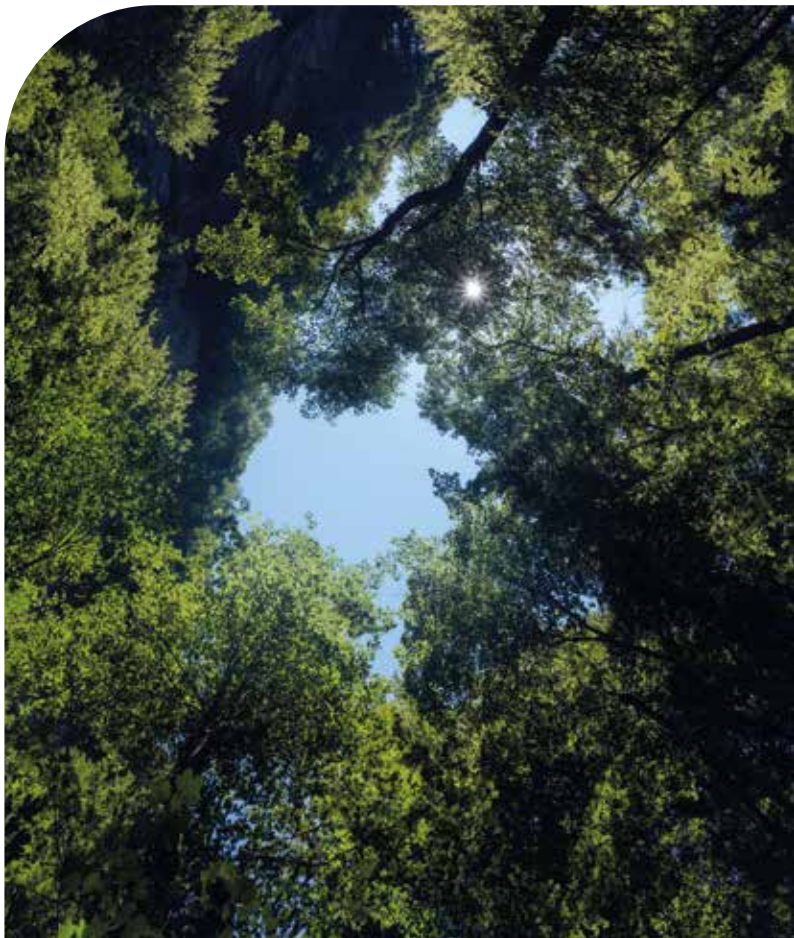
In such embedded, non-linear systems, it is impossible to have full confidence in the reliability or accuracy of long-term predictions (including those in a theory of change). To do so, it would be necessary to precisely understand each of the systems, its rules, and its conditions, as well as how they relate to one another. In practice, this is impossible because we do not and cannot have sufficiently precise and comprehensive information on the state of the environment, social and cultural dynamics, or the effectiveness of policies and institutions. Moreover, as an intervention proceeds, the situation changes (often dramatically) as does our understanding of the dynamics and conditions. In response, **adaptive management recognizes that in complex and dynamic situations context analysis and design are necessarily provisional.**

Monitoring, evaluation, and learning play central roles in adaptive management. Adaptive developers of interventions try to get a good understanding of the context and then design their intervention accordingly. During implementation, staff monitor both the progress on the intervention and any changes in the context. At designated pause points, staff review whether the intervention is making the anticipated progress, whether the context has changed in material ways, and how understanding of the intervention and its context has evolved. Based on this interim review, staff may adjust implementation of the intervention. The review can also lead to changes in design and/or updates to the context analysis (see Figure 2.1 on learning feedback loops).

Sometimes, a distinction is made between "passive" adaptive management and "active" adaptive management. Passive adaptive management focuses on a preferred solution and trying to keep that intervention on track. In contrast, active adaptive management may not have a preferred solution, so it tests different approaches to see which may work best and be scaled up (McCarthy & Possingham 2007; Williams 2011b).

A few key points for planning for adaptive management include:

- **Do you have pause points scheduled where you can review the monitoring information and decide whether any adjustments are necessary?**
- **Who is involved** in reviewing the monitoring information and adapting the intervention?
- **What is the process for adapting the intervention?**
- **Are there any barriers to adapting the intervention?** Do you have a mandate to adjust the intervention if necessary? Does the funder insist on approving any changes (or any significant changes)?
- **Is it possible to include a budget line to cover**



contingencies? This could be both to adjust the intervention to address negative impacts and to capitalize on opportunities that may arise that would enhance the effectiveness and success of the intervention.

Planning to Protect Yourself and Your Staff

Working in fragile and conflict-affected situations presents physical, mental, and emotional threats. Organizations often have procedures, guidelines, and training to prepare people for the physical threats they may face. Measures to protect yourself physically tend to focus on:

- **Situational awareness:** developing escape plans and contingency plans for a variety of situations; be alert to roadblocks, kidnapping, landmines, and unexploded ordnance; local counterparts (and particularly fixers) can be helpful in navigating some of this;
- **Protective equipment:** including appropriate transport and personal safety equipment;
- **Communications:** developing a communications plan; having redundancy in phones and other communications technology; encrypting communications;
- **Training:** identifying, avoiding, and surviving attacks; local culture and language; first aid; map reading;
- **Insurance:** it will not protect you, but special insurance can help you leave on short notice and/or cover harm you suffered

There are many training programs and resources on protecting yourself and your staff in fragile and conflict-affected situations.[27]

Working in crisis situations, especially on a protracted basis, can also affect mental and emotional health. While long-term trauma affects a small fraction of practitioners, such issues can have serious implications for those practitioners and their work. Therefore, practitioners should self-assess personal vulnerabilities, such as predispositions to mental illness, and identify support systems, such as family members or employee wellbeing benefits, to understand their limits and pinpoint available resources. Throughout their life, but especially during interventions, practitioners should aim to exercise regularly and maintain healthy sleep and eating schedules (Bosch et al. 2020). The first signs of mental health problems may manifest through physical reactions, such as extreme fatigue, headaches, irritability, or gastrointestinal problems. Furthermore, practitioners that stay in dangerous situations for long periods of time may become desensitized to violence (Theidon 2014); other times, practitioners who engage with certain community members such as gang members or victims of abuse can experience severe fear and/or stress. Witnessing alarming violence and disaster can also cause feelings of powerlessness or guilt. When such signs emerge, it is important for practitioners to

28. For example, see https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/national_self-care_manual-en.pdf.

check their mental health and understand their limits. For example, while discussing mental health with their peers, one researcher in Peru found that feelings of powerlessness are best remedied by promising "only that which you can do. [Identifying] actions that might help, and [doing] them, rather than making empty promises or carrying guilt." Furthermore, they found it helpful to create boundaries between themselves and their work through "safe spaces" – one's home, a favorite park, etc. – in which they could physically and mentally remove themselves from their work (Krause 2021). When faced with severe mental health problems, it is important to take the necessary time to recover, seek professional help when necessary, and not minimize the impact of traumatic events. Such practices increase the likelihood of a quicker recovery (Bosch et al. 2020).

