Concept Note: Mainstreaming of Climate Change Resilience in the GEF

Purpose and objectives

1. This purpose of this study is to assess how increased attention over time to climate change resilience in the GEF Partnership has affected its interventions. The study's main objectives are as follows: 1) to understand the GEF Partnership's approach to climate change adaptation and resilience and how it has evolved over time, 2) to assess how the incorporation of climate change resilience thinking in project design affects project implementation and outcomes.

Background

2. **While the GEF has a history of delivering results in a variety of environmental areas including climate change mitigation, it has become increasingly clear that mainstreaming of climate change resilience into activities is essential for ensuring that global environmental benefits in its diverse focal areas are achieved.** During the GEF 5 period (2010-2014), when climate change resilience began to receive more attention in the GEF partnership, the programming document stipulated that climate change adaptation and resilience work would be funded exclusively through the Least Developed Country Fund (LDCF) and the Special Climate Change Fund (SCCF), while GEF Trust Fund projects would address climate change mitigation.[1] However, as the GEF Scientific and Advisory Panel (STAP) wrote at the start of the GEF 5 period, climate change is a multi-focal threat, "requiring both multi-focal approaches and actions within all focal area projects" (STAP 2010). The report, STAP's first advisory document focused on climate resilience in the GEF, further concluded that to deliver GEBs, GEF investments "are best protected by adopting approaches that simultaneously address climate risks and the objectives of focal areas" (IBID).

3. The STAP advisory document reviewed a sample of GEF-4 projects to gauge compliance with the requirement that climate risks are identified, a requirement in project proposals at the time. STAP found that considerations of climate risks varied, and that even where projects did

[1]The second strategic goal of the GEF 5 Results Architecture was to "Reduce global climate change risks by: 1) stabilizing atmospheric greenhouse gas concentrations through emission reduction actions: and 2) assisting countries to adapt to climate change, including variability" (GEF 2010). However, a footnote to this goal clarified that the GEF Trust Fund would provide resources towards climate change mitigation, while the Least Developed Country Fund (LDCF) and the Special Climate Change Fund (SCCF), would fund adaptation work, essentially removing the mandate to address climate change adaptation from the majority of GEF's work.

identify risks, few supported these risks with analysis and scientific data, while mitigation responses were generic (STAP 2010). That same year, the GEF IEO's Evaluation of the Strategic Priority for Adaptation (SPA), the precursor to the LDCF and SCCF funds, found some evidence of an increase in mainstreaming of adaptation and resilience in GEF focal areas strategies from GEF-3 to GEF-5, but also identified several factors preventing integration or mainstreaming of climate change adaptation (CCA) and resilience into GEF's activities, including the lack of mechanisms for operationalization, gaps in scientific knowledge related to potential climate change impacts, lack of incentives within the GEF system to take climate change impacts into account with already limited resources to deal with demands of focal areas, difficulties in conceptualizing an operational link between adaptation and global environmental benefits, and limited collaboration regarding adaptation between the various GEF-managed funds (GEF IEO 2011).

4. **Integration of climate change resilience into GEF work started slowly in GEF-5 but has since built momentum.** In response to the findings of the IEO study noted above, the GEF Council requested the Secretariat to develop and implement screening tools to "serve as a first step to ensure the mainstreaming and targeting of adaptation and resilience, to reduce the risks from climate change in GEF focal areas and its activities" (GEF 2012). The Council also requested the Secretariat to report on its progress at the November 2012 GEF Council meeting. At the meeting, the GEF Secretariat presented an update on its efforts at enhancing climate change resilience in GEF projects, including a plan to develop a more structured framework for enhancing climate resilience in GEF projects, with more detailed expectations for information to be included at the Project Identification Form (PIF) and CEO Endorsement Stages (GEF 2012). The document also noted that the GEF Sixth Replenishment would provide an opportunity to discuss how GEF focal area strategies could be improved in their contribution to climate change resilience. However, the next steps outlined in this document, which included finalizing a framework document for approval by the GEF CEO as part of the GEF Policies and Procedures on the GEF project cycle, never took place.

