

# Achieving enduring outcomes from GEF investment

A STAP Advisory Document  
November 2019



**STAP**

SCIENTIFIC AND TECHNICAL  
ADVISORY PANEL

*An independent group of scientists that advises  
the Global Environment Facility*



LEAD STAP AUTHOR:  
Mark Stafford Smith

STAP PANEL CONTRIBUTORS:  
Blake Ratner, Graciela Metternicht, Jamidu Katima, Saleem Ali, and Rosina Bierbaum

STAP SECRETARIAT CONTRIBUTORS:  
Christopher Whaley and Guadalupe Durón

SUGGESTED CITATION:  
Stafford Smith, M. 2019. Achieving enduring outcomes from GEF investments, A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, D.C.

COPYRIGHT:  
This work is shared under a Creative Commons Attribution-Non Commercial-No Derivative Works License.



#### ABOUT STAP:

The Scientific and Technical Advisory Panel (STAP) comprises seven expert advisers supported by a Secretariat, which are together responsible for connecting the GEF to the most up to date, authoritative, and globally representative science. The STAP Chair reports to every GEF Council meeting, briefing Council members on the Panel's work and emerging scientific and technical issues. <https://stapgef.org>

#### ABOUT GEF:

The Global Environment Facility (GEF) was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems. Since then, the GEF has provided more than \$21.1 billion in grants and mobilized an additional \$114 billion in co-financing for more than 5,000 projects in 170 countries. Through its Small Grants Programme, the GEF has provided support to more than 25,000 civil society and community initiatives in 133 countries. <http://www.thegef.org>

COPY EDITOR:  
Emily Youers

DESIGN AND LAYOUT:  
Phoenix Design Aid A/S, Denmark

COVER PHOTO:  
Frolova Elena Photo – Shutterstock ID: 260006612, Eo Naya Photo – Shutterstock ID: 767683264,  
RudiErnst Photo – Shutterstock ID: 1648444591, Sarawut Kundej Photo – Shutterstock ID: 533432395

# Achieving enduring outcomes from GEF investment

A STAP Advisory Document  
November 2019



# CONTENTS

<b>EXECUTIVE SUMMARY AND RECOMMENDATIONS .....</b>	<b>3</b>
<b>1. INTRODUCTION .....</b>	<b>6</b>
<b>2. TERMINOLOGY AND DEFINITIONS .....</b>	<b>7</b>
<b>3. RISK APPETITE, TRANSFORMATIONAL CHANGE AND DURABILITY .....</b>	<b>9</b>
3.1 Project delivery.....	9
3.2 Scaling from projects .....	9
3.3 Program delivery .....	9
<b>4. WHAT IS THE EVIDENCE ON SECURING ENDURING OUTCOMES? .....</b>	<b>11</b>
4.1 Achieving enduring outcomes from projects .....	11
4.2 Systems change: Towards transformation and durability .....	14
<b>5. DESIGN AND IMPLEMENTATION ACTIONS TOWARDS ACHIEVING ENDURING     OUTCOMES AND IMPACTS .....</b>	<b>17</b>
5.1 At the project level.....	17
5.2 At the program level .....	18
<b>GLOSSARY.....</b>	<b>19</b>
<b>REFERENCES.....</b>	<b>20</b>
<b>ENDNOTES .....</b>	<b>25</b>



## EXECUTIVE SUMMARY AND RECOMMENDATIONS

Investment under GEF-7 is increasingly seeking greater **integration** and more **innovation**, and for investments to be **scaled** to deliver **transformational** change and consequently much **more impact**.

The Global Environment Facility (GEF) Independent Evaluation Office defines *transformation* as achieving deep, systemic and sustainable change with large-scale impact in an area of global environmental concern. The key criterion is 'sustainability', here termed **durability** (i.e. that the impact endures financially, economically, environmentally, socially and politically in the long term, after the intervention ends).

**The Independent Evaluation Office found that about 80% of completed projects achieved satisfactory short- to medium-term outcomes**

**and that these outcomes were likely to endure in the long term in about 60% of projects;** the remainder faced considerable risks to the long-term continuation of their benefits.

**The GEF needs to be confident that global environmental benefits will endure.** The Scientific and Technical Advisory Panel (STAP) urges the GEF to use the terms **enduring** and **durability** to mean the long-term maintenance of outcomes and consequent impacts, whether environmental or not, and to restrict the use of *sustainability* to the project or program's effects on natural resources, including in the long term, beyond the project lifetime. (*Sustainability* is often confused with environmental sustainability and sustainable development, which aim to endure but usually imply "not living beyond our means" or "not diminishing global environmental benefits".)



The extensive literature on achieving project outcomes and impact increasingly emphasizes success factors focused specifically on durability. The simple logic chain here is that (i) engaging key stakeholders and incentivizing them will build **stakeholder trust and motivation**; (ii) building the capacity of stakeholders and institutions as part of incentivizing them, as well as emphasizing diversity of inputs, will help ensure **enduring capacity and financing**; and (iii) emphasizing diversity and adaptability along with a good application of systems thinking and learning will **build resilience** in the outcomes.

**Impacts also need to endure in the face of long-term external changes, such as climate change, demographic change or shifting demand for products**, and unintended consequences need to be avoided or managed. Durability of this kind requires outcomes to be resilient and adaptive to such changes and for relevant external changes to be considered when designing investments.

There is a widespread assumption that scaling and transformational change imply greater durability; this may often be true, but it is not a strict causal relationship. For example, local benefits may endure well but not scale, and benefits may scale successfully but not endure. Therefore, **it is important to scale both for systems change (i.e. broad impact) and for durability (i.e. long-term impact)**.

Larger investments do not necessarily guarantee transformational success, and transformational success will not happen of its own accord.

**Transformation needs to be embedded in planning from the outset and may require additional financing after the initial GEF investment, more innovation, and new – or additional – stakeholders.**

**Systems change for transformation requires innovation**, which can occur in diverse ways, including technological, financial, business model, policy and institutional innovation. Most transformational change involves more than one of these elements of innovation.

Greater innovation brings the likelihood of higher failure rates, which are also opportunities to learn. Expectations for projects and programs need to be clearly articulated, and **the GEF Council should decide on what is an acceptable risk appetite.**

In an earlier paper, STAP made recommendations on how to improve **integration** in the design of GEF projects. There are common elements, and the current paper – which builds on and extends those recommendations and those of other previous STAP analyses – shows how to embed the consideration of long-term **durability** more explicitly in project outcomes and impacts. Taking this previous research together, the STAP recommends the following:

1. **Articulate an explicit risk appetite and consequent expectations** for enduring outcomes from GEF investment, with a low tolerance for programs failing to deliver enduring benefits and transformational outcomes. Where innovation and risk are high, there should be an expectation that interventions aim for high impact, recognizing that some innovative projects may fail to scale durably and that others may deliver outsized results that endure.
2. **Apply systems thinking.** Devise a logical sequence of interventions that is responsive to changing circumstances and new learning (adaptive implementation pathways). Address interconnected environmental, social, economic, and governance challenges across sectors in the project or program design and implementation, with an eye towards resilience and transformational and enduring change.
3. **Develop a clear rationale and robust Theory of Change** to tackle the drivers of environmental degradation by assessing assumptions, outlining causal pathways and devising responses that are robust to future change and adaptive in the event that desired outcomes do not materialize. The Theory of Change should encompass enablers of durability and transformation, in particular to clarify the assumptions that underlie the



intended transformation pathways and to address any limitations.