Organizations should be proactive in ensuring the wellbeing of both their staff and participants in their initiatives. There are numerous options: protocols and procedures, training, dedicated staff and resources, and participatory mechanisms (Bosch 2020; Strohmeier & Scholte 2015; OECD DAC 2012). Whatever path an organization takes, the key point is to consider the physical, mental, and emotional risks and develop mechanisms before an initiative starts.

Worksheet: Theories of Change

Objectives

- Clarify assumptions that underpin the realization of outcomes and results chain.
- Help teams, organizations, partners, and communities build a common understanding of the purpose of the intervention, and to work together in realizing them.
- Design a living document that serves as an instrument to guide other M&E elements.
- Create a mirror to review, rethink, and revise interventions at strategically or operationally opportune moments.

Initial Considerations

- ☐ Have you undertaken a context analysis—including a needs assessment, stakeholder identification and analysis, conflict analysis, and environmental and social impact assessment—to inform your theory of change?
- ☐ Define the ultimate objective of your intervention.
- ☐ Identify intermediate objectives (outcomes) you can contribute to or influence that would affect the ultimate change you would like to see.
- ☐ What kind of activities are you planning, and how should they be ordered or arranged?
- ☐ What is the timeframe of your intervention? This may be defined by a funding window or donor.
- ☐ At what level(s) does your intervention seek to affect change? For example, you may seek change at the level(s) of the community, municipality, state or country, region, or the international sphere. This will affect how you frame and communicate your theory of change.
- ☐ Are you developing your theory of change for a single project or for a group of projects/program? Do you need to create multiple theories of change, one (or more) for each project?

- [ ] What is the best way to communicate your theory of change, considering the various stakeholders and their needs? Do you need multiple models?
- [ ] Where are there gaps or leaps in logic? Where are there assumptions (and accompanying risks if the assumptions do not hold)?
- [ ] How can you make explicit the connections between the environmental aspects of your intervention and the peace or conflict-related aspects? What are the pathways connecting environment and peace?
- [ ] Do you need more information to complete your theory of change?

Participation

- [ ] Who are your key stakeholders, and how can they be involved in developing the theory of change? Identify stakeholders to consult and a process for doing so, taking into account:
  - Cultural considerations
  - Gender considerations
  - Possible spoilers

- [ ] Have you asked stakeholders to review and validate your theory of change?
- [ ] Remember to be conflict-sensitive and inclusive!
- [ ] Make a plan for clarifying and managing expectations during consultations. Some stakeholders might feel that their participation in the process of developing a theory of change guarantees certain benefits or activities. Be clear on stakeholders' role in the process: Is it to promote buy-in? Simply solicit information?

Develop Risks & Assumptions

- [ ] How robust is the evidence for your theory of change? What do the peer-reviewed literature and gray literature say regarding risks?
- [ ] Have you identified key risks or assumptions that could influence or affect your theory of change?
- [ ] Are the potential effects of these risks significant?
- [ ] Is the probability and/or severity of these risks sufficient enough to warrant monitoring that focuses on the risks?
- [ ] What conditions and resources need to be in place to achieve your desired outcomes?

Other Considerations

- [ ] Have you shared your theory of change with key stakeholders?
- [ ] Have you communicated that you plan to adapt and refine your theory of change based on monitoring, evaluation, and learning processes?

Worksheet: Indicators

Objectives

- Support monitoring for early warning and adjustment if problems arise
- Support accountability
  - To funders
  - To partners and stakeholders
- Support learning
  - Interrogate and test the theory/ies of change used by the project (i.e., was this intervention an appropriate way to pursue the desired objectives?)

- Determine if the way the intervention was designed and implemented was appropriate, or if it needs to be amended (if there is a desire to undertake similar projects elsewhere)
- Identify unintended consequences

- **RETHINKING M&E:** Often evaluation has been undertaken for accountability reasons (required by the donor); for environmental peacebuilding, though, learning is at least as important.

Based on your theory of change, you will need to design (1) process indicators, (2) outcome indicators, and (3) contextual and assumption/risk indicators. For each, think through the following questions:

- ☐ ***Process Indicators*** – In addition to measuring or counting *what* happened at the input, activity, and output levels, do you have ways of understanding the *how* and *why* of your theory of change at the stages of activity and output? For example, you may include an indicator about the perceptions of the usefulness of a training or why people attended the training or not.
- ☐ ***Outcome Indicators*** – Do you have qualitative indicators for key conversion points that will ascertain how and why an outcome did or did not occur?
- ☐ ***Context, Assumptions, & Risks*** – Do you have indicators to track the key assumptions or risks in your theory of change? As it may be difficult to know which assumptions or risks are the most significant, you might consider a broad indicator along the following lines: Were there any unintended consequences? If so, describe the consequences and what happened.

When selecting your indicators, consider the following for each indicator you develop:

- Are your indicators feasible, including the availability and cost of information, and whether you will need to generate the data (and how much it will cost)? **Be cautious about developing too many indicators.**
- Do you have **both qualitative and quantitative indicators?** You especially need indicators at "key conversion points" or places along your theory of change where there is insufficient evidence that it might work or an innovative approach you are testing.
- Do you have ways of **understanding the connections between environmental and peace factors**? You may need a dedicated indicator and associated interview or survey question, e.g., what factors contributed to improving trust and "To what degree did X lead to Y?"
- **Be careful about being too SMART!** There is often a desire for SMART (specific, measurable, achievable, relevant, time-bound) indicators, but these often do not capture more qualitative impacts or unintended consequences.
- **Does the indicator need a baseline?** If so, *when* should you take the baseline, or should you have more than one baseline?

Worksheet: Integrating Gender

Objectives

I. Understand interactions of environment, conflict and gender by identifying the needs and priorities of men, women, and other gender minority groups

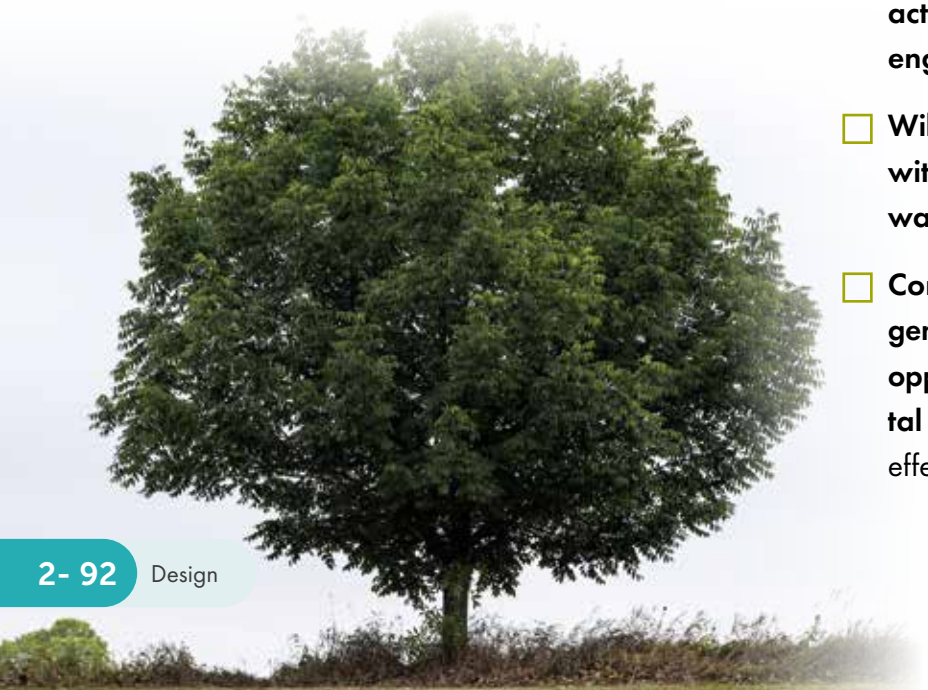
II. Collect gender-disaggregated data to monitor gender dynamics of conflict and environmental peacebuilding initiatives