5. While this framework was never delivered, the GEF-5 period did see other developments towards integration of climate change resilience, the most notable being the introduction of multi-trust fund projects, combining change adaptation activities funded through LDCF/SCCF with activities funded through the GEF Trust Fund. These projects provided further opportunities for mainstreaming of resilience to climate change into GEF focal areas.

6. While the GEF 5 programming document had limited mentions of climate change resilience and adaptation, the GEF 6 programming direction addressed the issue more directly: "It should also be noted that given the magnitude of the potential adverse impacts of climate change the GEF Council has encouraged the GEF to reflect resilience in its projects." (GEF 2014). The main measure identified to address this call was the introduction of multi-trust fund

projects noted above. Focal areas strategies also made increased mention of climate resilience, particularly in the descriptions of the three Integrated Approach Pilot programs designed during the period.

7. Also during the GEF 6 period, STAP developed the first in a series of guidance documents, the Resilience, Adaptation and Transformation Assessment Framework (O'Connell et al., 2015). The report synthesized scientific understanding of resilience in agroecosystems and proposed indicators of land-based adaption and ecosystem resilience. The guidance included a step by step method for assessment and reporting these indicators. This guidance was followed up the following year with a guidance document outlining the Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) framework, which offered "practical guidance in how to apply the concepts of resilience, adaptation and transformation in planning projects." (O'Connell et al., 2016). The guidance laid out was aligned specifically with the Food Security Integrated Approach Pilot program, but was designed for use in other sectors as well.

8. GEF-7 programming directions included more attention to climate resilience, including the acknowledgment that "climate change affects virtually all natural and economic systems. This interaction between climate change and biodiversity, land degradation, forests, chemicals and waste, and international waters points to the importance of recognizing climate change implications in all GEF-7 focal areas and impact programs by harnessing mitigation options to address them and integrating climate resilience measures to address climate change risks" (GEF 2018). Among approved GEF-7 projects, according to GEF Agency reporting against the Rio Markers[2], 42% of approved GEF Trust Fund projects target CCA as a significant objective, and 3% target CCA as a principal objective (see annex A). Additionally the Environmental and Social Safeguards policy approved by GEF Council in 2018 required that "short-and long-term risks posed by climate change and other natural hazards are considered systematically in the screening, assessment and planning processes…based on established methodologies, and significant risks and potential impacts are addressed throughout the design and implementation of projects and programs." In support of GEF Agencies meeting this requirement, STAP produced a guidance document on climate risk screening (STAP 2019).

Coverage of Climate Change Resilience by GEF IEO

9. Since the GEF began giving more attention to climate change adaptation and resilience in its strategies, the GEF IEO has reviewed projects for inclusion of resilience thinking through two main efforts. As part of the Fifth Overall Performance Study (OPS5) GEF IEO undertook a

[2] All GEF 7 projects are required to indicate whether they target climate change adaptation on a 3-point scale (0=does note target, 1=targets as a significant objective, 2=targets as the principal objective) using the OECD DAC Rio Markers. More information on the Rio Marker methodology is available here (http://www.oecd.org/dac/environment-development/rioconventions.htm)

review of mainstreaming resilience and adaptation to climate change in the GEF Focal Areas. The review covered a sample of GEF-5 projects, assessing integration of adaptation and resilience concepts into design at entry, finding that nearly 40% of projects reviewed took resilience to climate change into account in their design (GEF IEO 2013). More recently and comprehensively, in 2018-2019, GEF IEO conducted a portfolio review of 870 projects from the pilot phase through GEF 6 period, which included screening for considerations of climate change risks in project design as part of the joint portfolio review for the Least Developed Countries (LDC), Small Island Developing States (SIDS), and Africa Biomes Strategic Country Cluster Evaluations (SCCE). The review of projects in LDCs and the African Biomes both found that only 37 percent of non-climate change adaptation projects showed some evidence of climate resilience considerations (GEF IEO 2020). Within the SIDS portfolio, half of the projects reviewed had resilience built into project design (GEF IEO 2018).