4. **Choose the innovations to be scaled, which may include technological, financial, business model, policy and institutional innovations**, and describe the intended modes of scaling. Transformation at scale is likely to require multiple forms of innovation. Allow flexibility in project preparation to accommodate the additional transaction costs and time required to tackle complex issues through multi-agency teams.
5. **Analyse the barriers to, and enablers of, scaling and transformation**, for example those related to institutional arrangements, governance, culture and vested interests. Assess the potential risks and vulnerabilities of the key components of the system to determine its resilience to expected and unexpected shocks and changes and the need for incremental adaptation or more fundamental transformational change.
6. **Maximize global environmental benefits by improving effective integration** and by identifying positive synergies among multiple benefits, and avoid doing harm by minimizing negative interactions and managing any trade-offs, including climate risk and other long-term changes.
7. **Develop multi-stakeholder platforms**, including with local communities (i.e. not

just government officials), from inception and design through to project completion, ideally building on existing platforms and incorporating a flexible structure that can extend and evolve in form and membership over time towards enduring transformational change. This is essential to create ownership; address innovation and pathways to scaling and transformation; enable learning; and maximize global environmental benefits.

8. **Establish a monitoring, evaluation and learning process that will track the intended innovations, integration and transformation, as well as indicators of durability**, including regular review of the Theory of Change to allow a structured approach to flexibility in implementation and to learn about innovation, integration and transformation during and after implementation. Develop explicit plans and funding for good quality knowledge management, including sustainable databases and simple, useful and usable common indicators. Good knowledge management is essential for learning lessons and scaling up.

This paper sets out **principles for securing durability in project and program outcomes and impacts**, built around four themes: (i) engaging the right stakeholders, (ii) building the incentives for these key actors to act, (iii) incorporating adequate diversity and flexibility into project design and implementation, and (iv) underpinning it all with a systems-thinking approach.



Frolova Elena – Shutterstock  
ID: 260006612

## 1. INTRODUCTION

Investment under the GEF is increasingly seeking **greater integration** and **more innovation** and for investments to deliver **transformational change** and consequently much **more impact**, particularly in the Impact Programs.

The **Global Environment Facility (GEF) Independent Evaluation Office (IEO) defines transformational interventions<sup>1</sup>** as those that help achieve deep, systemic and sustainable change with large-scale impact in an area of global environmental concern. It notes four criteria that help differentiate truly transformational interventions from engagements that are “merely” highly successful, complex or large in size:

- Relevance to global environmental challenges
- Depth of change (driving a fundamental change in a system or market)
- Scale of change (full-scale impact at the local, national or regional level)
- ‘Sustainability’, herein termed durability (the impact endures financially, economically, environmentally, socially and politically in the long term, after the intervention ends)

**The GEF IEO<sup>2</sup> found that about 80% of projects achieved satisfactory short- to medium-term outcomes and that these outcomes endured long term in about 60% of projects;** the remainder

faced risks to the long-term continuance of their benefits. The IEO also estimated that about 13% of projects had achieved impact scaling at a broad scale and a further 45% at a local scale. Most of these projects were from GEF-4 (2006–2010), and design principles are expected to have improved substantially over the last two replenishment periods, with a focus on development of the Integrated Approach Pilots and the Impact Programs.

Nevertheless, given the desire for more enduring transformational outcomes, particularly for Impact Programs, the GEF Secretariat asked the Scientific and Technical Advisory Panel (STAP) to examine the evidence from practice and the research literature about what can lead to such outcomes.

This paper reviews an extensive literature; explains some key concepts and provides definitions; summarizes some key themes emerging from the literature on durability, scaling and transformation; outlines the consequences of durability, scaling and transformation for the design of GEF investments; and concludes with some recommendations to help deliver enduring outcomes that are integrated, scalable and transformative.

The appendix to this paper reports in more detail on a literature survey of more than 75 analyses of project and program durability, both at the project level and when scaled to achieve transformative systems change.<sup>3</sup>



## 2. TERMINOLOGY AND DEFINITIONS

This paper uses the IEO's definitions for:

**Outputs:** Direct products of projects and programs

**Outcomes:** Activities beyond the investment period that will lead to longer-term impacts. These activities are often processes or institutional arrangements put in place during the investment that need to continue after the GEF investment has concluded, including (where appropriate) with additional financing.

**Impacts:** Key impacts for the GEF are the global environmental benefits, but these are also expected to be compatible with other social and policy goals, such as gender equity, national policy priorities and livelihood improvement. Impacts may often take time to emerge, well beyond the investment period.

The GEF's investments are increasingly seeking greater **integration** and more **innovation**, with an expectation that these innovations be **scaled** to deliver **transformational** change and, consequently, much more impact.

Figure 1 relates these concepts to project- and program-level activities.

- **At a project level, outcomes and impact should at least occur within the geographic or organizational scope of the project.** This requires proper project design and implementation. Integration is important to maximize co-benefits among different global environmental benefits and social outcomes, and innovation is needed to support a step change in impacts, beyond just further implementation of well-known approaches.
- **Ideally, projects should also set up a pathway to scale** so that their local outcomes

are taken up by other actors and in other places and contribute to transformational change. This often requires an additional round of innovation to address barriers to scaling.

- **At a program level, there is an explicit intention to integrate and to deliver transformational change across the program's portfolio of projects**, even if individual projects do not scale in their own right.

In summary (see figure 2), outcomes may be (i) project level and restricted to the project's scope (figure 2a,b), (ii) project level but scaled to some degree (figure 2c,d) or (iii) program level (figure 2e), for which transformational change is expected through scaling from multiple projects with a synergistic effect.

**The GEF needs to be confident that global environmental benefits will endure** (figure 2b,d,e). This durability is widely referred to as sustainability in project management and in development literature.<sup>4</sup> However, in the environmental field, this term causes considerable confusion with environmental sustainability and sustainable development, which certainly aim to endure, but in which sustainable usually implies "not living beyond our means" or "not diminishing global environmental benefits". The terms enduring and durability are therefore becoming more widely used (see the appendix<sup>3</sup>).

This paper uses the terms **enduring** and **durability** to mean the long-term maintenance of outcomes and consequent impacts, whether environmental or not, and restricts the use of sustainability to the project's effects on natural resources, including in the long term, beyond the project lifetime.

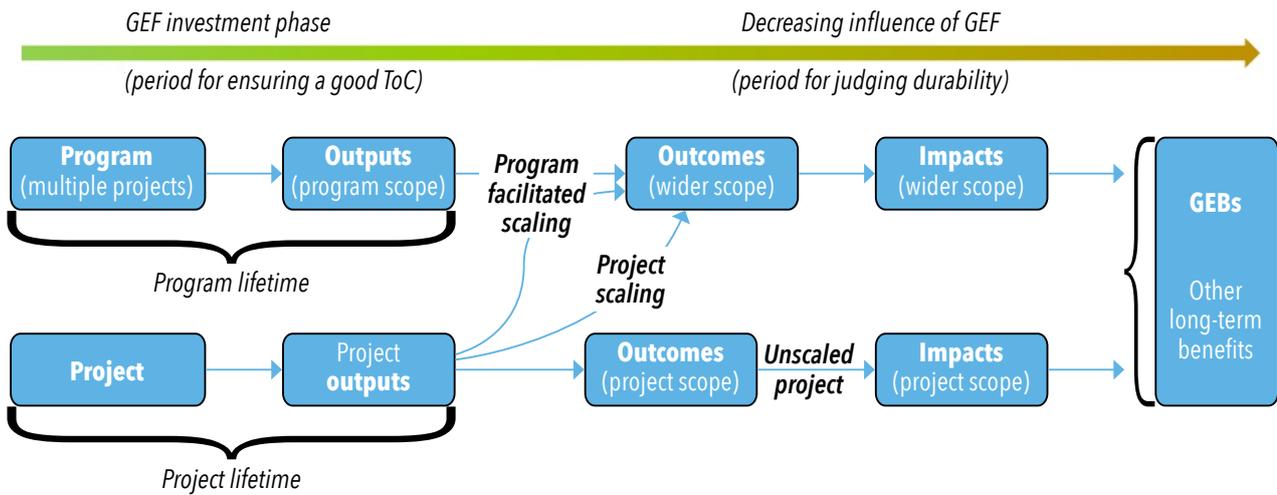


Figure 1: Temporal and functional relationships between some key terms in GEF usage. Illustrates three ways impact may be delivered: by projects within their original scope, through scaling from an individual project, and by a program integrated across multiple projects. (GEBs: global environmental benefits).