III. Integrate women and gender minority groups in evaluation to achieve a more gender-balanced workforce and promote inclusivity in environmental peacebuilding efforts

Gender in Your Context Analysis

Ensuring gender considerations in your context analysis can highlight potential challenges and opportunities for environmental peacebuilding work. As you conduct your context analysis, think through the following:

- ☐ **Identify the different gender groups involved and what gender means in your context.** Consider how best to incorporate gender minorities that may not fit within the man/woman binary.
- ☐ **How do these different groups perceive or interact with the conflict and the environment?** Does the conflict unequally or differently impact certain gender groups? Do these groups interact differently with the environment? Do changes to the environment affect them differently?
- ☐ **Consider the different risks and challenges faced by gender groups,** focusing particularly on those of women, girls, and gender minorities. How do these challenges shape differential needs and priorities of gender groups? How do men, women, and gender minorities experience the conflict differently? How does the conflict affect gender roles?



- ☐ **Do different gender roles create opportunities for peace?** What different roles do men, women, and gender minorities play in facilitating a peaceful resolution? How might the ways in which women and gender minorities interact with the environment be leveraged as a tool for building peace?
- ☐ **Consider the different perceptions of gender in your context.** What stakeholder groups are likely to hold those perceptions? How might these different perceptions affect your intervention's implementation?
- ☐ **What are the gender dynamics of your intervention team and partnerships?** If there is a gender imbalance, what strategies can you employ to promote more gender diversity or representation?

Gender in Design

Incorporating gender considerations into the design of your environmental peacebuilding intervention will help you to be more responsive and relevant, conflict sensitive, inclusive, effective, and sustainable. As you design your intervention, think through the following:

- ☐ **Have you considered different inputs and activities that might be needed to reach or engage various gender groups?**
- ☐ **Will you target participation or engagement with certain gender groups and in certain ways?**
- ☐ **Consider how the inclusion of women and gender minorities helped build peace, create opportunities, and/or improve environmental outcomes.** Inclusion may help create more effective peacekeeping operations and build a

more durable peace. How can your intervention design leverage the ways in which women, girls, and gender minorities interact with the environment as a tool for peacebuilding?

- ☐ **Have you considered how some gender groups might be marginalized or excluded?**
- ☐ **What situations or contexts might compromise the safety of women, girls, and gender minorities involved in your intervention?** Do you have protocols or processes in place to address these situations?

Gender in the Monitoring, Evaluation, and Learning Plans

- ☐ **How might you disaggregate or otherwise include gender in your various indicators?** How can this reveal correlations or other linkages between environment, peace, and gender?
- ☐ **Given your intervention context, what monitoring tools might best capture the relevant and important gender dynamics?** This includes the ability to capture disaggregated information.
- ☐ **How can you identify differences in monitoring, evaluation, and learning in how different gender groups were affected by your intervention?** How might these insights help you better understand different gender groups' needs, goals, and relationships in the context?
- ☐ **What methods or tools are better suited to meet the needs of different gender groups?** Consider strategies for ensuring these groups are comfortable, building trust, etc.

- ☐ **Do your monitoring, evaluation, and learning processes capture the full picture of gender in your context?** Have you considered how you can reach marginalized and excluded groups?
- ☐ **Have you provided people with the opportunity to self-identify their gender?** This can increase inclusion and empower stakeholders. It could also put them at risk, if their responses were made public in some countries.
- ☐ **How might gender groups interact different with your monitoring information, evaluation results, and learning?** What different needs do they have, and how might they analyze and use information differently?

- ☐ **How can you ensure that different gender groups, particularly women, have access to and are involved in monitoring, evaluation, and learning processes?** Consider learning strategies that will speak to the capacities of women to act and create a safe space for women to ask questions and provide input.
- ☐ **How could the dissemination of monitoring, evaluation, and learning information inadvertently create risks for certain gender groups**? How can you balance transparency and information sensitivity?
- ☐ **How can you capture, share, and ensure the use of gender-specific findings?**

Substantively, gender-related questions may take a number of different approaches:

- ☐ **How were different gender groups affected differently by the project? How may women be differentially impacted by this project?** Women are often heavily engaged in the use and management of natural resources. They also may take on non-traditional economic or familial roles in times of conflict. There may also be differential impacts on men; M&E should seek to explore these gender-specific impacts (e.g., impacts on young men such as entry into illicit occupations and increased violence).
- ☐ **Did the project create opportunities for women and girls?** Projects can target female-dominated economic sectors and support access to credit, education, and salaried employment.
- ☐ **Did the inclusion of women help build peace and/or improve environmental outcomes?**

Annex 2-I: Illustrative Theories of Change for Environmental Peacebuilding

The theories of change shared here are intended to provide a high-level sample of commonly recurring themes and are grouped according to peacebuilding priorities. This is not a comprehensive list of theories of change but instead is intended to be **illustrative**. As such, some theories of change are more general, while others are more specific. Note that the same cross-cutting principles—namely conflict sensitivity, gender sensitivity, participation, and inclusion—apply across theories of change in much the same way as they apply across the various aspects of design, monitoring, evaluation, and learning for environmental peacebuilding.

ENVIRONMENTAL PEACEBUILDING PRIORITIES		
Category (With sample activities)	**Sample Theory of Change**	**Considerations & Phases of Conflict Related Categories**
Basic Safety & Security		
Provision of peace dividends and incentives Quick impact projects Providing basic services, access to water, etc.	*If* quick gains supporting livelihoods and the delivery of basic services are achieved in the peace process through sustainable natural resource management *then* social cohesion, stability, trust in the peace process, and state legitimacy are increased *because* stakeholders have additional incentives to sustain negotiations, cooperation, and other peacebuilding processes (McCandless 2012, p. 16; UNSG 2009).	Conflict Phase • During and post-conflict Assumptions/Risks • The provision of livelihoods and basic services must be inclusive and consider varied effects on different stakeholder groups.
Establishment of early warning systems	*If* early warning systems can identify environmental, fragility, and conflict risks before they escalate, *then* stakeholders can take steps to increase their resilience and avoid violent conflict *because* the early warning system provides timely information to support coordination and collective action at different scales to mitigate or otherwise address risks.	Conflict Phase • Pre-conflict Assumptions/Risks • Consider the benefits and challenges or risks of community participation in early warning. Spoilers or those benefiting from conflict may use the information in adverse ways. • To be effective at preventing conflict, early warning systems need to feed into response mechanisms.