10. Despite these reviews of the amount of projects that include resilience thinking in their design, there has not been an effort to understand how increased attention to climate resilience has affected project implementation or outcomes, or how GEF's inclusion of climate change resilience and climate risks in their projects compares with best practices in the environmental development global community. Such efforts would provide GEF with key evidence as to how the consideration of adaptation and resilience has translated into actual improvements in the quality of interventions and how to best integrate these themes into future programming. Along with providing a comprehensive review of the development of GEF's approach to climate change resilience, this study will attempt to understand the pathway through which increased inclusion of resilience and adaptation in design may impact project implementation and outcomes.

Initial evaluation questions

11. This study will seek to provide evidence against the following initial evaluation questions:

1. How has GEF's strategy and approach to incorporating climate change adaptation and resilience evolved over time?
2. What are the different ways in which and to what extent do GEF projects incorporate climate change adaptation and resilience into project design?
3. How has the inclusion of climate change adaptation and resilience thinking in project design affected the implementation and outcomes of projects?
4. What is the GEF's comparative advantage in the topic of climate change resilience and how do its efforts to integrate such resilience into GEF Trust Fund projects compare to best practices?

Approach

12. This study will rely on a desk-based review of GEF documents, case studies, and interviews.

Review of GEF's evolving approach to climate change adaptation and resilience

13. First, this study will review in detail existing GEF guidance on climate change adaptation and resilience, including the following documents:

- **GEF Programming Directions for GEF-5 and GEF-7** for mentions of prioritizing links with climate change adaptation or resilience goals, climate mainstreaming or climate risk screening.
- **STAP guidance** related to climate risk screening, climate mainstreaming and the RATPA guidelines.
- **GEF guidance or strategy documents** related to climate change adaptation or resilience, and related GEF Council decisions.

14. These documents will be reviewed to create a timeline of GEF's strategy and approach to climate change adaptation and resilience to better understand how it has evolved and during which periods the major changes were made.

15. Additionally, documents and reports from the wider climate change resilience and adaptation community will be reviewed to understand best practices for integrating the themes into development projects. This review will be done looking both at mainstreaming resilience into projects that focus on other topics (such as the topics covered by the GEF Trust Fund focal areas) and assessing climate risks to project outcomes and performance. The review will include protocols used by GEF Agencies to better understand how resilience integrated into their programming strategies and may include interviews of key international experts.

Linking resilience thinking with outcomes

16. In order to better understand if increased resilience thinking in project design has affected project implementation and outcomes, the existing review of projects for inclusion of resilience thinking that was conducted for the SCCEs, described above, will be used to identify case study projects (see Annex B for definitions of resilience thinking used in the SCCE portfolio review). In line with the scope of this study, the data gathered for the SCCE portfolio review for projects funded by the GEF Trust Fund (including multi-trust fund projects with GEF funding) approved during the GEF 5 and GEF 6 periods (n = 378) will be used. While the projects are not geographically representative of the GEF portfolio (areas such as Latin America and Eastern Europe are largely unrepresented), they represent a substantial portion of approved GEF Trust Fund projects for the GEF 5 and GEF 6 periods (29% and 15% respectively). Projects within this group that were identified by the SCCE portfolio review as including resilience thinking will be

further reviewed to gather more information on the level of consideration being given to climate resilience.

17. Case studies will then be selected based on the level of attention given to climate change resilience in project design, and the amount of information available on implementation, outcomes, and sustainability of outcomes. The team will prioritize for case study selection projects which have been closed long enough to gather evidence on sustainability of outcomes post completion (ideally 2-3 years), allowing for analysis of how the inclusion or lack of inclusion of resilience thinking impacted not only implementation but also outcomes and sustainability. If a sufficient number of completed projects with terminal evaluations from GEF-5 and GEF-6 are not available, projects that have at least received mid-term evaluations will be prioritized next for case studies.