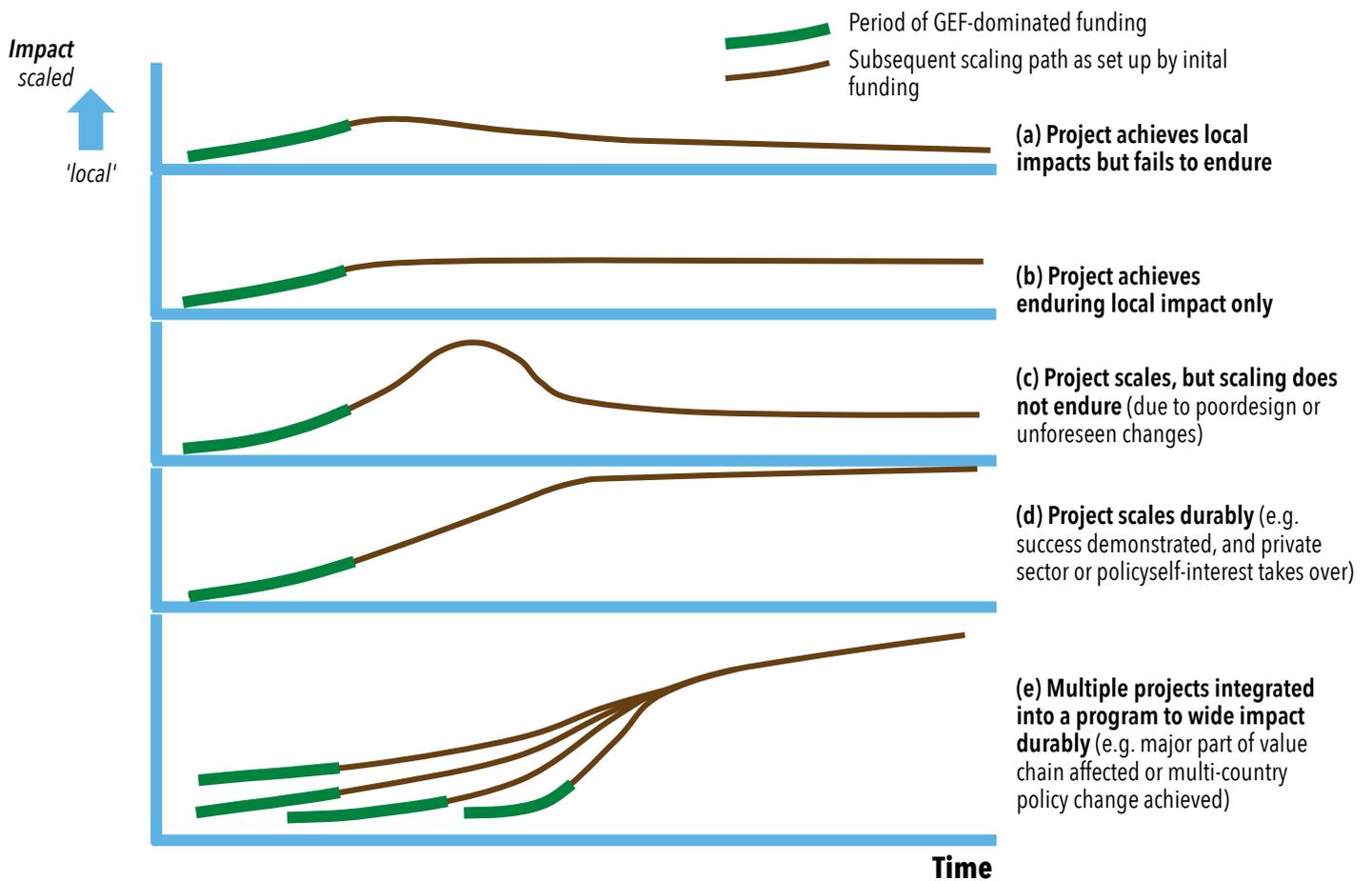


Figure 2: Impact, scaling and durability. Illustrates different scenarios in which a period of Global Environment Facility (GEF) funding (green) may or may not achieve enduring impact.



## 3. RISK APPETITE, TRANSFORMATIONAL CHANGE AND DURABILITY

**Systems change requires greater innovation to explore new ways of achieving more impact,** which often entails greater uncertainty **with a higher likelihood of failure** than with tried and tested approaches (figure 3). The Independent Commission for Aid Impact emphasizes **the importance of clearly articulated expectations about risk appetite** across a program.<sup>5</sup>

### 3.1 PROJECT DELIVERY

**The minimum expectation of any project is that it should achieve its expected outcomes and impact and that these impacts should be enduring.** Across an innovative portfolio, it would be reasonable to expect a modest project failure rate. Good design processes should ensure that almost all projects at least deliver short-term outcomes, but performance might drop off in terms of how enduring the outcomes are.

The GEF IEO found that about 80% of projects achieved satisfactory short- to medium-term outcomes (exceeding the 75% target set in the GEF-4 replenishment) and that these outcomes were enduring in the long term in about 60% of projects.<sup>2</sup> **An acceptable risk appetite is a matter for GEF Council policy.** However, it is important to clarify expectations: when projects fail, it should be despite excellent project design, not because of design or implementation failures.

### 3.2 SCALING FROM PROJECTS

The GEF IEO estimated that about 13% of projects had achieved impact scaling at a broad scale and a further 45% at a local scale at the time of its ex

post assessment (which primarily examined projects financed through GEF-4 and earlier, typically two to three years after project completion).<sup>2</sup> A significantly higher level should be expected for the current investment portfolio, given the increased emphasis on integration, systems thinking and transformation in GEF-6 and GEF-7, especially via Integrated Approach Pilots, Impact Programs and multi-focal area projects. **Scaling to transformation, where the GEF is seeking most innovation at present, may be where a higher risk of not achieving enduring transformation is most acceptable.**

### 3.3 PROGRAM DELIVERY

The ambition for durability and transformation should be much higher when a project is embedded in a coherent program (e.g. the Impact Programs). **At the program level, transformational outcomes are expected: these may not accrue from every project, but the program as a whole should have a very low probability of failure, while targeting a high level of enduring impacts.**

This is the essence of well-informed risk-taking through a portfolio of investments: **by prioritizing innovation that explicitly aims at scaling and enduring transformational change, we recognize and accept that some efforts will fall short but that those that succeed will deliver greater overall enduring impact at larger scales** than would otherwise occur. Moreover, integrating project investments in well-structured program monitoring should increase the likelihood that “failures” will yield valuable lessons about which approaches merit increased investment and which should be abandoned or reconceived.