Basic Safety & Security		
Control of conflict resources Securing sites of extraction, transit, and trade	*If* legitimate and effective control is established over natural resources that some actors have used to finance or otherwise sustain conflict in the past, *then* security will increase *because* these actors will lack the means to continue to pursue violence.	Conflict Phase • All phases Assumptions/Risks • It is necessary to support alternative livelihoods to not destabilize local economies that may depend on conflict resources. • Conflict resources are various, spanning renewable and non-renewable resources and land. Lootability favors resources that have a high-value-per-weight, ease of extraction with minimal investment, and diffuse geographic availability (Le Billon 2012), but the breadth and variability of conflict resources indicate that these criteria are to be interpreted flexibly (Bruch et al. 2019). • Consider how different groups are connected to and affected by conflict resources. These groups include women, youth, Indigenous communities, and other marginalized groups. Inclusive natural resource management is key to sustainable benefits.
Remediating environmental damage and degradation Remediation of the toxic byproducts of warfare Addressing landmines and unexploded ordinances (Unruh & Williams 2013)	*If* steps are taken to address environmental damage and degradation from conflict, *then* communities have increased access to land and other resources areas that may support agricultural and other livelihoods *because* land is now accessible and no longer leaches toxic material into soil and groundwater or poses imminent health threats.	Conflict Phase • Post-conflict Assumptions/Risks • Consider ownership rights and land tenure governance in advance to avoid land-grabbing and new land-related conflicts (Shimoyachi-Yuzawa 2011). • Access to land and resources can be a peace dividend and thus a key point of entry for dialogue.

Basic Safety & Security		
Supporting migration with dignity for climate and conflict migrants	*If* migration is managed proactively and appropriately, IDPs and returnees are protected, and sending and receiving areas are adequately prepared and supported, then the influx of new populations will not be destabilizing or ignite conflict over scarce natural resources *because* adequate measures are in place both to reduce large numbers of migrants that might otherwise overwhelm and destabilize host communities and to limit potential backlash by host communities.	Conflict Phase • All phases Assumptions/Risks • Host communities require adequate support, without which they can become hostile to IDPs and returnees.
Disaster Risk Reduction	*If* an effective disaster risk reduction strategy is developed through collaborative and integrated multi-risk analysis tools, tailored capacity building, and partnerships across humanitarian, development, and formal and informal institutions, *then* security and resilience in the face of climate and conflict shocks and disasters will increase *because* communities, institutions, and the state will be better able to anticipate, mitigate, and adapt to environmental, social, and economic pressures.	Conflict Phase • All phases Assumptions/Risks • Shared interests in reducing disaster risks can bring communities together and build peace.
Reducing gender-based violence Providing secure opportunities for women and girls to collect water or fuel wood	*If* security is provided for groups of women and girls when they undertake activities associated with their roles as resource users, *then* gender-based violence will decrease *because* there are fewer opportunities for them to be attacked or otherwise harmed.	Conflict Phase • All phases Assumptions/Risks • It is essential to consult women and girls about how best to reduce gender-based violence as they undertake daily activities. For example, different well-meaning efforts to reduce gender-based violence by providing water points in the center of settlements have been criticized by (1) women as reducing opportunities for them to socialize, and (2) young people as reducing opportunities to court. • While it is critical to reduce gender-based violence, it is also essential to build women's leadership.

Provision of Basic Services		
Basic services delivery Providing water and sanitation Providing energy Engaging the private sector to invest in basic services	*If* the government provides communities with sustainable and equitable access to basic services, *then* this will foster stability and trust in government institutions *because* conflict-affected communities have their basic needs for livelihoods, health, and well-being met.	Conflict Phase • All phases Assumptions/Risks • Basic services include water, sanitation, shelter, and energy. • This approach can complement post-conflict rehabilitation with longer-term sustainable development (McCandless 2012). • The external provision of basic services risks weakening central governance structures and underscoring local perceptions of ineffective government. Capacity strengthening of local and national institutions to deliver basic services builds trust in them.
Climate-resilient ecosystem services	*If* the ability of communities and countries to adapt to climate change is strengthened in ways that conserve local ecosystems, *then* communities and countries will be more resilient to changes in climate, environment, and natural resources as well as the knock-on social effects *because* climate change adaptation and the essential services it provides support local and national actors in anticipating and adapting to shocks.	Conflict Phase • All phases Assumptions/Risk • Anticipate and manage the adverse impacts associated with increasing or decreasing value or quantity of natural resources. • Ensure activities do not fuel competition over new resource availability or displacement due to elite capture. • Activities should complement efforts to improve governance.
Sustainable Economies and Livelihoods		
Supporting alternative livelihoods Providing livelihood alternatives to producing illicit narcotics Expanding opportunities to provide value added	*If* different or improved and sustainable livelihood activities are used to meet the economic needs of groups in conflict, *then* conflict will decrease, because their needs are being met, the incentives for engaging in conflict are lessened or removed, and engaging in conflict is more costly.	Conflict Phase • During and post-conflict. Assumptions/Risk • This approach assumes new or improved livelihood activities are at least or more lucrative (financial, social, cultural). • Value-added activities (e.g., turning raw logs into furniture) may require additional equipment and training, as well as development of international markets. • It is important to make sure steps to control the conflict economy will not be destabilizing. • Relevant communities include IDPs, ex-combatants, migrants, and returnees. • Often a community-level approach is used.

Strengthening livelihoods and food security Ensuring rights to land and other resources Providing seed, fertilizer, and other inputs Building capacity	*If* communities have access to sufficient and sustainable livelihoods and food security, *then* the threat of inter-communal violence will be reduced *because* unemployment, food insecurity, and a weak economy are key determinants of violence and peacebuilding failure and often a foundation for recruitment of combatants.	Conflict Phase • All phases Assumptions/Risk • There should be sufficient access to land, water, and other necessary resources. • Sufficient knowledge. For example, sometimes ex-combatants that were recruited as child soldiers lack the necessary knowledge to succeed in agriculture.
Restoring and diversifying the economy Reviewing resource concessions and their governance Rebuilding the Agriculture, Fisheries, and Forestry sectors (including non-timber forest products) Building infrastructure to develop industry and access to markets Sustainable and socially responsible value-chains Renewable energy	*If* environment and natural resource management investments are made to diversify the economy, mobilize financing, and engage formal and informal economies in a manner that is sustainable and equitable, *then* this will foster increased stability and resilience *because* post-conflict economies often depend on the extraction of natural resources to rebuild and generate government revenue and livelihoods (World Bank 2022, p. 53).	Conflict Phase • All phases, especially post-conflict. Assumptions/Risk • Conflict may have led to unfavorable resource contracts and concessions due to the urgent need for cash, weak negotiating power in a high-risk environment, and reduced public oversight. • Consider the importance of non-renewables for the national economy and renewables for local communities, while ensuring investments are sustainable and equitable.
Just transition	*If* a country's economy is diversified to be less dependent on fossil fuels, *then* the likelihood of conflict will be reduced *because* governments will be able to continue generating revenues, governing, and providing services in a carbon-neutral world. *If* the governance of minerals necessary for the transition in a carbon-neutral world are managed in a transparent, participatory, and equitable way with the sharing of benefits with local communities, then the likelihood of conflict will be reduced *because* many of the primary causes of the green resource curse will be proactively addressed (Stein, Bruch, & Dieni 2023).	Conflict Phase • All phases Assumptions/Risk • The transition to a carbon-neutral economy can have a profound effect on national economies that depend on oil, gas, and other fossil fuels. • It is essential to ensure that diversification is sustainable, equitable, and inclusive.