18. All case study project documents will be reviewed, starting with design documents such as PIFs and CEO Endorsement Request documents to understand the specific resilience thinking (if any) that were included at the design phase. Project implementation reports (PIRs), mid-term reviews and terminal evaluations will be reviewed to understand how considerations of climate resilience informed implementation and impacted results and sustainability of outcomes. If possible, Agencies and government staff involved in the project will be interviewed to determine their views on the effectiveness and usefulness of the resilience thinking and how it impacted project success. If resilience thinking wasn't incorporated, interviews will help determine if such design thinking could have improved project outcomes.

Stakeholder engagement

19. Key stakeholders include the GEF Secretariat, STAP, and GEF Agencies. These stakeholders would be engaged through interviews and consultation. Interviews with project staff and beneficiaries from case studies will also be undertaken if possible. This study will contribute to the ongoing evaluation of GEF Integrated Programs and will benefit from feedback from that evaluation's reference group. Additionally, 1-2 climate change resilience experts will be engaged as key advisors to the study to provide sector-specific guidance throughout the evaluation process.

Evaluation Team

20. The study's task team lead is Gabriel Sidman, Evaluation Officer. Molly Sohn, Evaluation Analyst will lead the development of the project review protocol, to be assisted by a research analyst consultant. Another specialized consultant will perform research into best practices for integrating resilience into environmental projects. Edward Carr, STAP member, will provide strategic guidance. Anna Birgitta Viggh, Senior Evaluation Officer, will serve as internal peer reviewer. Geeta Batra, Deputy Director and Chief Evaluation Officer, will provide oversight.

Timeline

21. This study will be an input into the OPS-7 report to inform the 8th GEF Replenishment process.

Annex A: Climate change adaptation Rio Marker in GEF-7 projects

GEF-7 GEF Trust Fund PIF Approved Projects climate change adaptation (CCA) Rio Marker status (excluding cancelled/dropped projects)

Share of GEF projects targeting CCA at PIF Stage*	**Enabling activities**	**Full size project**	**Medium size project**	**Program framework document**	**Total**
Projects not targeting CCA	35 (63%)	124 (51%)	55 (63%)	7 (64%)	221 (55%)
Projects targeting CCA as a significant objective	20 (36%)	113 (46%)	31 (35%)	4 (36%)	168 (42%)
Projects targeting CCA as a principal objective	1 (2%)	7 (3%)	2 (3%)	-	10 (3%)
Grand Total	**56**	**244**	**88**	**11**	**399**

Annex B: Definitions of resilience thinking used in SCCE Portfolio Review

Levels of climate resilience in the context of GEF (Bierbaum et al., 2014):

Resilience as risk management: A first level of response emerges from pure risk management considerations: sustained delivery of future global environmental benefits is at risk from climate change; therefore, projects ought to be screened for climate risks, and suitable risk management measures should be developed and adopted in project design and implementation. This would increase the resilience of the GEF portfolio to climate change. Such a de-risking approach is now being widely adopted by most multilateral and bilateral funding organizations, starting with the development and adoption of screening tools.

Resilience as a cobenefit: GEF focal area interventions offer the opportunity of enhancing resilience of human socioeconomic systems to climate change; it is therefore worth seeking resilience cobenefits of GEF focal area interventions, or in some cases, use approaches practiced in other focal areas, specifically for enhancing the climate resilience of human systems. This is the underlying logic of ecosystem-based adaptation, where ecosystem restoration serves as a means for reducing the vulnerability of human socioeconomic systems.

Resilience integrated into a multiple benefits framework: It is increasingly important to develop frameworks and approaches that allow multiple objectives and multiple benefits to be achieved simultaneously across social and natural systems. In this framing, resilience is not seen as an add-on (additional risk to be managed) or a cobenefit, but rather as a system property that needs to be considered together with all of the other system properties, and thus linked to the idea of sustainable development.