Level of impact, related to degree of scaling and system transformation

High

Low

Low

High

Level of innovation and risk of failure (& opportunity to learn)

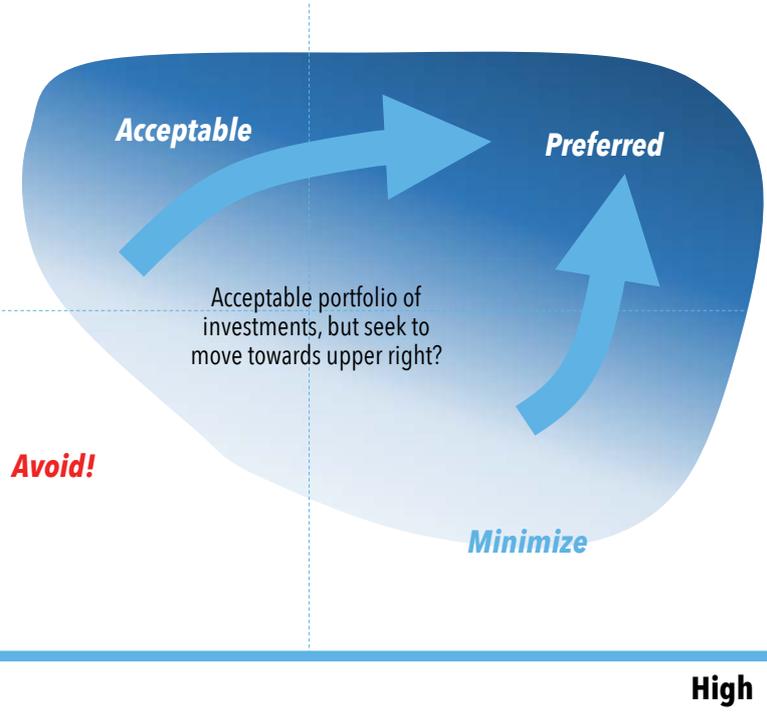


Figure 3: A visualization of the preferred areas of operation for the Global Environment Facility for levels of innovation (risk) and of impact (return). Activities are increasingly preferred as they move from lighter to more heavily shaded areas, but some portfolio diversity across these areas is desirable. The low-impact area is to be avoided.



# 4. WHAT IS THE EVIDENCE ON SECURING ENDURING OUTCOMES?

## 4.1 ACHIEVING ENDURING OUTCOMES FROM PROJECTS

There is extensive peer-reviewed and grey literature on achieving project outcomes and impact, which increasingly emphasizes success factors focused specifically on durability: engaging the right stakeholders; building incentives for these key actors to act; incorporating adequate diversity and flexibility into project design and implementation; and underpinning it all with a systems-thinking approach.<sup>6</sup>

The simple logic chain here is that engaging key stakeholders and incentivizing them will build **stakeholder trust and motivation**; building the capacity of stakeholders and institutions as part of incentivizing them, as well as emphasizing diversity of inputs, will help ensure **enduring**

**capacity and financing**; and emphasizing diversity and adaptability, along with a good application of systems thinking and learning, will **build resilience** in the outcomes (as summarized in figure 4). These three emergent factors are widely seen as indicators of the durability of the outcome processes that underpin enduring impacts.

**Enduring impacts depend on establishing enduring outcomes in the form of actors' behaviours, institutional arrangements or financing, and also on enduring in the face of long-term external changes, such as climate change, changes in demographics or changes in demand for products, as well as avoiding or managing unintended consequences.** This requires outcomes to be appropriately resilient and adaptive to such changes, which means these issues must

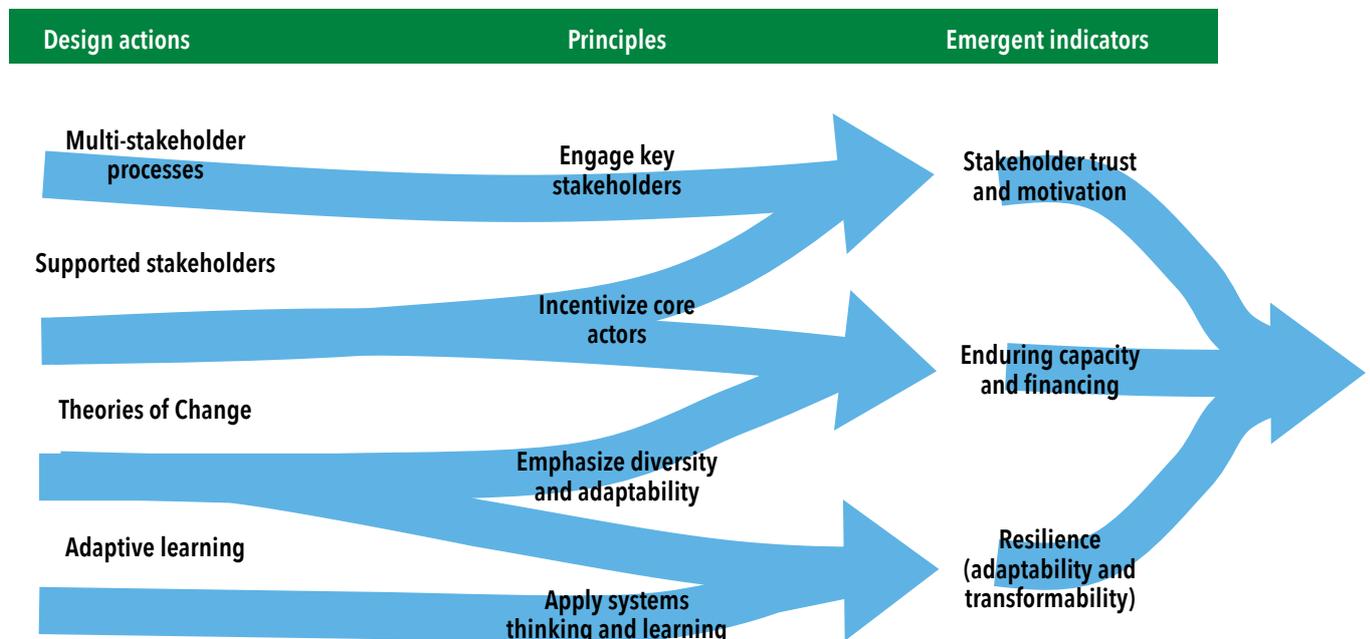


Figure 4: Simplified chain of logic illustrating how emergent indicators of enduring outcomes relate to underlying design principles (elaborated in table 1) and design actions (elaborated in section 5).



Mohamed Hashif – Shutterstock  
ID: 1679355970

be considered in project and program design. (These principles from the literature underpin the STAP’s guidance on Impact Program framework documents and build on the STAP’s previous work on integration.<sup>7</sup>)

There is limited literature on how project durability is affected by a changing world and on how projects can deal with the unintended consequences of an intervention.<sup>8,9</sup> Risk assessments in development projects tend to focus on short-term financial, organizational and project management risks, rather than the risk that the project outcomes will not stand up in a changing world, such as the increasing risk that climate change may undermine project outcomes.<sup>10</sup> To help prepare for these risks, the STAP encourages the Theory of Change and project or program design to explore response options that are robust to future uncertainty, as well as the pursuit of adaptive modes of implementation in case the anticipated intervention proves inadequate.<sup>7, 11, 12</sup>

Box A illustrates various examples of these risks, which relate to different types of uncertainty and require different types of project design response:

- **Foreseeable known changes:** Design for these changes; test ability to cope if they do not happen.
- **Known changes, where the form is foreseeable, but the magnitude is not:** Use scenarios<sup>13</sup> to look for robust approaches, including flexible pathways over time.
- **Known changes, form and magnitude unforeseeable:** Brainstorm some possibilities, consider flexible approaches and build resilience in relevant actors and institutions.
- **Unknown changes:** Build general resilience.<sup>11</sup>