Social Cohesion, Cooperation, and Trust Building		
Bridging (contact hypothesis)	*If* groups in conflict participate in joint activities, *then* there may be a reduction in intergroup conflict and more positive intergroup attitudes and relationships *because* that hostility between groups is perpetuated by unfamiliarity and separation and engagement with those groups can increase understanding of the other and challenge negative stereotypes (USAID 2013, p. 20). If confidence-building measures, peacekeeping and verification missions, monitoring mechanisms, and problem-solving dialogues are used, then conflict groups or actors will not resort to force because these measures allay fears that the "other" group or actor is not committed to peace and will exploit it in the future (USAID 2013, p. 22).	Conflict Phase • All phases, especially post-conflict Assumptions/Risk • It is possible to manage the risks of violence between conflict groups while cohesion is being built. • It is important that the different groups are treated equitably and engaged in the design, implementation, and evaluation of the intervention in ways that are conflict sensitive. • Peacebuilding impacts may be limited if the underlying causes of conflict are not resolved.
Functionalism	*If* conflict groups cooperate on the technical and non-political aspects of environmental or climate change interventions, *then* conflicts between those groups will decrease or be peacefully managed because they will have developed communities and institutions across political, cultural, and other boundaries that make the use of force in resolving conflicts impractical or even unimaginable.	Conflict Phase • All phases, especially after conflict Assumptions/Risk • Peacebuilding impacts may be limited if the underlying causes of conflict are not resolved. • Costs of defection can be different between conflicting parties, i.e. the stakes for avoiding conflict may be asymmetrical.

Transforming power relations Laws governing procedural and substantive resource rights Natural resource committees or user groups Environmental, women, and youth advocacy organizations	*If* communities' social capital, capacities for collective action, platforms for effective and transparent participation, and stake or ownership in natural resource management are increased, *then* more inclusive institutions and processes can reduce the possibilities for conflict *because* communities have more power and are increasingly able to influence and participate in institutions and processes governing those resources. *If* new and inclusive institutional arrangements are used in managing natural resources and their access, use, benefits, and stewardship, *then* there will be fewer conflicts over those resources and between user groups *because* power relationships have changed as power and authority are redistributed, there is expanded participation in natural resource management, and groups have enhanced capabilities to engage in deliberation and decision making (USAID 2022, p. 25).	Conflict Phase • All phases Assumptions/Risk • These approaches assume that if groups are perceived as functioning with effectiveness, transparency, and accountability, then social trust and larger networks will develop and result in changes to the state-society relationship (USAID 2022, p. 29). • Pre-existing social capital can help develop institutional arrangements, improve shared access to information, services, and resources, and build trust, but they must be inclusive and not replicate existing unequal societal structures (USAID 2022). • A lack of capacity or inadequate processes is a significant obstacle in negotiation, peacebuilding, and consensus-building (USAID 2013, p. 23).
Increasing public participation in natural resource decision-making Community-based natural resource management Notice-and-comment rulemaking	*If* natural resource management institutions are inclusive, *then* people will feel able to address grievances nonviolently, thereby promoting peace *because* people in society can express their will and exert control over those making decisions in governing institutions and because under such a structure, people will be less likely to either revolt against the government or address their grievances violently, thereby creating a more peaceful nation (USAID 2013, p. 24).	Conflict Phase • All phases Assumptions/Risk • Possible platforms for cooperation and trust: participatory, inclusive processes for decision-making; opportunities to voice concerns; representation in mechanisms, roles, and voting; new mechanisms for monitoring and surveillance; and new mechanisms to interact with the government (USAID 2022, p. 69).

Good Governance & Inclusive Political Processes		
Enhancing Good Governance Improving benefit sharing Extractive Industries Transparency Initiative	*If* good governance processes for the environment and natural resources are put into place, *then* conflicts will be better prevented and resolved *because* responsive, responsible, transparent, accountable, and inclusive governance fosters trust in government institutions that are better equipped to handle disputes and grievances reliably and peacefully.	Conflict Phase • All phases Assumptions/Risk • The UN definition of good governance includes responsiveness, transparency, accountability, participation, and responsibility (UNEP 2019).
Improving resource ownership, access, and management Recognizing customary resource tenure and working with communities to manage land Improving and updating land cadastres Mediating disputes between ex-combatants and IDPs post-conflict	*If* there is equitable redistribution of and access to land, forests, minerals, and other natural resources and their revenues, *then* the risk of new and renewed conflict is minimized *because* resource-based grievances would be addressed and the opportunity costs of future conflict would be increased.	Conflict Phase • All phases Assumptions/Risk • Governance vacuums resulting from conflict can lead to the neglect of key resource management functions, the expansion of illegal and criminal exploitations, and the loss of tenure security. • This approach assumes equitable governance that recognizes local knowledge and institutions—e.g., Indigenous rights—and facilitates their articulation within formal institutional structures. • This approach represents a peace dividend.
(Re)building environmental governance at all levels (statutory and customary)	*If* environmental governance is rebuilt to be more equitable, inclusive, and effective, *then* both peace and environmental rule of law can be supported *because* revising laws and rebuilding governance can help address the environmental causes of conflict (e.g., inequitable benefit sharing or access to resources), as well as to strengthen governance for a sustainable peace.	Conflict Phase • All phases Assumptions/Risk • Often the most difficult aspect is the implementation and enforcement of new provisions.

Good Governance & Inclusive Political Processes		
Customary and traditional natural resource governance	*If* institutions are based on customary governance structures that are familiar to and reflect the values of the people they govern, *then* the likelihood that people will use violence to change or reject institutions is reduced *because* people will be more likely to feel allegiance, ownership, and legitimacy for those institutions (USAID 2013, p. 24). *If* environmental governance is aligned with the traditions and practices of Indigenous and resource-dependent local communities, *then* it is more likely for a successful framework to be developed that peacefully resolves disputes and protects Indigenous rights while responding to national governance systems and international environmental goals, *because* local communities can be best suited to manage and steward natural resources (USAID 2022, p. 33).	Conflict Phase • Conflict prevention and post-conflict Assumptions/Risk • This approach assumes institutions will retain the benefits of customary institutions when integrated with formal institutional arrangements. • It is important to consider how long-standing or traditional institutions and norms address women and other groups who are historically marginalized.
Implementing community-based natural resource and climate governance	*If* communities are brought together around climate scenario planning and natural resource management decisions, *then* there is stronger support of and better compliance with regulations and norms in the face of challenges *because* collaborative planning increases local ownership and buy-in of management strategies and practices (USAID 2022, p. 5).	Conflict Phase • All phases Assumptions/Risk • Communities often need capacity development support to craft, implement, and enforce policies. • Communities must be brought together under the right conditions; collaboration alone is not sufficient. Conflict sensitivity is very important.