Types of resilience system thinking (Bene et al., 2012):

Resilience from a systems or engineering perspective (absorptive): This was the original, relatively narrow focus of resilience; the ability of a system to bounce back or return to equilibrium following disturbance, referred to by Holling (1973) as "engineering resilience." This comes down to absorptive (coping) capacity, which Cutter et al. (2008, p.663) defined as "the ability of the community to absorb event impacts using predetermined coping responses." Resilience as incremental change (adaptive): Adaptive resilience refers to the various adjustments (incremental changes) that people undergo in order to continue functioning without major qualitative changes in function or structural identity. These incremental adjustments and changes can take many forms (e.g., adopting new farming techniques, change in farming practices, diversifying livelihood bases, engaging in new social networks,

etc). These adaptations can be individual or collective, and they can take place at multilevel (intrahousehold, groups of individuals/households, community, etc.).

Resilience as transformational change (transformative): Transformational changes often involve shifts in the nature of the system, the introduction of new state variables, and possibly the loss of others, such as when a household adopts a new direction in making a living or when a region moves from an agrarian to a resource extraction economy. It can be a deliberate process, initiated by the people involved, or it can be forced on them by changing environmental or socioeconomic conditions. What the growing body of literature that discusses transformational changes highlights is that the main challenges associated with transformation are not of a technical or technological nature only. Instead, as pointed out by Pelling (2011), these shifts may include a combination of technological innovations, institutional reforms, behavioral shifts, and cultural changes.

References

GEF (Global Environment Facility) 2010. "GEF-5 Programming Document." GEF/R.5/31/CRP.1. GEF, Washington, DC.

_____. 2012. "Enhancing Climate Change Resilience in GEF Projects: Update on GEF Secretariat Efforts." GEF/C.43/Inf.06. GEF, Washington, DC.

_____. 2014. "GEF-6 Programming Directions." GEF/A.5/07/Rev.01. GEF, Washington, DC.

_____. 2018. "GEF-7 Programming Directions." GEF/R.7/19. GEF, Washington, DC.

Global Environment Facility Independent Evaluation Office (GEF IEO). 2010. *Evaluation of the GEF Strategic Priority for Adaptation*. Evaluation Report No. 61. GEF IEO, Washington, DC.

_____. 2013. *Adaptation to Climate Change*. OPS5 Technical Document #19. GEF IEO, Washington, DC.

_____.GEF IEO. 2018. Strategic Country Cluster Evaluation (SCCE): Small Island Developing States. GEF IEO, Washington, DC.

_____. 2020. Strategic Country Cluster Evaluation (SCCE): Least Developed Countries (LDC). GEF IEO, Washington, DC.

_____. 2020. Strategic Country Cluster Evaluation (SCCE): Africa Biomes. GEF IEO, Washington, DC.

Béné, C., Godfrey-Wood, R., Newsham, A., and Davies, M. (2012). "Resilience: New utopia or new tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes." IDS working Paper 405. Brighton: Institute of Development Studies (IDS). ISBN 978 1 78118 091 4.

Bierbaum, R., Stocking, M., Bouwman, H., Cowie, A., Diaz, S., Granit, J., Patwardhan, A., Sims, R., Duron, G., Gorsevski, V., Hammond, T., Neretin, L., Wellington-Moore, C. (2014). "Delivering global environmental benefits for sustainable development." Report of the Scientific and Technical Advisory Panel to the 5th GEF Assembly, Mexico 2014. Global Environment Facility, Washington, D.C.

O'Connell, D., Walker, B., Abel, N., Grigg, N. (2015) The Resilience, Adaptation and Transformation Assessment Framework: from theory to application. CSIRO, Australia.

O'Connell, D., Abel, N.,Grigg, N., Maru, Y., Butler, J., Cowie, A., Stone-Jovicich, S., Walker, B., Wise, R., Ruhweza, A., Pearson, L., Ryan, P., Stafford Smith, M. (2016). "Designing projects in a rapidly changing world: Guidelines for embedding resilience, adaptation and transformation

into sustainable development projects. (Version 1.0)". Global Environment Facility, Washington, D.C.

Scientific and Technical Advisory Panel (STAP). 2010. "Enhancing Resilience to Reduce Climate Risks: Scientific Rationale for the Sustained Delivery of Global Environmental Benefits in GEF Focal Areas." GEC/C.39/Inf.18.

_____.2019. "STAP guidance on climate risk screening". GEF, Washington, DC.