## BOX A: ACHIEVING DURABILITY BY AVOIDING UNINTENDED CONSEQUENCES OR FAILURE DUE TO EXTERNAL CHANGES

Many longer-term trends or events may undermine the durability of even a well-designed project. Different forms of uncertainty underlie such trends and events,<sup>14, 15</sup> from those that have a formal probability (i.e. a defined risk), to those with known or unknown levels of uncertainty, to those that cannot easily be foreseen. These trends and events require thought in project planning and implementation, as illustrated by the following examples:

- **Change in climate:** This change is known to be happening; the magnitude of local impacts is uncertain. Projects should assess durability with respect to different scenarios ( see Change in technology) and look for robust approaches (i.e. approaches that work reasonably well across all possible futures rather than optimally but only in one, such as adaptation pathways that retain flexibility<sup>12</sup>).
- **Change in government policy:** If an outcome is dependent on a specific government policy, then risk management should require an appraisal of how robust the outcomes are to the possibility of change and whether there are approaches (e.g. flexible staging of actions, engaging all sides of politics) that would make the intervention more robust.
- **Change in demographics:** In most developing regions, changes in demographics include population increase, often coupled with urban migration, and significant shifts in age structure. These changes are reasonably foreseeable and their implications for durability must be considered.
- **Change in demand for products** (e.g. coffee, cocoa): Such changes are often reasonably foreseeable, but intended outcomes may need to be tested against a less likely scenario (e.g. a drop in global demand).
- **Change in technology:** Such changes are certain to happen, but while some may be foreseeable and easily related to implications for some interventions, others are entirely and unpredictably disruptive. Developing some scenarios may help minimize risks here, but for extreme changes that are impossible to foresee, it is important to build general resilience among networks of stakeholders (e.g. reflective processes, local capacity, capable institutions).
- **Novel pests and diseases:** Such events are likely to happen, but their impacts are very uncertain. Brainstorm possibilities and look for resilience, as in Change in technology.
- **Conflict or break-down of law and order:** It may or may not be possible to assess the risk of such events in context. Use above approaches as appropriate.<sup>16</sup>
- **Unforeseen side effects of a project:**<sup>9</sup> By definition, side effects are unpredictable (though engaging a wider range of stakeholders at the design stage may help to foresee possible outcomes).



## 4.2 SYSTEMS CHANGE: TOWARDS TRANSFORMATION AND DURABILITY

Transformation implies impact at scale, but not all impacts at scale are transformational.

**There is a widespread assumption that scaling and transformational change imply greater durability; this may often be true, but it is not a strict causal relationship.** For example, local benefits may endure well but not scale, and benefits may scale successfully but not endure, for example where changes in policy or technology, or unexpected project side-effects,<sup>8</sup> undermine success (figure 2, point c). For systems change, **it is therefore important to have both broad impact (systems change) and long-term impact (durability).**

**Similarly, larger investments do not necessarily guarantee transformational success;**<sup>1, 17</sup> transformational success can also be achieved, for example, in adaptation from a bundle of small interventions that adjust flexibly to change rather than reinforcing the status quo.<sup>17, 18</sup>

Systems change for transformation can occur in diverse ways, based on one or more types of innovation. The STAP paper Innovation and the GEF<sup>19</sup> identified five forms of innovation: technological, financial, business model, policy and institutional (including changes in cultural norms). In principle, these innovations can apply at any scale: local, regional, national or global. **Most transformational change involves more than one of these elements of innovation.**

The GEF IEO noted four transformational mechanisms in the GEF projects it reviewed – specifically, what it termed *mainstreaming*, *demonstration*, *replication* and *catalytic effects*.<sup>1</sup> Box B shows some lessons from the literature on transformation at scale, suggesting some additional forms as well as a **diagnostic for project and program design**: transformation requires an analysis of the barriers and enablers of scaling related to **knowledge, rules and values** (see box B).

GEF funding is by design often a fraction of a total project or program investment, and an even smaller fraction of investment in the given sector. For this “tail” to “wag the dog”, there needs to be a clear Theory of Change strategy, which can be adaptive. Scaling through replication can achieve enduring impact when a change is of sufficient benefit to self-interested actors to continue it after the intervention, and there are no “rules” or “values” barriers (box B). Examples include reduction of the costs of uptake (e.g. electricity from renewables), exposure to new knowledge or technologies not previously seen but obviously beneficial (e.g. mobile phones), or innovations that yield profitable business advantages and are picked up by the private sector.

Where benefits are diffuse or hard to protect against other interests, a bigger system transformation is required. This may involve hard-to-undo changes in the policy environment (e.g. changes in land tenure or control of resources) or in financing (e.g. a department of finance providing enduring funding in return for increased tax revenue) or may involve a real change in social context (e.g. a persistent green market incentive driven by demand down a value chain).



Eo Naya – Shutterstock  
ID: 767683264

## BOX B: LESSONS FROM THE LITERATURE ON SYSTEMS CHANGE AND TRANSFORMATION

The expanding literature on transformation converges on the consistent lesson that transformation requires three elements, which provide a **simple diagnostic** for projects to use to analyse the possible barriers:<sup>20, 21, 22, 23</sup>

1. Having practical examples of success that provide **knowledge** and experience that work
2. Getting the **rules and institutions** right, usually at a higher level of organization than the project
3. Making sure that wider cultural norms and **values** are properly aligned to enable scaling

In its ex post review of factors that facilitate transformational change, the GEF IEO concluded that projects should:<sup>1</sup>

- Have clear ambition in design to trigger a fundamental systems change that addresses a root cause for an environmental concern
- Explicitly identify the transformational (scaling) mechanism(s)
- Harness market forces, where appropriate (especially in technology projects), as this may be a sufficient condition for transformation
- Have quality implementation and execution



**Table 1**  
Towards systems change: Key principles for achieving durability and enduring transformational change in project or program outcomes and impacts

Achieving durability	Achieving enduring transformational change
<b>Engage key stakeholders</b>	
<ul style="list-style-type: none"> <li>• Emphasize legitimate engagement and ongoing partnerships with and among appropriate stakeholders<sup>22, 24, 25, 26, 27</sup></li> <li>• Have processes to manage diverse values and motivations<sup>25, 28</sup></li> <li>• Use co-design and co-production to involve key actors, with a planned and phased approach to withdrawal<sup>24, 26, 29</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Review and evolve the changing identity and roles of, and partnerships with, key actors<sup>28</sup></li> <li>• Recognize expanded diversity of motivations, especially across scale<sup>28, 29</sup></li> <li>• Extend planning for phased withdrawal from the intervention, carefully timed to support scaling and long-term financing<sup>27, 30, 31, 32</sup></li> </ul>
<b>Incentivize core actors</b>	
<ul style="list-style-type: none"> <li>• Value local knowledge and institutions<sup>33, 34</sup></li> <li>• Link to local culture and use storytelling<sup>6, 34, 35</sup></li> <li>• Build human and social capital as well as individual and community capacity<sup>30, 33, 35, 36, 37</sup></li> <li>• Develop leadership and champions<sup>30, 32, 37</sup></li> <li>• Deliver local benefits, no matter what else is achieved<sup>6, 27, 35</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Build capital and capacity beyond the original core actors and covering a wider set of skills<sup>35, 38</sup></li> <li>• Identify cultural barriers and enablers of scaling and transformational change, such as “moral norms”<sup>39, 40</sup></li> <li>• Build multi-stakeholder platforms and coalitions to address social and political barriers and enable collective learning<sup>41, 42</sup></li> <li>• Address inequities in power and distribution of benefits<sup>43, 44</sup></li> </ul>
<b>Emphasize diversity and adaptability</b>	
<ul style="list-style-type: none"> <li>• Ensure diversity in inputs and outputs (e.g. livelihoods, people, financing)<sup>6, 32</sup></li> <li>• Be flexible and adaptable in project implementation<sup>6, 26</sup></li> <li>• Build adaptive processes into community and local structures<sup>45</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Create structured flexibility (i.e. not open-ended change) to enable scaling as new barriers and enablers become apparent<sup>46</sup></li> <li>• Consider the policy and institutional environment<sup>45</sup></li> <li>• Explicitly set goals and plan for transformation and scaling from early on, identifying the form (or mechanism) of scaling<sup>31, 45</sup></li> </ul>
<b>Apply systems thinking and learning</b>	
<ul style="list-style-type: none"> <li>• Take an integrated, holistic systems view<sup>35, 47</sup></li> <li>• Emphasize ongoing monitoring, reflection and learning cycles<sup>5, 34</sup></li> <li>• Plan for long-term changes and shocks (see box A)<sup>29, 48</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Handle added complexity in monitoring, evaluation and learning from scaling and transformation<sup>30, 49, 50, 51</sup></li> <li>• Challenge (all) actors with the need for transformation</li> <li>• Allow time for scaling to deliver impact<sup>28, 33, 50</sup></li> </ul>