Good Governance & Inclusive Political Processes		
Transitional justice	*If* transitional justice institutions address environmental grievances, *then* the likelihood of violence re-emerging in the future will be reduced *because* ad-hoc institutions provide a bridging function, which is both backward and forward looking, to help society deal with historic and unresolved grievances so that they will not impede progress toward peace (USAID 2013, p. 25).	Conflict Phase • Post-conflict Assumptions/Risk • Historically, transitional justice mechanisms have been reluctant to address environmental dimensions (Harwell 2016).
Joint management of interacting systems	*If* interacting systems at the subnational, national, or regional level are jointly managed, *then* countries will be better prepared to withstand a variety of social and economic pressures while avoiding the destabilization of their governing institutions and social structures *because* collaborative mechanisms support a cohesive approach to effectively target risks and needs.	Conflict Phase • Pre- and post-conflict Assumptions/Risk • Flexibility and adaptability are key.
Diffusion of transnational norms	*If* global norms for social and environmental safeguards and inclusive policies are supported and advanced, *then* the risks of bad governance will be addressed (reducing conflict) and opportunities to promote peace will be strengthened *because* greater community empowerment, better-defined resource rights, and local input on rules and regulations often result in better conflict and environment outcomes by addressing underlying causes of conflict and grievances.	Conflict Phase • All phases Assumptions/Risk • This approach requires attunement with local political contexts.

Appendix 2-I References

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Annex 2-II: Illustrative Sets of Indicators for Environmental Peacebuilding

This annex provides illustrative indicators for nine theories of change for environmental peacebuilding, selected from Annex 2-I. For any particular project, the indicators will need to be adapted to the particular context, and additional indicators may be needed. For each set, the Theory of Change is provided in the dark green bar at the top. These indicators were developed at a hackathon on August 8, 2023 and by the authors of this toolkit, and edited accordingly.

If natural resources are effectively governed for the economic needs of a community, *then* inter-communal violence will decrease *because* communities have access to sufficient and sustainable livelihoods.			
Considerations	**Indicators**	**Notes**	**Sources/Examples**
• Natural resources can help immediately restore economic activity post-conflict. • Natural resources can diversify and strengthen economies. • Livelihood support can be useful in reintegrating ex-combatants or community members in conflict. • Sustainable livelihoods offer alternative income sources to conflict-related activities.	If/Activities & Short-Term Outcomes • Implementation of natural resource governance mechanisms • % of people who believe that [the natural resource in question] is being effectively governed Then/Long-Term Outcomes • # of instances of inter-communal violence • Evidence of other approaches being used to resolve conflicts Because/Medium-Term Outcomes • % of people employed • % of households with sufficient income to meet their basic needs • Perceptions of sufficiency and sustainability of livelihoods Unexpected Outcomes • Were there any unexpected outcomes (positive or negative)? Please describe.	Relevant disaggregation may include: • Gender • Age • Rural/urban or geographic • Sector • Ethnic or religious group • Political identities • Livelihoods group Indicators data can be collected via: • Community or household surveys • Community informants/reports • Interviews or focus groups The context will determine what is effective governance and what are sufficient and sustainable livelihoods. Communities are often best placed to define this themselves.	Livelihoods Centre n.d.

If different or improved and sustainable livelihood activities are used to meet the needs of groups in conflict, *then* conflict between them will decrease, *because* the incentives for engaging in conflict are lessened or removed, and engaging in conflict is more costly.

Considerations	Indicators	Notes	Sources/Examples
• While new or improved livelihood activities must meet economic needs, cultural or social needs should also be considered, as some livelihood activities may be less socially acceptable or desirable. • Different stakeholder groups will have different needs; it is important to be inclusive.	*If/Activities & Short-Term Outcomes* • # or % of people participating in sustainable livelihood activities • Perceptions of suitability or desirability of livelihood activities *Then/Long-Term Outcomes* • # of instances of violence or conflict • Evidence of increased capacity to prevent or resolve conflicts *Because/Medium-Term Outcomes* • % of people employed • % of households with sufficient income to meet their basic needs • Perceptions of sufficiency and sustainability of livelihoods, including expectations that the future economic situation will be better than the present • Perceptions of the cost of engaging in conflict *Unexpected Outcomes* • Were there any unexpected outcomes (positive or negative)? Please describe.	Relevant disaggregation may include: • Gender • Age • Rural/urban or geographic • Sector • Ethnic or religious group • Political identities • Livelihoods group Indicators data can be collected via: • Community or household surveys • Community informants/reports • Interviews or focus groups The context will determine what counts as a sufficient or sustainable livelihood. Communities are often best placed to define this themselves	FAO 2022 Livelihoods Centre n.d.

If groups in conflict participate in collaborative activities related to shared interests in the environment, *then* there may be reductions in intergroup conflict and more positive intergroup attitudes and relationships *because* that hostility between groups is perpetuated by unfamiliarity and separation and engagement with those groups can increase understanding of the other and challenge negative stereotypes (USAID 2013, p. 20).

Considerations	Indicators	Notes	Sources
• Bringing groups in conflict together alone is not sufficient; joint activities must take place in a conflict-sensitive way or risk exacerbating the conflict dynamics. • The activities should reflect the needs or important areas to all participating groups. Management and implementation of the activities should also reflect those groups. • It is important to consider whether the interests of groups really align. • It is also important to consider scale, as it may be easier to find common ground and built people at a local level.	*If/Activities & Short-Term Outcomes* • # and type of joint activities organized by third-parties • # of people participating directly (and indirectly) in the joint activities • Perceptions of the relevance of activities to needs or their degree of importance • Perceptions of activities as truly collaborative and/or tackling real interests • Perceptions of process equity and fairness *Then/Long-Term Outcomes* • # of instances of violence or conflict • Reduced willingness to engage in conflict • Increased relationships or trust between groups • % of people reporting increased friendships with those of the other group • Changes in perception of the other groups • Changes in values and priorities • Opportunities for joint peaceful environmental collaboration were seized • Strengthened collaborative networks Because/Medium-Term Outcomes • % of people reporting increased understanding of the other group • Changes in perceptions of the other group, particularly regarding stereotypes • Evidence of social learning, including improved understanding of social and ecological issues as well as other groups' and one's own perceptions (self- awareness) of those issues. • More peaceful social relations and governance, especially around shared environmental issues • Evidence of groups finding (shared) value in the process/activities • Evidence of challenging institutional and cultural practices **Where does social learning end and peacebuilding begin? Learning is a process and an outcome; you can have indicators for both.* *Unexpected Outcomes* • Were there any unexpected outcomes (positive or negative)? Please describe.	Relevant disaggregation may include: • Gender • Age • Rural/urban or geography • Ethnic or religious group • Political identities • Livelihoods group • Income level Indicators data can be collected via: • Individual interviews or surveys • Observation • Behavioral stories • Observations (especially if focused on elites or others who may not participate in surveys or focus groups) • Rumor tracking Maintaining anonymity or confidentiality in data collection is important; some of those participating in the activities may be reluctant to share improvements in their perceptions of the other group in public settings. It is important to combine perception-focused surveys or interviews with other methods to avoid bias.	

If the ability of communities and countries to adapt to climate change is strengthened in ways that conserve local ecosystems and strengthens their capacity to address climate-related conflicts in an equitable way, *then* communities and countries will be more resilient to changes in climate, environment, and natural resources as well as conflict risks and other knock-on social effects *because* climate change adaptation and the essential services it provides support local and national actors in anticipating and adapting to shocks.

Considerations	Indicators	Notes	Sources
• Climate adaptation strategies can include the use of climate-smart agricultural practices, resource risk management strategies, inclusive financing mechanisms, disaster risk reduction, etc. • It is essential that approaches account for sustainable ecosystems that conserve natural resources; nature-based solutions (NbS) may be helpful. • Equitable distribution of benefits is essential to avoid exacerbating conflicts across the various stakeholders (avoid repeating structural violence). • Consider long-term climate effects and expand or enlarge the spatial scale. • From an environmental peacebuilding perspective, a climate-resilient ecosystem service The Theory of Change should try to include both environmental and conflict resolution pathways. • Ensure the root causes of vulnerability are addressed by the intervention.	*If/Activities & Short-Term Outcomes* • # of people participating in climate adaptation activities/intervention • # of people able to access inclusive financing mechanisms (e.g., social bonds) • % of community aware of climate adaptation and resilience strategies. • Collaborative governance arrangements for the ecosystem • Perceptions of inclusion in the activities • Identification of alternative livelihoods as part of ecosystem preservation *Then/Long-Term Outcomes* • Availability of quality infrastructure (transportation, energy, etc.) • Availability of natural resources (e.g., water) • Quality of institutions for responding to climate change . • Capacities to manage conflict • Levels of conflict • Alternative livelihoods relying on ecosystem services. • Improved adaptation measures. *Because/Medium-Term Outcomes* • % of community utilizing climate adaptation and resilience strategies • Availability of essential services and their performance under shocks or stresses • Increased capacities in both ecosystem governance and conflict resolution *Unexpected Outcomes* • *Were there any unexpected outcomes (positive or negative)? Please describe.*	Relevant disaggregation may include: • Gender • Age • Rural/urban or geographic • Livelihoods group • Income level • Ethnic group • Political group Indicators data can be collected via: • Interviews • Surveys • Observation *Disaggregation should help implementers understand the diversity present and avoid elite capture Resilience can be defined differently based on the scale and context. Indicators of resilience have traditionally focused on the existence of economic, social, and infrastructure conditions.	CARE 2015

If early warning systems are established to identify environmental, fragility, and conflict risks before they escalate, *then* stakeholders can take steps to increase their resilience and avoid conflict *because* the early warning system provides timely information to support coordination and collective action at different scales to mitigate or otherwise address risks.

Considerations	Indicators	Notes	Sources

• It is important to know who will use the data (government, community councils, etc.), and whether they have the capacity to use/process the data securely.
• Theory of Changes often mentions early warning system, but creating new parallel structures may not be necessary (or the best system). You n eed to consider whether you are capitalizing on an existing institutional mechanism or creating an entirely new one.
	If/Activities & Short-Term Outcomes
	• Operational level of the early warning system
	• Accessibility of early warning system (e.g., language)
	• Existence of a legal mandate to:
	  • Warn
	  • Respond
	  • Monitor responses
	Then/Long-Term Outcomes
	• Did the early warning system prevent conflict?
	• Steps taken to avoid conflict/# of responses
	• # of conflicts potentially prevented
	Because/Medium-Term Outcomes
	• # of risks identified
	• Relevance of the information provided
	• Timeliness of the information provided
	• #/% of community receiving information
	• Sustainability of early warning system
	Unexpected Outcomes
	• Were there any unexpected outcomes (positive or negative)? Please describe.
		Relevant disaggregation may include:
		• Stakeholder v. Decisionmaker
		• Ethnicity
		• Nationality
		• Gender
		• Types of actions undertaken
		Indicator data can be collected via:
		• Surveys
		• Interviews (esp. for counterfactuals)
		• Observation	

If women are provided safety and security in natural resource access and management, *then* gender-based violence will decrease *because* increased protections reduce vulnerability to structural inequalities and opportunities for them to be attacked or otherwise harmed.

Considerations	Indicators	Notes	Sources
• GBV extends beyond women and girls, and the exclusion of men can result in increased violence towards women. • Consider the impacts of interventions on traditional gender roles and norms, and recognize impacts that come with this deviation from the status quo. • Environmental defenders are a special case.	*If/Activities & Short-Term Outcomes* • #/% of women that have ownership rights of natural resources • #/% of women participating in natural resource management leadership positions *Then/Long-Term Outcomes* • # of instances of gender-based violence. • # of instances of forced early marriage. • Perceptions about gender-based violence prevalence and causes. *Because/Medium-Term Outcomes* • Perceptions regarding whether women have safe and secure access to natural resources. • Perceptions regarding whether women have access to decision-making processes or other relevant governance mechanisms; perceptions of inequality. *Unexpected Outcomes* • Were there any unexpected outcomes (positive or negative)? Please describe.	Relevant disaggregation may include: • Gender • Age • Rural/urban or geographic • Livelihoods group • Income level • Ethnic group • Political group Data can be collected via: • Surveys • Interviews • Review of documents regarding participation in natural resource governance processes Note that it is particularly important to examine changes in attitudes regarding women's participation among all gender groups.	A study in NE Nigeria on violence and humanitarian context found that because most of the programs on gender supported women, they left out both boys and men.. Accordingly, men did not have access to psychosocial support, which then increased the violence toward women. Moreover, young men who were excluded from accessing livelihood support were more prone to recruitment into violence.

If there is [equitable][optimal] redistribution of and access to land, forests, minerals, and other natural resources as well as their revenues and indirect benefits, *then* the risk of new and renewed conflict is minimized *because* resource-based grievances would be addressed and the opportunity costs of future conflict would be increased.

Considerations	Indicators	Notes	Sources
• The maturity of legal and administrative systems will affect the enforcement of ownership rights. • When power is unevenly distributed, the allocation of resources and revenues might perversely incentivize conflict. • This theory of change only works when the conflict is not active. • Whether redistribution itself effectively addresses grievances depends on the ability and collective buy-in to maintain the new arrangement.	*If/Activities & Short-Term Outcomes* • # of resource rights redistributed • Size of the resource rights redistributed (e.g., hectares) • # of people participating in redistribution *Then/Long-Term Outcomes* • # of instances of new or renewed conflict • Perceptions of peace and reasons for peace *Because/Medium-Term Outcomes* • Perceptions regarding whether the redistribution was fair and effective • Perceptions of the utility of conflict • #/% of people who feel that their resource-based grievances have been addressed	*Relevant disaggregation may include:* • Gender • Economic group • Community group • Ethnicity • Power *Data can be collected via:* • Interviews • Surveys	

If quick gains supporting livelihoods and the delivery of basic services are achieved in the peace process through sustainable natural resource management, *then* social cohesion, stability, trust in the peace process, and state legitimacy are increased *because* stakeholders are incentivized to sustain negotiations, cooperation, and other peacebuilding processes (McCandless 2012, p. 16).