## 5. DESIGN AND IMPLEMENTATION ACTIONS TOWARDS ACHIEVING ENDURING OUTCOMES AND IMPACTS

Designing and implementing projects and programs that align with the principles outlined in table 1, therefore increasing the likelihood of achieving enduring outcomes and impacts, requires attention to certain design considerations. The considerations were introduced in section 2 (see figure 4), and in this section they are elaborated.<sup>52</sup> The considerations align well with the STAP principles for integration.<sup>7</sup>

### 5.1 AT THE PROJECT LEVEL

At the project level, key design considerations for better durability emphasize **multi-stakeholder processes**, supporting the **involvement and motivation of stakeholders**, developing and testing a robust **Theory of Change**, and promoting **adaptive learning**.

#### Multi-stakeholder design processes

- Do (and regularly update) **stakeholder mapping and institutional analyses** to inform the engagement of all necessary stakeholders. Pay attention to power and influence over the barriers and enablers of project outcomes (an iterative process is needed as these barriers and enablers develop).<sup>28</sup>
- Identify and **equitably engage all key stakeholders**, explicitly allowing who is considered a key stakeholder to evolve over time. Ensure careful design of stakeholder engagement in project governance.<sup>24, 33</sup>

#### Involvement and motivation of stakeholders

- Develop explicit plans to **demonstrate the comparative advantage of adopting planned project outputs** to potential adopters within the project scope (including potential policy-level supporters); in other words, show the local benefits.<sup>27, 28</sup>

- Design **individual and community or institutional capacity-building plans** that will develop leaders and champions, consider diversity in all forms, connect with local institutional structures, value local knowledge, use storytelling, and link to local culture in ways that build motivation, trust and ownership.<sup>34, 35</sup>

#### Theories of Change

- **Co-design (with stakeholders) a robust Theory of Change** for project-level outcomes and impact.<sup>53</sup> The Theory of Change should include a clear definition of the problem to be addressed and its root causes or drivers; a co-designed vision of desired outcomes; a systematic analysis of barriers to, and enablers for, achieving the outcomes; consideration of how to address all barriers (including persistent funding after the intervention<sup>32</sup>); a plan for a phased withdrawal of the intervention; and prioritization of the **necessary and sufficient** set of responses for the project to focus on (allowing for other complementary activities outside the current investment).<sup>11, 54</sup>
- Identify and **plan for distributional outcomes** and how to manage issues arising from winners and losers of the intervention in the Theory of Change to minimize the risk of these issues undermining the project's durability.<sup>25</sup>
- **Explicitly identify any long-term drivers of change** (e.g. population, climate, migration, product demand) that might undermine project outcomes beyond the project's lifetime (or create alternative opportunities) and incorporate these issues into the Theory of Change (see box A).



- **Regularly review and refine the Theory of Change in light of learning** from monitoring and formative evaluation efforts to allow structured flexibility in implementation.<sup>5,46</sup> (This also needs to be supported at the program level; see section 4.2.)

## Adaptive learning

- **Establish effective monitoring, evaluation and learning as well as knowledge management systems**, coupled to an ongoing mechanism or process (e.g. local committees, capacity-building, new or strengthened value chain organization) that will carry the project outputs forward into outcomes and impact after the end of the investment; the monitoring, evaluation and learning should encompass the durability of the outcomes.<sup>27, 29</sup> (This may be facilitated at a program level; see section 4.2.)

## 5.2 AT THE PROGRAM LEVEL

A coordinated portfolio of projects in a program may deliver durable transformation and systems change in various ways from the sum of the parts if they:

- **Scale from individual projects**, with learning across projects so that each project scales more easily; this requires networking across project participants, demonstration sites, and so on.
- **Coordinate sets of projects so a regional or systemwide outcome is reached** beyond what independent individual projects could achieve; this usually requires engaging with higher levels of governance than individual projects need to and may require institutional change at a higher level (e.g. agreement on tackling land degradation neutrality among nations across the Mopane woodlands region, or driving change in private sector aggregators of a substantial part of the global cocoa or coffee value chains).
- **Maintain partnerships, collaborative networks and coalitions over time** so that individual projects build to transformational

impacts (within or beyond the national level). This requires persistent and evolving stakeholder engagement.

**To support transformation, programs should** allocate resources to establish processes or conditions (e.g. in the IP coordination projects) that enable projects to take the actions identified in section 4.1 and in STAP's integration paper,<sup>7</sup> such as:

- **Establish (or strengthen existing) multi-stakeholder platforms** to sustain collaboration and build coalitions for change and allow flexible engagement with a network of stakeholders that may change through project and program lifetimes.<sup>55</sup>
- **Support learning by establishing a knowledge management system**<sup>56</sup> that includes compiling and periodically reviewing innovative policy and management actions or measures (e.g. strategies and actions for dryland restoration and rehabilitation) as well as documenting roadblocks and pitfalls.
- **Support structured flexibility in implementation in projects**, perhaps by using regular project-level Theory of Change reviews to assess where flexibility is important and implement adaptive management.<sup>46</sup>
- **Support capacity-building among project teams to develop good project design for durability**, for example by creating a community of practice<sup>53</sup> and providing consistent future scenarios against which to test for future shocks.<sup>13</sup>
- **Develop and review a robust Theory of Change at the program level** that addresses scaling from individual projects.<sup>57</sup>
- **Develop effective approaches to monitoring, evaluation and learning and to knowledge management** that assist individual projects to do both efficiently. In addition, provide program level outputs, including those that help judge durability, and allow quality control of knowledge to be shared across projects.