Considerations	Indicators	Notes	Sources
• Consider which types of quick-impact interventions are most effective. • Ensure that the design of and participation in intervention involve a sufficient diversity of stakeholders to avoid elite capture. Diversity should be multidimensional.	*If/Activities & Short-Term Outcomes* • # of beneficiaries/participants • % of community receiving basic services • Timeliness of the provision of assistance to livelihoods or basic services • Type of intervention • How was the QIP decided/designed? Who decided/designed (note particularly re disaggregation factors)? • Perceptions of the utility or relevance of livelihoods and basic services provided *Then/Long-Term Outcomes* • Positive perception of the peace process and/or state and state institutions • # of instances of conflict • Improvement of relationships between different groups • % of participants willing to work with someone from the other group *Because/Medium-Term Outcomes* • Increased confidence in peace process due to the quick-impact projects • % of people willing to continue participating in the peace process • % of people who support the peace process *Unexpected Outcomes* • Were there any unexpected outcomes (positive or negative)? Please describe.	*Relevant disaggregation may include:* • Race • Ethnicity • Gender • Income • Age • Rural/urban • Direct and indirect participation *Data can be collected via*: • Surveys • Interviews • Observation	

If the governance of minerals necessary for the transition in a carbon-neutral world are managed in a transparent, participatory, and equitable way with the sharing of benefits with local communities, *then* the likelihood of conflict will be reduced *because* many of the primary causes of the green resource curse will be proactively addressed (Stein, Bruch, & Dieni 2023).

Considerations	Indicators	Notes	Sources
• Ensure that related interventions are inclusive for sustainability. • Minerals are often extracted from fragile and conflict-affected situations. In such circumstances, it is key to consider who is getting the money and that tensions are not being fueled or funded.	*If/Activities & Short-Term Outcomes* • # of people consulted/% of communities consulted on mineral governance mechanisms or agreements • # of mineral governance agreements or processes put into place that are transparent, participatory, and equitable • Perceptions of transparency, participation, and equity in mineral governance *Then/Long-Term Outcomes* • *Perceptions on the likelihood of conflict* • *# of instances of conflict* *Because/Medium-Term Outcomes* • *Perceptions of fair/economic gain compensation at the local level* • *#/% of people/communities receiving certain types of benefits from mineral extractive or processing* *Unexpected Outcomes* • *Were there any unexpected outcomes (positive or negative)? Please describe.*	*Relevant disaggregation may include:* • Financial flows • Gender • Ethnicity • Socioeconomic classes • Geography • Direct or Indirect participants *Data can be collected via:* • *Surveys* • *Interviews* • *Observation* • *Rubrics*	

Annex 2-2 References

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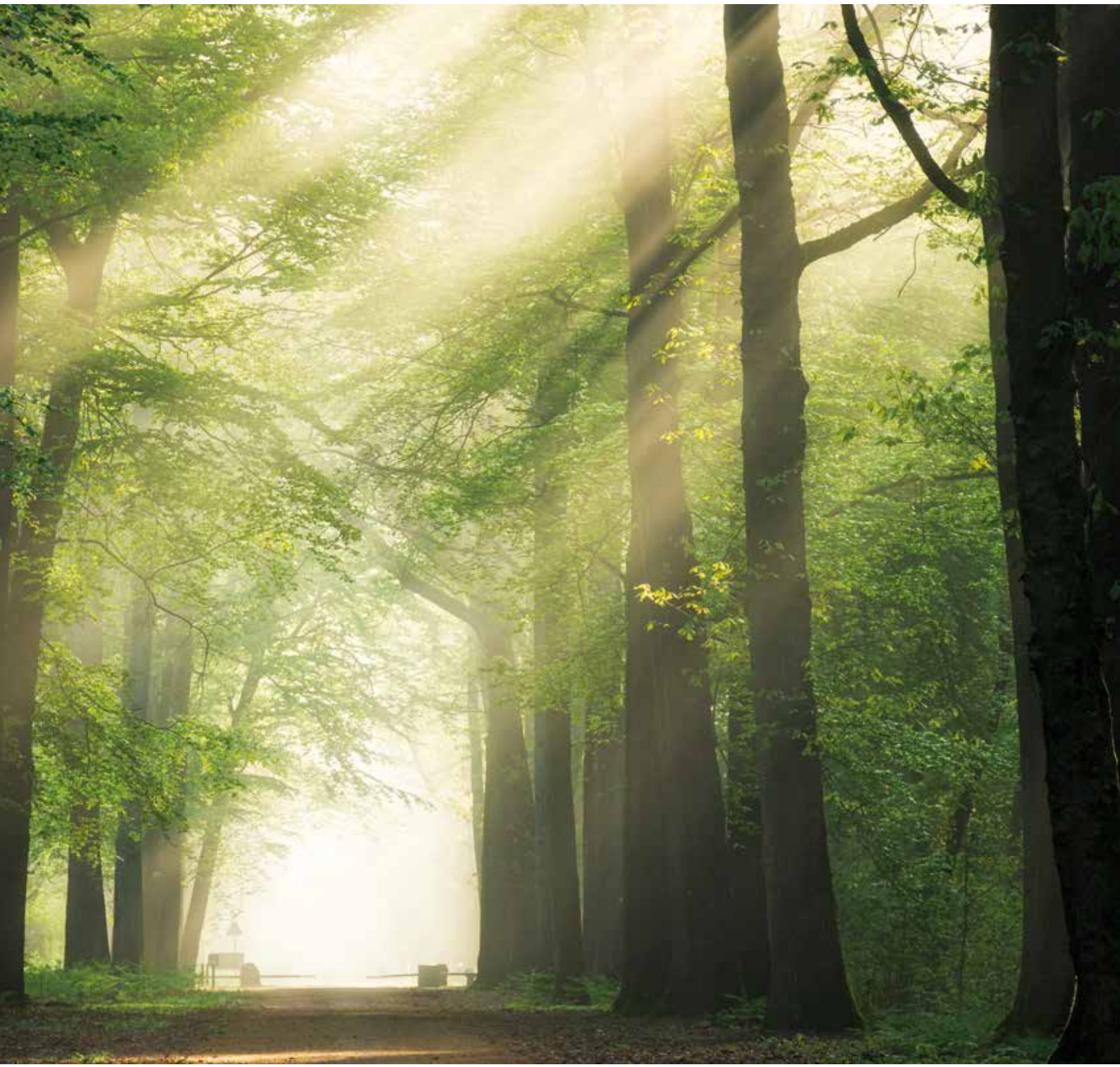

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