RudiErnst - Shutterstock  
ID: 1648444591

## GLOSSARY

Term	Definition
durability, enduring	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefits over time. <sup>58</sup> But confusingly often termed 'sustainability' in the development literature.
impact	The positive and negative, primary and secondary long-term effects produced by a project or program, directly or indirectly, intended or unintended. <sup>59</sup>
innovation	An idea – embodied in a technology, product or process – that is new and creates value. To be impactful, innovations must also be scalable, not merely one-off novelties. <sup>19, 60</sup>  A new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process). <sup>61</sup>
integration	Combination of two or more disciplines to provide holistic and systemic outcomes. <sup>7</sup>
outcome	An intended or achieved short- or medium-term effect of a project or program's outputs. <sup>56</sup>
output	A product or service that results from the completion of activities implemented within a project or program. <sup>56</sup>
scaling	Extending the impact of a product or process. Scaling out, up and deep <sup>40</sup> are discussed in the appendix.
sustainable development; sustainability in an environmental sense	Sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." <sup>62</sup>
transformation	A systems change to a new identity. In this context, systems refers to social-ecological systems. <sup>11</sup> Social-ecological systems are complex, integrated systems in which humans are understood to interact closely with nature. <sup>63</sup> (See also discussion in STAP Brief.) <sup>64</sup>

# ENDNOTES

- 1 Global Environment Facility Independent Evaluation Office, *Evaluation of GEF Support for Transformational Change*, Evaluation Report No. 122 (Washington, D.C., 2018).
- 2 Global Environment Facility Independent Evaluation Office, *GEF Project Performance and Progress to Impact*, Evaluation Report No. 121 (Washington, D.C., 2018).
- 3 M. Stafford Smith, "Achieving enduring outcomes from GEF investment: A short literature review. Appendix." (Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, D.C. 2019).
- 4 Organisation for Economic Co-operation and Development, Development Assistance Committee, *Principles for Evaluation of Development Assistance* (Paris, 1991).
- 5 Independent Commission for Aid Impact, *DFID's Approach to Delivering Impact* (London, 2015).
- 6 TANGO International, *Sustainability of Rural Development Projects: Best Practices and Lessons Learned by IFAD in Asia — India Case Study* (Rome, International Fund for Agricultural Development, 2009).
- 7 R. Bierbaum et al., *Integration: To Solve Complex Environmental Problems* (Washington, D.C., Global Environment Facility, Scientific and Technical Advisory Panel, 2018).
- 8 D.J. Koch and L. Schulpen, "Introduction to the special issue 'unintended effects of international cooperation'", *Evaluation and Program Planning*, vol. 68 (June 2018), pp. 202–209. <https://doi.org/10.1016/j.evalprogplan.2017.10.006>.
- 9 A. Swidler and S.C. Watkins, "'Teach a man to fish': the doctrine of sustainability and its effects on three strata of Malawian society", *World Development*, vol. 37, No. 7 (July 2009), pp. 1182–1196. <https://doi.org/10.1016/j.worlddev.2008.11.002>.
- 10 Highlighted in review comments on the Development Assistance Committee (Organisation for Economic Co-operation and Development) principles, as discussed in the Appendix (see footnote 3).
- 11 D. O'Connell et al., *Designing Projects in a Rapidly Changing World: Guidelines for Embedding Resilience, Adaptation and Transformation into Sustainable Development Projects (Version 1.0)* (Washington, D.C., Global Environment Facility, 2016).
- 12 STAP guidance on climate risk screening. A STAP Document. June 2019.
- 13 Some of these approaches require a set of future scenarios against which alternative project responses can be tested. These scenarios may benefit from being framed by Shared Socioeconomic Pathways, which are scenarios that explore how future, internally consistent changes in climate, population, diet, land-use regulation and trade (i.e. different socioeconomic pathways) affect outcomes such as deforestation, malnutrition and water stress. E. Byers et al., "Global exposure and vulnerability to multi-sector development and climate change hotspots", *Environmental Research Letters*, vol. 13, No. 5 (May 2018). <https://doi.org/10.1088/1748-9326/aabf45>.
- 13 D.P. van Vuuren et al., "The Shared Socio-economic Pathways: trajectories for human development and global environmental change", *Global Environmental Change*, vol. 42 (January 2017), pp. 148–152. <https://doi.org/10.1016/j.gloenvcha.2016.10.009>.  
For guidance on how to use scenarios in different contexts:  
A. Wilkinson and E. Eidinow, "Evolving practices in environmental scenarios: a new scenario typology", *Environmental Research Letters*, vol. 3, No. 4 (December 2008). <https://doi.org/10.1088/1748-9326/3/4/045017>.
- 14 A.C. Stirling and I. Scoones, "From risk assessment to knowledge mapping: science, precaution and participation in disease ecology", *Ecology and Society*, vol. 14, No. 2.
- 15 W. Walker et al., "Comment on 'From data to decisions: Processing information, biases, and beliefs for improved management of natural resources and environments' by Glynn et al.", *Earth's Future*, vol. 6, No. 5 (May 2018), pp. 757–761. <https://doi.org/10.1002/2017EF000750>.
- 16 B.D. Ratner, *Environmental Security: Dimensions and Priorities* (Washington, D.C., Global Environment Facility, Scientific and Technical Advisory Panel, 2018).
- 17 K. Warner et al., "Characteristics of transformational adaptation in climate-land-society interactions", *Sustainability*, vol. 11, No. 2 (January 2019), p. 356. <https://doi.org/10.3390/su11020356>.
- 18 S.E. Park et al., "Informing adaptation responses to climate change through theories of transformation", *Global Environmental Change*, vol. 22, No. 1 (February 2012), pp. 115–126. <https://doi.org/10.1016/j.gloenvcha.2011.10.003>.
- 19 F. Toth, *Innovation and the GEF* (Washington, D.C., Global Environment Facility, Scientific and Technical Advisory Panel, 2018).
- 20 F.W. Geels, "The multi-level perspective on sustainability transitions: responses to seven criticisms", *Environmental Innovation and Societal Transitions*, vol. 1, No. 1 (June 2011), pp. 24–40. <https://doi.org/10.1016/j.eist.2011.02.002>.
- 21 D. Riddell and M.-L. Moore, *Scaling Out, Scaling Up, Scaling Deep: Advancing Systemic Social Innovation and the Learning Processes to Support It* (Montreal, J.W. McConnell Family Foundation, 2015).
- 22 A. Tengberg and S. Valencia, *Science of Integrated Approaches to Natural Resources Management* (Washington, D.C., Global Environment Facility, Scientific and Technical Advisory Panel, 2017).
- 23 R. Gorrdard et al., "Values, rules and knowledge: adaptation as change in the decision context", *Environmental Science & Policy*, vol. 57 (March 2016), pp. 60–69. <https://doi.org/10.1016/j.envsci.2015.12.004>.
- 24 Y.T. Bayiley and G.K. Teklu, "Success factors and criteria in the management of international development projects: evidence from projects funded by the European Union in Ethiopia", *International Journal of Managing Projects in Business*, vol. 9, No. 3 (June 2016), pp. 562–582. <https://doi.org/10.1108/ijmpb-06-2015-0046>.
- 25 J. de Vente et al., "How does the context and design of participatory decision making processes affect their outcomes? Evidence from sustainable land management in global drylands", *Ecology and Society*, vol. 21, No. 2 (2016). <https://dx.doi.org/10.5751/es-08053-210224>.
- 26 L.A. Ika and J. Donnelly, "Success conditions for international development capacity building projects", *International Journal of Project Management*, vol. 35, No. 1 (January 2017), pp. 44–63. <https://doi.org/10.1016/j.ijproman.2016.10.005>.
- 27 A. Zazueta, *Principles for the Development of Integrated Climate Change and Chemicals and Waste* (Washington, D.C., Global Environment Facility, Scientific and Technical Advisory Panel, 2017).
- 28 J. Boshoven, M. Hill and A. Koontz, *The Nature of Conservation Enterprises* (Washington, D.C., U.S. Agency for International Development, 2018).
- 29 B.L. Rogers and J. Coates, *Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects* (Washington, D.C., Food and Nutrition Technical Assistance III Project, 2015).
- 30 J. Bao et al., "Monitoring and evaluating the transition of large-scale programs in global health", *Global Health-Science and Practice*, vol. 3, No. 4 (December 2015), pp. 591–605. <https://doi.org/10.9745/ghsp-d-15-00221>.



- 31 M.T. Buntaine and B.C. Parks, "When do environmentally focused assistance projects achieve their objectives? Evidence from World Bank post-project evaluations", *Global Environmental Politics*, vol. 13, No. 2 (May 2013), pp. 65–88. [https://doi.org/10.1162/GLEP\\_a\\_00167](https://doi.org/10.1162/GLEP_a_00167).
- 32 W.H. Oldewage-Theron et al., "Comparative analysis of the factors contributing to sustainability of a food and nutrition intervention programme: two case studies from South Africa", *Evaluation and Program Planning*, vol. 71 (December 2018), pp. 51–57. <https://doi.org/10.1016/j.evalprogplan.2018.08.003>.
- 33 J.S. Brooks, "Design features and project age contribute to joint success in social, ecological, and economic outcomes of community-based conservation projects", *Conservation Letters*, vol. 10, No. 1 (January/February 2017), pp. 23–32. <https://doi.org/10.1111/conl.12231>.
- 34 C. Mahonge, "Factors behind sustainability of activities in the post-project period in Matengo highlands in Tanzania", *Journal of Environmental Sustainability*, vol. 3, No. 3 (2013), pp. 91–102.
- 35 Hovland Consulting LLC, *Best Practices for Enduring Conservation* (Boulder, Colorado, 2018).
- 36 H. Martinez-Bautista et al., "Determinants of success or failure on community forestry projects with government funding in Mexico", *Bosque*, vol. 36, No. 3 (2015), pp. 363–374. <https://dx.doi.org/10.4067/s0717-92002015000300004>.
- 37 S. Sastre-Merino, X. Negrillo and D. Hernández-Castellano, "Sustainability of rural development projects within the Working With People model: application to Aymara women communities in the Puno region, Peru", *Cuadernos de Desarrollo Rural*, vol. 10, No. 70 (2013), pp. 219–243.
- 38 J.S.R. Yee and H. White, "The Goldilocks conundrum: the 'just right' conditions for design to achieve impact in public and third sector projects", *International Journal of Design*, vol. 10, No. 1 (2016), pp. 7–19.
- 39 H.E. Moore and J. Boldero, "Designing interventions that last: a classification of environmental behaviors in relation to the activities, costs, and effort involved for adoption and maintenance", *Frontiers in Psychology*, vol. 8 (November 2017), p. 1874. <https://doi.org/10.3389/fpsyg.2017.01874>.
- 40 M.-L. Moore, D. Riddell and D. Vocisano, "Scaling out, scaling up, scaling deep: strategies of non-profits in advancing systemic social innovation", *Journal of Corporate Citizenship*, vol. 58 (June 2015), pp. 67–84.
- 41 P. Glasbergen, "Global action networks: agents for collective action", *Global Environmental Change*, vol. 20, No. 1 (February 2010), pp. 130–141. <https://doi.org/10.1016/j.gloenvcha.2009.09.002>.
- 42 J. de Kraker, "Social learning for resilience in social-ecological systems", *Current Opinion in Environmental Sustainability*, vol. 28 (October 2017), pp. 100–107. <https://doi.org/10.1016/j.cosust.2017.09.002>.
- 43 L. Lebel et al., "Governance and the capacity to manage resilience in regional social-ecological systems", *Ecology and Society*, vol. 11, No. 1 (2006), p. 19.
- 44 T. Tanner et al., "Livelihood resilience in the face of climate change", *Nature Climate Change*, vol. 5, No. 1 (2015), pp. 23–26.
- 45 C. Barnes and F. van Laerhoven, "Making it last? Analysing the role of NGO interventions in the development of institutions for durable collective action in Indian community forestry", *Environmental Science & Policy*, vol. 53, part B (November 2015), pp. 192–205. <https://doi.org/10.1016/j.envsci.2014.06.008>.
- 46 P.K. Thornton et al., "Responding to global change: A theory of change approach to making agricultural research for development outcome-based", *Agricultural Systems*, vol. 152 (March 2017), pp. 145–153. <https://doi.org/10.1016/j.agsy.2017.01.005>. This paper provides an approach to allowing constrained flexibility.
- 47 See also the Development Assistance Committee (Organisation for Economic Co-operation and Development) review, as discussed in the appendix (see footnote 3).
- 48 J. Terrapon-Pfaff et al., "Productive use of energy – pathway to development? Reviewing the outcomes and impacts of small-scale energy projects in the Global South", *Renewable & Sustainable Energy Reviews*, vol. 96 (November 2018), pp. 198–209. <https://doi.org/10.1016/j.rser.2018.07.016>.
- 49 S. Bennett et al., "Monitoring and evaluating transition and sustainability of donor-funded programs: reflections on the Avahan experience", *Evaluation and Program Planning*, vol. 52 (October 2015), pp. 148–158. <https://doi.org/10.1016/j.evalprogplan.2015.05.003>.
- 50 P. Midmore, "The science of impact and the impact of agricultural science", *Journal of Agricultural Economics*, vol. 68, No. 3 (September 2017), pp. 611–631. <https://doi.org/10.1111/1477-9552.12242>.
- 51 S. Ozawa et al., "The Avahan transition: effects of transition readiness on program institutionalization and sustained outcomes", *PloS One*, vol. 11, No. 7 (2016). <https://doi.org/10.1371/journal.pone.0158659>.
- 52 More background on the sources is provided in the appendix, summarised in figure A.1, showing the links between success indicators, principles and these actions.
- 53 M. Stafford Smith. *Theory of Change Primer*, A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, D.C., 2020.
- 54 Y.T. Maru et al., "Towards appropriate mainstreaming of 'Theory of Change' approaches into agricultural research for development: challenges and opportunities", *Agricultural Systems*, vol. 165 (September 2018), pp. 344–353. <https://doi.org/10.1016/j.agsy.2018.04.010>.
- 55 B.D. Ratner and M. Stafford Smith. *Multi-stakeholder dialogue for transformational change*. A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC., 2020.
- 56 M. Stocking et al., *Managing Knowledge for a Sustainable Global Future* (Washington, D.C., Global Environment Facility, Scientific and Technical Advisory Panel, 2018).
- 57 The Global Environment Facility Independent Evaluation Office's *Evaluation of GEF Support for Transformational Change* contains (see that publication's page 3) a generalized Theory of Change that has elements relevant to the program level, which should be fleshed out by identifying barriers and enablers in particular program contexts.
- 58 Organisation for Economic Co-operation and Development, *Glossary of Evaluation and Results Based Management (RBM) Terms* (Paris, 2002). See also Global Environment Facility Independent Evaluation Office, *The GEF Monitoring and Evaluation Policy* (Washington, D.C., 2010).
- 59 Global Environment Facility Independent Evaluation Office, *The GEF Monitoring and Evaluation Policy* (Washington, D.C., 2010). The above publication draws on: Organisation for Economic Co-operation and Development, *Glossary of Evaluation and Results Based Management (RBM) Terms* (Paris, 2002).
- 60 National Economic Council and Office of Science and Technology Policy, *A Strategy for American Innovation* (Washington, D.C., White House, 2015).
- 61 Organisation for Economic Co-operation and Development, *The Oslo Manual 2018*, 4th ed. (Paris, 2018).
- 62 Brundtland Commission, *Report of the World Commission on Environment and Development: Our Common Future* (Oxford, Oxford University Press, 1987).
- 63 F. Berkes and C. Folke, eds., *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience* (Cambridge, Cambridge University Press, 1998).
- 64 Achieving transformation through GEF investments. <https://www.stapgef.org/resources/advisory-documents/achieving-transformation-through-gef-investments>





[www.stapgef.org](http://www.stapgef.org)



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET