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Agenda Item 09

EVALUATION OF THE EFFECTS OF THE COVID-19 PANDEMIC ON GEF ACTIVITIES

(Prepared by the Independent Evaluation Office of the GEF)

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2. Almost three years have elapsed since the onset of the pandemic, so it is now feasible to assess its effects on the preparation, design, implementation, results, and impacts of GEF activities, to analyze the response of the GEF Partnership, and to document lessons that may be drawn from the experience. In this evaluation, we assess the effects of the pandemic on GEF activities through (a) an analysis of the GEF portfolio and monitoring and evaluation (M&E) reports, (b) an analysis of the impacts on GEF-supported Protected Areas, and (c) an analysis of the effects of COVID-19 within GEF intervention areas and in neighboring areas on (1) vegetation productivity, and (2) nighttime lights.

1. Main Findings

3. PIF approval times were reduced; CEO endorsement times took a little longer to allow for difficulties faced in project preparation. The GEF Secretariat took less time in responding to PIF submissions at the GEF Portal. Acknowledging the constraints in gathering information from the field and conducting stakeholder consultations up front, the GEF Secretariat allowed the Agencies to shift some of these activities to later stages of project preparation. Because of the travel restrictions during the pandemic, it was often difficult to conduct stakeholder consultations and gather information from the project sites. In some instances, GEF Agencies had to identify new sources of co-financing because the original partners did not confirm their commitment. Considering the difficulties faced by the GEF Agencies in project preparation, the GEF CEO provided extensions for project preparation. This helped the Agencies in meeting the CEO Endorsement related deadlines and in avoiding cancellations.

4. Projects that were CEO endorsed after the onset of the pandemic are more likely to incorporate features that are associated with risk mitigation, adaptive management and use scenario-based planning. Majority of these projects discuss the potential effects of the pandemic on project implementation and results, the factors influencing the results, and the potential contributions of the project to a post-pandemic green recovery.

5. COVID-19 presented challenges in the implementation of some project activities, leading to delayed implementation of activities or, in some cases, the activity being dropped. Lockdowns, social distancing, and travel restrictions took a toll on activities requiring in-person interaction. These affected activities included site-based training, technical assistance, and capacity building activities; meetings, workshops, and collective activities; and field visits for primary data collection and/or interaction with local-level stakeholders for consultation. In addition, in many instances

procurement and delivery of goods and equipment were delayed or stalled due to disruption of international and national supply chains. Challenges were encountered in mobilizing cofinancing. Several aspects of project M&E were affected by COVID-19. Project teams adapted to the challenges related to travel restrictions, social distancing, and restrictions on onsite working, by shifting (at least partially) to virtual platforms and adjusted their work plans.

6. COVID-19 adversely affected the achievement of results in at least 28 percent of the projects, with projects in the biodiversity focal area more likely to be affected. Pandemic-related delays in procuring materials, constructing, and operationalizing infrastructure led in part to environmental targets not being met by project end in some projects. Approvals for reforms in the legal and policy framework and for management plans were put on hold in some cases because government officials faced the urgent need to address the health crisis. Outcomes of several projects faced increased risks to sustainability as governments, private sector organizations, and local communities prioritized health and economic concerns. Pandemic-related challenges were more likely to reduce outcomes when the project was already struggling with internal challenges prior to the global lockdowns. Delays due to bureaucratic barriers at startup or poor project management, high turnover of project managers, lack of full-time technical staff, frequently changing government counterparts, overly ambitious designs or inappropriate interventions were other internal project-related factors identified as affecting outcomes.

7. Most GEF projects that supported protected areas reported issues with the disbursement or lack of funds to support current arrangements because of changes in government priorities; the most common challenge in these projects was the pandemic's adverse effects on livelihoods in about a third of the cases. Despite these challenges, and even though some GEF-supported protected areas experienced higher than expected deforestation, some cases were observed where they performed better compared to neighboring areas which did not receive GEF support. Satellite-based evidence across 595 locations in 10 countries shows that during COVID-19 GEF intervention areas tended to improve local conditions of vegetation in 9 of the 10 study countries. Evidence also suggests that COVID-19 showed a decline in nighttime lights, a proxy for economic activity, within GEF areas in a few countries.

8. With the use of new technologies necessitated by the pandemic, outcomes in some projects were better than those planned. Some projects turned to remote sensing to collect better-quality forestry data than they previously had, and in the process strengthened national capacity in this area. Many regional projects found that shifting to online platforms could be a regular form of meeting, which allowed them to reduce participation costs for countries, include more participants, conserve scarce funding for operations, and in some cases divert it towards strengthening human resources or implementing additional on-the-ground interventions.

9. In a fifth of the projects, activities became opportunities to respond to COVID-19–related concerns such as food security, safety, and sanitation, while promoting environmental interventions. In many cases, projects that supported community-based livelihood activities helped to bridge the loss of income during the lockdowns through grants (supplemented by government funds), or through sustainable farming activities that produced fresh and nutrient-rich organic produce for households at a time when markets were closed. Projects that supported community groups for knowledge exchange and early warning systems to build climate resilience used these established interventions to deliver important COVID-19 updates to communities.

10. Despite severe disruptions to implementation, in general projects successfully mitigated negative COVID-19 effects—and in some cases exceeded their outcomes—when they had a highly adaptive project management team and strongly collaborative partners. Project management teams that quickly adapted to the challenging circumstances were able to mitigate the negative effects on projects. These timely shifts included 1) moving meetings and trainings online more quickly than other projects, 2) increasing the frequency of communication with partners and field-based staff in lieu of supervision missions, and 3) relying more on—and in some cases, building the capacity of—local staff and partners to implement the project. Continued collaboration, albeit virtually, and often developed prior to the pandemic, was key to activities continuing on the ground despite the many restrictions.

11. The GEF Partnership undertook several measures to address the challenges posed by the pandemic which have prevented cancellations and have contributed to improved project design. A task force established by the Secretariat prepared a White Paper on a GEF COVID-19 Response Strategy to explore ways to address the COVID-19 crisis and prevent future outbreaks, and to identify new avenues for GEF support. The GEF-8 Programming Directions discusses the implications of the pandemic for the GEF's work and identifies ways through which the Integrated Programs and other activities would contribute to the recovery from COVID-19, resilience of targeted communities, and mitigating future pandemics. On March 21, 2020, the GEF CEO extended by three months the deadline for CEO Endorsements and Approvals for projects approved after the new GEF Policy (2019) became effective. The GEF Secretariat issued "Project Design and Review Considerations in Response to the COVID-19 Crisis and the Mitigation of Future Pandemics" (2020) to provide guidance to Agencies on addressing COVID-19 issues in project designs. The Secretariat also made changes to the PIF template to facilitate discussion on the topic in the proposals. This guidance led to an improved discussion in project proposals on themes related to COVID-19, such as increased attention to risks from future pandemics, greater attention to factors that may affect results, and scenario-based planning. GEF Agencies also took several measures to address the impacts of COVID-19 pandemic on the recipient countries and their activities.

2. Conclusions

12. **COVID-19 primarily presented challenges in the implementation of some project activities, leading to delayed implementation or, in some cases, cancellation. Project monitoring was adversely affected.** Flexibility in the Project Cancellation Policy (2018), and subsequent decisions by the GEF Council to increase the duration of permissible extensions, allowed the GEF Secretariat and GEF Agencies to effectively address the challenges related to project preparation.

13. **Design features in projects have improved and demonstrated a shift to addressing resilience; addressing gaps in climate risk screening and scenario-based planning would be useful.** GEF projects are including several design features that are associated with systems thinking, resilience, and adaptive management. However, a substantial number of project proposals do not discuss the use of scenario-based planning, assumptions related to theory of change, and use of climate risk screening. Addressing these gaps is important for GEF activities to be more resilient and promote adaptive management.

14. Despite the challenges encountered in most GEF projects, outcomes were affected in less than a third of the projects; projects in the biodiversity focal area were more likely to be affected. Most GEF-supported protected areas experienced fire frequency and deforestation rates

within the predicted range with some exceptions; GEF intervention areas had improved local conditions of vegetation in 9 of the 10 study countries, suggesting greater resilience. The impact of COVID-19 on nighttime lights, a proxy for economic activity within and around GEF intervention areas, varied but a decline could be observed in most countries. On the other hand, some projects reported unexpected, enhanced outcomes from using digital tools as a direct effect of the COVID-19 pandemic. In several cases, project activities became an opportunity to respond to COVID-19 needs for food security, safety, and sanitation while also meeting environmental targets.

15. **The evidence on the effects of the pandemic in protected areas highlights the risks associated with excessive reliance on livelihoods based on ecotourism, highlighting the need for greater diversification in income-generating activities.** GEF activities focused on biodiversity conservation, especially protected area management, were more affected by the pandemic. The pandemic showed that ecotourism-focused rural livelihoods are vulnerable to reduced tourist influx and increase risks to sustainability. However, livelihood activities in agriculture, forestry and fisheries were able to continue and provide food security at the household level during the lockdowns. Therefore, in GEF projects attention to a wider and diverse suite of livelihood activities may be important to reduce risks and increase resilience to shocks.

16. **GEF projects and Agencies adapted to minimize the effects of the shutdowns through the application of technology and a shift to virtual platforms, but the shift had implications for the breadth and depth of stakeholder engagement.** A few projects turned to remote sensing to collect better-quality forestry data than they previously had, and in the process strengthened national capacity in this aspect. Many regional projects found that shifting to online platforms included more participants, conserved scarce funding for operations, and in some cases diverted resources towards strengthening human resources or implementing additional on-the-ground interventions. However, communications with the operational focal points and stakeholders in remote rural areas faced difficulties, especially those that involved crucial follow-up to ensure sustained outcomes. The shift to virtual platforms in some cases reduced the effectiveness of meetings that required stakeholders to reach agreement, and of some of the trainings. Given that dependence on the virtual platforms will continue, a judicious balance between virtual and in-person interactions will be necessary.

17. Responsive and adaptive project management is crucial for mitigating the effects of COVID-19. Project teams that quickly adapted their mode and frequency of communication and field implementation successfully mitigated and overcame the negative effects of COVID-19 and other contextual challenges. They were particularly effective when they developed and collaborated with partners who had strong ownership of the project's objectives, especially at the local level.

3. Recommendations

18. The GEF Secretariat should provide guidance and assist GEF Agencies in incorporating important features associated with systems thinking, resilience, and adaptive management in all project proposals.

19. The GEF Agencies should ensure that GEF projects include a broad suite of livelihood options and support diverse income-generating activities. GEF projects should diversify strategies and actions for risk mitigation and build the resilience of local communities to various shocks.

20. The GEF Agencies should strengthen remote supervision by using a variety of appropriate tools and methods such as rapid surveys, satellite data, and GIS-based technology for timely response and adaptive management. M&E in a pandemic or similar difficult situation is challenging, and these tools and methods can help identify areas which require priority attention, as well as being useful in planning and monitoring activities over time.

I. BACKGROUND

1. The SARS-CoV-2 virus (COVID-19) has adversely affected our economies, led to loss of lives, and has affected how we work. Through September 2022, the pandemic caused over 6.5 million deaths globally.[1] Since 2020, many groups have explored the impact of COVID-19 lockdowns on environmental outcomes, including greenhouse gas emissions, biodiversity, and land cover. The emerging literature has painted a complex picture of cause and effect, identifying both positive (e.g., a reduction in greenhouse gas emissions) and negative (e.g., increases in illegal lumbering practices) impacts.

2. Though the effects of the COVID-19 pandemic and associated lockdowns on conservation efforts including Protected Areas are yet to be fully seen and understood, they are already being described in the literature as huge, dramatic, and of unprecedented dimensions (Waithaka et al., 2021; Hockings et al., 2020). Lockdown measures to control the spread of the virus have affected most protected areas, causing serious disruptions to vital conservation activities and often resulting in the suspension of critical and time-sensitive management activities such as fire management, invasive species control, habitat restoration, and patrolling to prevent illegal activities. In addition, tourist volume was severely reduced, resulting in significant losses in revenue for protected areas and for communities dependent on tourism.

3. Given the scope and intensity of the pandemic, projects and activities supported by the Global Environment Facility (GEF) have also been affected in various ways. The pandemic affected the normal functioning of executing entities through restrictions on mobility and procurement activities were also adversely affected due to delays in conducting site visits by firms interested in bidding for contracts. A variety of measures were taken across the Partnership, and the Secretariat, and countries, Agencies and entities were creative and resourceful in addressing the challenges imposed by the pandemic through policy changes, use of virtual platforms and other technologies. More than two and a half years have elapsed since the onset of the pandemic, so it is now feasible to assess its effects on the preparation, design, implementation, results,[2] and impacts on GEF activities, to analyze the response of the GEF Partnership, and to document lessons that may be drawn from the experience.

4. In this evaluation, we assess the effects of the pandemic on GEF activities through (a) an analysis of the GEF portfolio and monitoring and evaluation (M&E) reports, (b) an analysis of the impacts on GEF-supported Protected Areas, and (c) an analysis of the effects of COVID-19 within GEF intervention areas and in neighboring areas on (1) vegetation productivity, and (2) nighttime lights.

[1] https://covid19.who.int/

[2] The following definition of results, provided in the GEF Evaluation Policy 2019, is used: results "Include intervention outputs, outcomes, progress toward longer-term impact including global environmental benefits, and should be discernible/ measurable."

II. EVALUATION QUESTIONS AND METHODOLOGICAL APPROACH

1. Key evaluation questions

5. The key evaluation questions are:

(1) How has the COVID-19 pandemic affected GEF activities including preparation, design, implementation, and results of GEF projects?

The evaluation assesses the effect of the pandemic on the preparation, design, implementation, and results of GEF projects. It assesses the types of activities affected and how these were affected.

(2) How did the GEF Secretariat and Agencies respond to the pandemic?

The evaluation assesses the response of GEF Secretariat and Agencies to the challenges from COVID-19. It covers measures addressing different time frames, programming priorities and strategies, and actions taken to mitigate the effect on project preparation, implementation, and results.

(3) To what extent do GEF projects incorporate resilience and adaptive management elements into their design?

The evaluation examines the extent to which projects endorsed by the GEF CEO after the onset of the pandemic incorporate design elements that are linked to resilience and adaptive management. This includes an assessment of the extent to which projects apply elements related to systems thinking, stakeholder involvement, scenario-based planning, and risk mitigation in their design.

2. Methodological approach

6. The answers to the evaluation questions have drawn on several sources of information, including analysis of the GEF Portal data related to activity cycle and co-financing, review of publications by the GEF Secretariat and GEF Agencies, review of project proposals, review of project self-evaluations prepared by Agencies, and interviews with key informants (table 1).

Table 1: Key questions and sources of information

Key question	Source	Coverage
Question 1. How has the COVID-19 pandemic affected the preparation, implementation, and results of GEF projects?	GEF Portal data	GEF Portal dataset on dates of PIF submission and approval, CEO Endorsement, expected and actual project completion; promised co-financing at PIF approval and CEO endorsement.
	Review of self-evaluations	• Terminal evaluations of 117 completed projects that were completed from May 2020 onwards. • MTRs and PIRs of 63 projects for which MTRs were completed between January 2021 to July 2022. • Analysis of 44 GEF supported protected areas

		• Analysis of 102 projects across 595locations in 10 countries based on satellite data
	KIs from GEF Secretariat and Agencies	Interviews with KIs identified by the GEF Secretariat and GEF Agencies
Question 2. How did the GEF Secretariat and Agencies respond to the pandemic?	Review of self-evaluations	As described earlier for question 1.
	Publications by the GEF Secretariat and Agencies	Documents published by the GEF Secretariat and GEF Agencies that address COVID-19.
	KIs from GEF Secretariat and Agencies	As described earlier for question 1.
Question 3. To what extent do GEF projects incorporate resilience and adaptive management elements into their design?	Review of project documents	FSPs that were CEO endorsed in FY2022 with endorsements in FY2019 as baseline.
	KIs from GEF Secretariat and Agencies	As described earlier for question 1.

Note: FSP = full-size project; KI = key informant; PIF = Project Information Form.

3. Analysis of the GEF Portal data set

7. The GEF Portal data set was analyzed to assess the effect of COVID-19 on the efficiency of the GEF activity cycle, and for related changes in co-financing commitments. The Portal provides data on the dates on which a project achieved milestones such as the Project Information Form (PIF) submission and approval; submission for CEO endorsement submission and its endorsement; expected and actual project completion, and co-financing commitments at PIF Approval and CEO Endorsement. The review of the activity cycle–related data explores the hypothesis that the disruptions experienced during the COVID-19 pandemic have affected efficiency at different stages of the activity cycle, and that it has also led to a change in co-financing commitments from PIF approval to CEO Endorsement.

8. Data on the activity cycle was accessed from the GEF Portal on September 15, 2022. The analysis of time taken from PIF submission to PIF Approval tracks progress of the submission of full-size stand-alone GEF-7 project proposals up to 12 months. The submissions before the onset of COVID-19 constitute the baseline, and those after the onset are tracked to measure effects. The proposals submitted before the onset of COVID-19 were further divided based on whether these were submitted during the first fiscal year (FY2019) of GEF-6 or the second year (July 2019 to February 2020). The GEF-7 proposals that were submitted after the onset of the pandemic in March 2020 were further divided based on whether these were submitted from March to June 2020—immediately after the onset—or whether these were submitted from July 2020 to September 2021. This approach allowed for comparison of the effects in the immediate transition period after the onset, and for checking whether there is difference in efficiency within the period considered for baseline and for assessing the effects of COVID-19. The analysis of the PIF Approval to CEO Endorsement stage covers approvals during GEF-6 and GEF-7, and tracks progress up to 25 months after Approval, using the former as baseline.

9. The analysis of changes in co-financing commitments is restricted to PIF approvals during GEF-6 and GEF-7 through March 2020. Of the PIF approvals through March 2020, those that were

CEO Endorsed through March 2020 were used as a baseline, and those that were CEO Endorsed from April 2020 onward were regarded as having some exposure to COVID-19. The change in co-financing commitments between PIF approval and CEO Endorsement was compared for these two groups of projects.

4. Review of project design

10. This review explored the hypothesis that projects that were designed after the onset of COVID-19 are more likely to address issues related to systems thinking, resilience, risk analysis, disaster preparedness, emergency response, and adaptive management, which may be relevant to addressing future pandemics.

11. The literature on resilience suggests that inclusion of measures that support mitigation and preparedness may enhance resilience, and inclusion of emergency management plans may be useful for robust responses when a disaster occurs (Maguire and Hagan, 2007). Generally, features that support the ability to undertake an alternative course of action, provide access to additional resources when needed, and contain the effects of risks (modularity), may enhance resilience (Walker and Salt 2012).

12. The importance of a good theory of change, risk analysis, resilience to exogenous shocks including emergency response, adaptive management, and flexibility in project implementation, is well recognized within the GEF Partnership. Several publications from the GEF Scientific and Technical Advisory Panel (STAP) that were prepared before the onset of the COVID-19 pandemic have provided guidance on addressing these issues: for example, the Resilience, Adaptation Pathways and Transformation Approach (RAPTA) Guidelines (2016) to incorporate lessons related to resilience, adaptation, and transformation in project design; STAP "Guidance on Climate Risk Screening" (2019); and the "Theory of Change Primer" (2019). After the onset of the pandemic, STAP published "Making GEF Investments Resilient" (2021) to provide guidance on how resilience thinking, and a simple scenario-based approach may be applied for resilient outcomes.

13. In September 2020, the GEF Secretariat shared guidance with the GEF Agencies on "Project Design and Review Considerations in Response to the COVID-19 Crisis and the Mitigation of Future Pandemics." The guidance emphasized the need to highlight elements related to *green recovery* and resilience in project proposals. It also called for a robust analysis of risks, with a focus on COVID-19–related risks, in the proposals.

14. This review assessed the extent to which GEF Agencies are incorporating elements related to resilience, adaptive management, modularity, flexibility, and systems thinking in project design. The review compares the designs of full-size projects endorsed by the GEF CEO during FY2022 (after) with those endorsed during FY2019 (before). A list of projects that were endorsed by the CEO during FY2019 (59 projects) or during FY2022 (186 projects) was generated from the GEF Portal. All 59 projects that were endorsed by the CEO in FY2019, and 84 randomly selected projects that were endorsed in FY2022, were sampled for screening. The projects for which the complete set of documents submitted at CEO endorsement were not available due to missing annexes or broken links, and not available at the old Project Management Information System archive, along with projects that were supplements to other projects already under implementation, were dropped from the sample. Documents for 52 projects that were endorsed by the CEO in FY2019 and for 75 projects endorsed in FY2022 were reviewed using an instrument (Annex C).

5. Review of project self-evaluations

15. The GEF Agencies prepare self-evaluations such as project implementation reports (PIRs) and a mid-term review during implementation and a terminal evaluation at project completion. These documents provide an account of the project implementation experience and progress in achieving results. The reports prepared after the onset of the COVID-19 pandemic are likely to include an account of how project implementation and results were affected by the pandemic, along with some explanation of the causal mechanisms. The evaluation included a qualitative analysis of the information provided by these self-evaluations. The analysis used the coding scheme applied in the Annual Performance Report 2021 (GEF IEO 2021) to assess the effects of COVID-19 (see Annex B). Where necessary, new codes were added to ensure that the relevant information is fully captured.

16. The review of midterm reviews and PIRs covered 63 GEF projects for which mid-term reviews were submitted between January 2021 and July 2022. A desk review and content analysis of the midterm reviews and PIRs (for FY2020 and FY2021) was carried out to assess the effects of the pandemic. For each project the information from its midterm review and PIRs was assessed together. The projects covered in the review of midterm review were in the first half of implementation at the onset of the pandemic. Therefore, this review shed light on the challenges faced by the projects that were in the earlier stages of their implementation. The relevant documents were downloaded as PDF documents, organized, and coded using NVivo software. Keywords such as “Covid” AND/OR “Covid-19” AND/OR “pandemic” AND/OR “corona” AND/OR “coronavirus” AND/OR “covid19” were searched. Text adjacent to location was read and the relevant data coded. The 63 projects covered in the review include projects implemented by the Food and Agriculture Organization of the United Nations (FAO) (21 projects), the United Nations Development Programme (UNDP) (11 projects), the United Nations Environmental Programme (UNEP) (10 projects), the United Nations Industrial Development Organization (UNIDO) (9 projects) Conservation International (4 projects), the Inter-American Development Bank (IDB) (4 projects), the International Fund for Agricultural Development (IFAD) (3 projects), and the World Wildlife Fund (1 project). Of the projects covered, 27 percent were implemented in Least Developed Countries and 21 percent in Small Island Developing States.

17. The review of terminal evaluations covered completed projects that had at least some exposure to COVID-19 during implementation. A total of 136 terminal evaluations submitted between October 2020 and June 2022 were screened to identify projects that had some exposure. Of these, 117 projects that were found to have been completed in May 2020 or later were reviewed.[3] Initial screening was conducted with NVivo using text search with COVID-19–related terms. The reports were then manually reviewed and coded. Almost all projects covered in this review were close to completion at the onset of the pandemic; the median project had already been implemented for 82 percent of its expected duration and had 12 months of implementation left. The review assessed the effects of the pandemic on implementation and results of the completed projects, and the response measures adopted by the GEF Agencies. The 117 projects for which terminal evaluations were reviewed were implemented by UNDP (79 projects), FAO (17

[3] These represent 120 projects, as 2 of the 117 projects had additional financing that was CEO-endorsed as separate projects. This portfolio excludes SGP grants and enabling activities.

projects), the World Bank (12 projects), IDB (5 projects) and UNIDO (4 projects). Most of the projects were full-size (75 percent) and national in scope (87 percent).

6. Review of GEF Secretariat and Agency publications

18. The publications of the GEF Secretariat and Agencies were examined to document the measures undertaken by the GEF Partnership to address the challenges from the pandemic. This includes changes made in strategies, orientation of programming, policies, and business procedures, along with measures related to management of the activity cycle: preparation, implementation, restructuring and/or reorientation, of the project. These documents were identified through web searches and through asking the GEF Secretariat and GEF Agencies to identify and provide other documents that might be relevant for the assessment. The evaluation team was not able to find any publication for the Foreign Economic Cooperation Office in the Ministry of Environmental Protection of China; therefore, it was excluded from the review. A list of these documents is provided in Annex A.

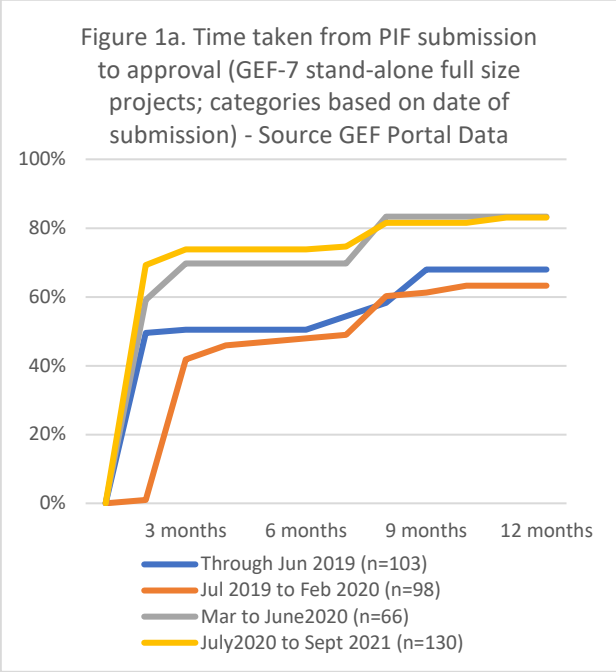
7. Key informant interviews

19. Key informant interviews were conducted with staff from the GEF Secretariat and GEF Agencies to gather information on the effects of the pandemic and on the GEF response. The GEF Secretariat and GEF Agencies were invited to nominate key informants, who were interviewed in a one-to-one setting or in a focus group setting and were provided interview questions beforehand (Annex B).

III. FINDINGS

1. Effects on project preparation

20. **PIF submissions after the onset of COVID-19 took less time to achieve PIF Approval than those submitted earlier.** Of the GEF-7 PIF submissions, those that were done after COVID-19 was declared a pandemic generally took less time to achieve PIF Approval than those that were submitted before (figure 1a). The speed at which approvals were made during the initial stages of the pandemic appears to have been maintained for submissions made later. Key informant interviews provide some plausible explanations. First, after the onset of pandemic, travel by the GEF Secretariat and GEF Agency staff was reduced, which reduced in-person interaction but increased virtual connectivity. The GEF Secretariat took less time in responding to PIF submissions at the GEF Portal; likewise, it was also easier for the Agencies to follow up on the feedback provided by the Secretariat. Second, acknowledging the constraints in gathering information from the field and conducting stakeholder consultations up front, the GEF Secretariat allowed the Agencies to shift some of these activities to later stages of project preparation, e.g., at the project preparation grant stage instead of the PIF submission stage.



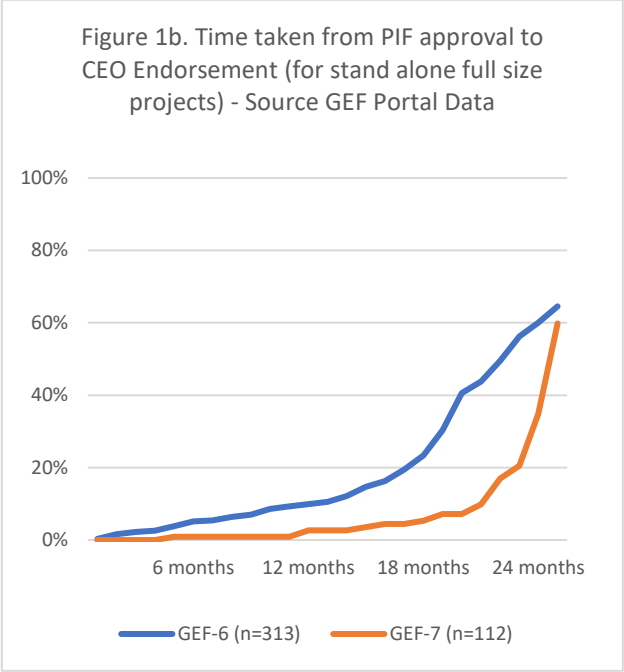


*Figure 1a: Time taken from PIF submission to approval (GEF-7 stand-alone full-size projects; categories based on date of submission) - Source GEF Portal Data ****Figure 1b: Time taken from PIF approval to CEO Endorsement (for stand-alone full-size projects) - Source GEF Portal Data*

21. **PIF approvals that had some overlap with COVID-19 during preparation took more time to achieve CEO Endorsement than baseline projects.** Compared to the PIFs of full-size projects approved in GEF-6, PIFs approved in GEF-7 took longer to achieve CEO Endorsement (figure 1b). At 18 months after approval, 23 percent of GEF-6 PIFs had achieved CEO's endorsement compared to 5 percent of GEF-7 PIFs. The difference increases at the 24 months threshold: 60 percent of GEF-6 achieved CEO endorsement compared to 35 percent for GEF-7. However, there was a rapid catch-up at 25 months; 60 percent of the GEF-7 PIFs achieved CEO endorsement compared to 65 percent for GEF-6. Several factors may explain this pattern. GEF Agencies reported that because of the travel restrictions during the pandemic it was often difficult to conduct stakeholder consultations and gather information from the project sites. In some instances, GEF Agencies had to identify new sources of co-financing because the original partners did not confirm their commitment. Considering the difficulties faced by the GEF Agencies in project preparation, the GEF CEO provided extensions for project preparation. This helped the Agencies in meeting the CEO Endorsement related deadlines and in avoiding cancellations. At the same time, it is likely to have also contributed to slower preparation, as is evident from the rapid catch-up around the 23-month to 25-month period.

22. **A fourth of GEF projects (39) experienced at least a 10 percent drop in co-financing commitments from PIF Approval to CEO Endorsement.** Between PIF Approval to CEO Endorsement 26.5 percent of the proposals for stand-alone full-size projects that were approved before March 2020 but endorsed after March 2020 (exposed to COVID-19) experienced a drop of at least 10 percent in co-financing, compared to a baseline of 14.9 percent for projects that were not exposed to COVID-19 (table 2). At the 10 percent drop threshold, the difference between exposed and not exposed projects was significant for Agencies that are not development banks.

Although a nominally higher percentage of projects by the development banks also experienced a drop, the difference compared to the baseline was not statistically significant.

23. Information gathered from the interviews suggests that during preparation for some projects, some partners and recipient countries that had earlier indicated their commitment to providing co-financing did not confirm their commitment during the project preparation for CEO Endorsement. Although such instances do occur during the normal course of project preparation, because of COVID-19 they occurred more frequently for proposals by the non-bank Agencies. In many cases the respective GEF Agency was able to find other sources of co-financing, but in some cases either new sources were not found or were not able to fully mitigate the shortfall in co-financing commitment. The search for new partners for co-financing added time to the preparation of some projects. For development banks, the bulk of co-financing was generally provided through internal resources; therefore, availability of co-financing was more stable. In some instances, substantial drops in co-financing contributions were also observed for proposals by development banks. In these cases, it was generally because the GEF Secretariat reclassified contributions marked as co-financing in PIFs to baseline investment in the request for CEO Endorsement.

Table 2 Change in co-financing commitments from PIF Approval to CEO Endorsement for standalone full-size projects – based on whether project preparation stage was exposed to COVID

	Not exposed to COVID-19		Exposed to COVID-19	
	Obs.	Percentage with change	Obs.	Percentage with change
Development Banks				
At least 10 percent decrease	59	20.3	15	26.7
At least 10 percent increase	59	23.7	15	20.0
Non-Development Bank				
At least 10 percent decrease	190	13.7	132	26.5**
At least 10 percent increase	190	45.8	132	39.4
All Agencies				
At least 10 percent decrease	249	14.9	147	26.5**
At least 10 percent increase	249	39.8	147	37.4

2. Effects on project design

24. COVID-19 had an influence on some aspects of the design of the GEF projects that were CEO endorsed after the onset of the pandemic. Overall, the projects that were CEO Endorsed in FY2022 are more likely to incorporate features that are associated with risk mitigation and adaptive management.

Given that COVID-19 was a recent and live experience for project proponents, compared to the baseline, a substantially higher percentage of projects prepared after the onset of COVID-19 mentioned a pandemic and discussed its potential effects on project implementation, results, and on the targeted system (figure 2).

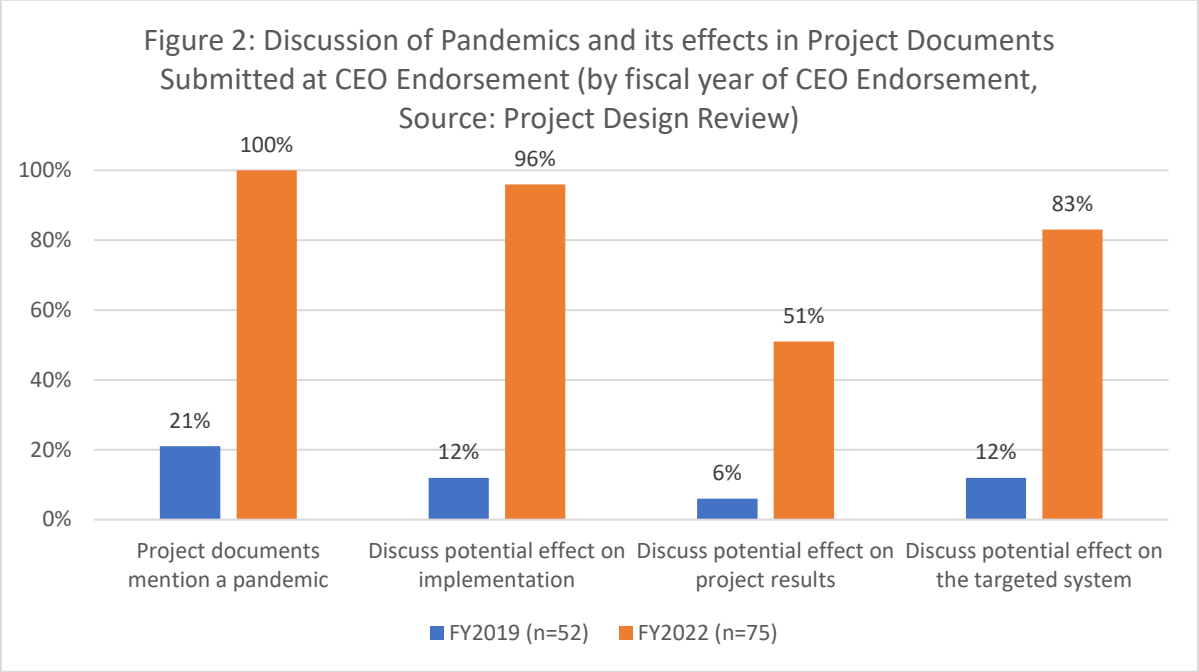


Figure 2: Discussion of Pandemics and its effects in Project Documents Submitted at CEO Endorsement (by fiscal year of CEO Endorsement, Source: Project Design Review)

25. Of the project proposals prepared after the onset of COVID-19, 65 percent discuss how the project would contribute to a post-pandemic green recovery, and 80 percent discuss how COVID-19 has influenced the design of the project (figure 3). For example, the proposal for the Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (GEF ID 10076, UNDP) noted that the project would undertake diagnostic analyses to assess impacts of the COVID-19 pandemic on coastal populations and key blue economic sectors and on billfish recreational fishing and the related tourism value chain. The proposal noted that to facilitate recovery from COVID-19, the project would prepare a regional plan for conservation of sailfish and marlin recreational fisheries. The guidance issued by the GEF Secretariat in September 2020 specifically requested the Agencies to demonstrate contributions to a green recovery and include a discussion of how the project would address challenges from future pandemics. The findings indicate that the Agencies have applied the guidance in most instances. Project proposals prepared by UNEP showed an atypical pattern—the proposals were more likely to discuss the influence of COVID-19 on project design (80 percent) and less likely to discuss their contribution to green recovery (30 percent) From the interviews, we noted that it was not always possible to demonstrate how a project will contribute to green recovery, because such links were sometime tenuous.

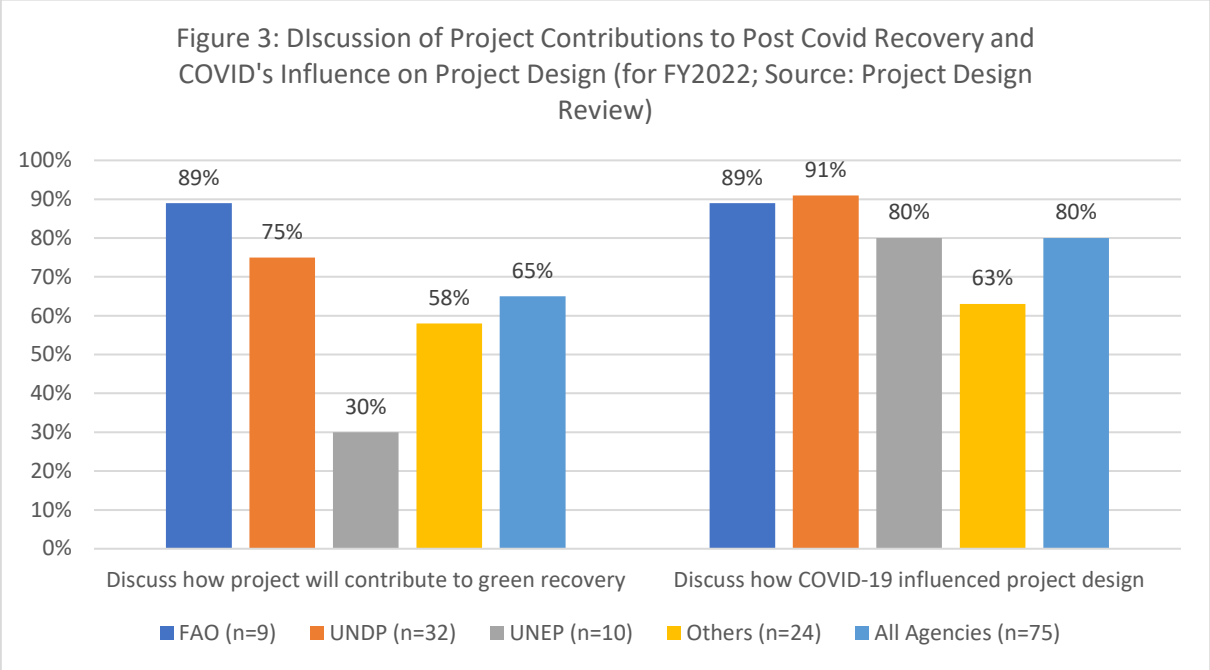


Figure 3: Discussion of Project Contributions to Post Covid Recovery and COVID's Influence on Project Design (for FY2022; Source: Project Design Review)

26. All or almost all projects, regardless of whether they were prepared before or after the onset of the pandemic, described the targeted system (100 percent), its components and subsystems (99 percent), targeted system components (98 percent), and system boundaries (90 percent). All or almost project proposals describe causal links and inputs required as per the project's theory of change (figure 4). Nearly 60 percent of the project proposals discuss key assumptions of the theory of change; however, relatively few describe how the project will assess whether the key assumptions of the theory hold during implementation. Project proposals prepared after the onset of COVID-19 were more likely to discuss the factors that might affect the achievement of project results than those prepared before the onset of pandemic. Compared to the baseline, proposals prepared by UNEP were more likely to discuss how a project will assess whether the key assumptions will hold during implementation (60 percent versus 20 percent). For other Agencies the difference was nominal (22 percent versus 19 percent).

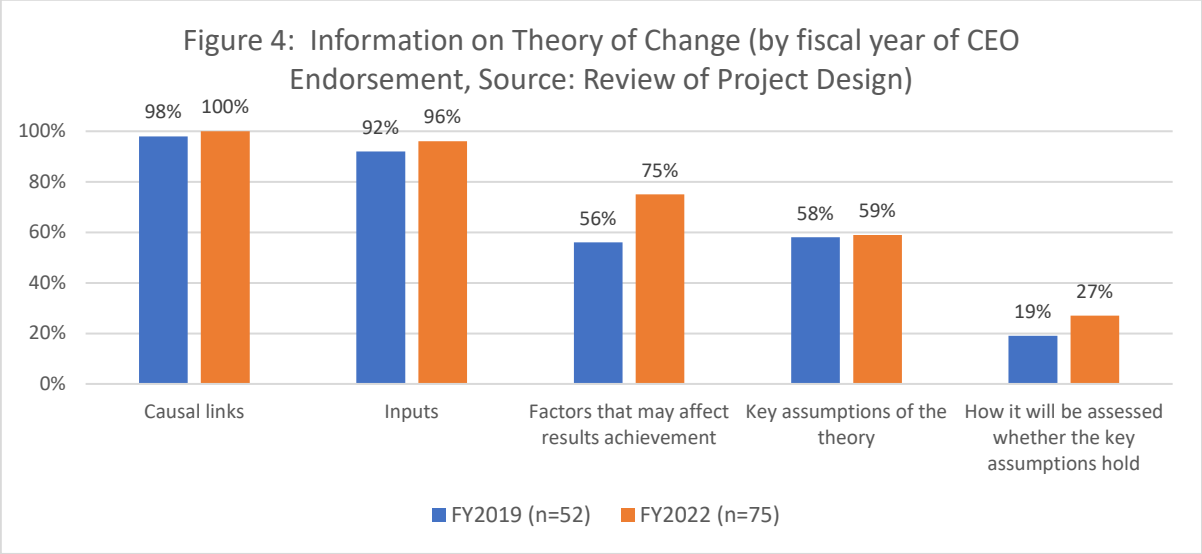


Figure 4: Information on Theory of Change (by fiscal year of CEO Endorsement, Source: Review of Project Design)

27. Almost all project proposals endorsed in FY2019 (98 percent) and FY2022 (99 percent) discuss risks that may destabilize the system targeted by the project, mention resilience, and discuss risk mitigation (figure 5). Roughly half of the project proposals discuss the general resilience of the targeted system and resilience as a strategy to mitigate risks. The only indicator on which the projects endorsed in FY2022 significantly differ from the baseline (at 99 percent confidence) is in their higher likelihood of having conducted climate risk screening. The reason for this increase, however, is not clear. In June 2019 the GEF STAP issued guidance on conducting climate risk screening, but that guidance could not have affected climate risk screening in project endorsements in FY2019. There is a likelihood that the guidance would have caused increased use of the climate risk screening for the FY2022 projects irrespective of the pandemic.

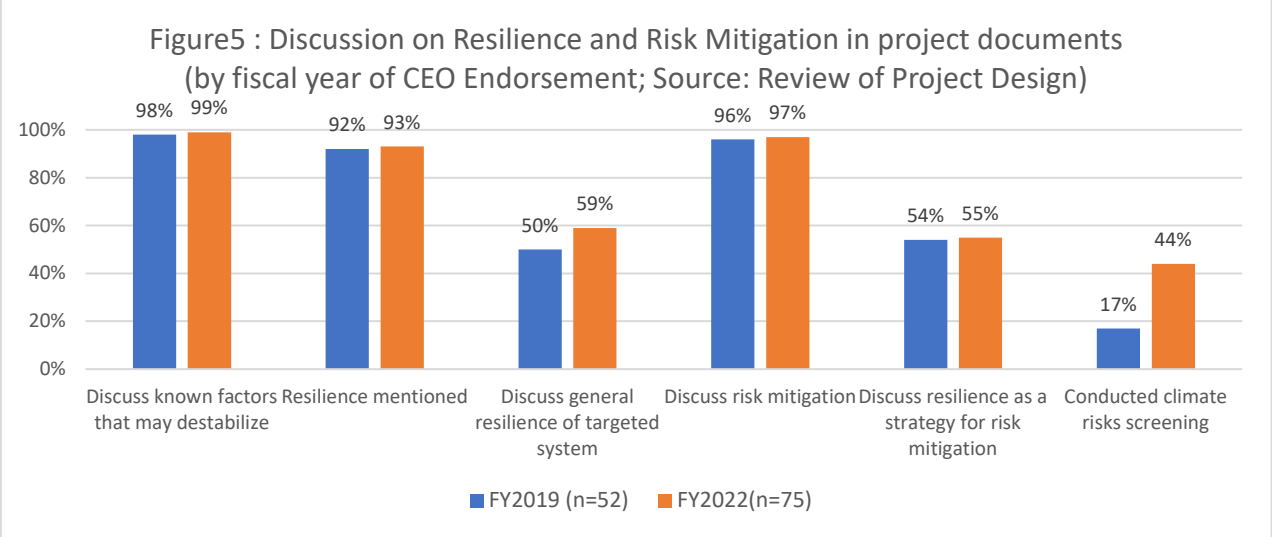


Figure 5: Discussion on Resilience and Risk Mitigation in project documents (by fiscal year of CEO Endorsement; Source: Review of Project Design)

28. Project proposals endorsed during FY2022 were more likely to discuss risks related to a public health crisis and economic risks than those endorsed during FY2019 (figure 6). These risks are likely to have been more apparent and available to those designing projects as they correspond to the recent experience. For other risks the difference between the two sets of proposals was not statistically significant.

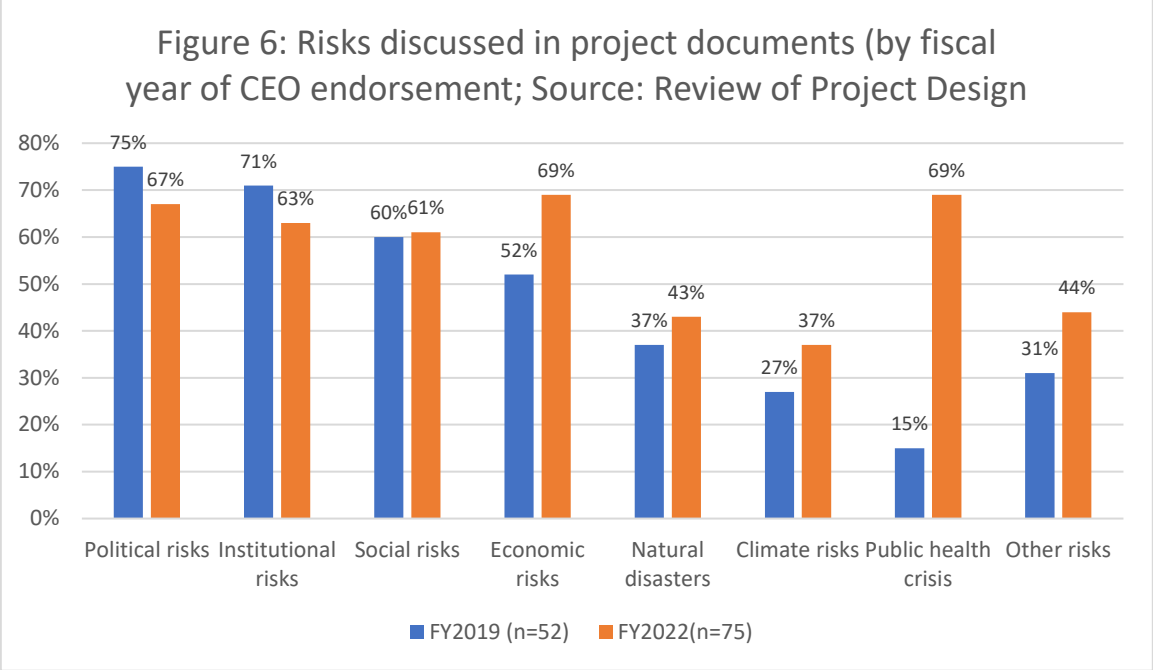


Figure 6: Risks discussed in project documents (by fiscal year of CEO endorsement; Source: Review of Project Design

29. More project proposals that were endorsed in FY2022 used scenario-based planning and discussed alternatives to their preferred approach than those that were endorsed in FY2019 (figure 7); however, only about one in five projects does so at present. The uptick in use of scenario-based planning may be attributed to the guidance issued by the GEF Secretariat in September 2020, encouraging the use of this approach.

30. The proposals prepared after the onset of the pandemic were broadly similar to the baseline in terms of M&E arrangements and provision for contingency funds. There was also little difference in terms of specification of an indicator to track changes in system resilience (35 percent compared to 40 percent of projects at baseline); proposals discussing arrangements for measuring project outcomes and impacts (95 percent compared to 84 percent of projects at baseline); and arrangements for regular analysis of M&E data (80 percent compared to 79 percent of projects at baseline). The percentage of projects that provide contingency funds remained low at 5 percent compared to the baseline of 12 percent.

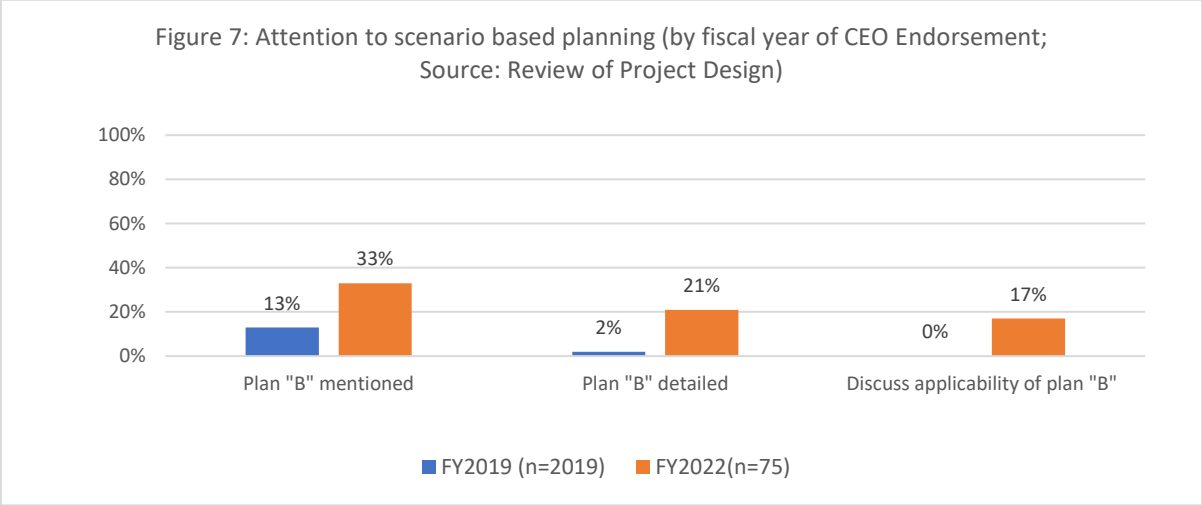


Figure 7: Attention to scenario-based planning (by fiscal year of CEO Endorsement; Source: Review of Project Design)

3. Effects on implementation

31. **COVID-19 presented challenges in the implementation of some project activities, leading to delayed implementation of activities or, in some cases, the activity being dropped.** Of the 63 projects covered through the review of midterm reviews and PIRs, in 44 percent of the projects at least some activity had been paused or put on hold, and in 19 percent cancellation of one or more activities was reported. Lockdowns, social distancing, and travel restrictions took a toll on activities requiring in-person interaction. These affected activities included site-based training, technical assistance, and capacity building activities; meetings, workshops, and collective activities; and field visits for primary data collection and/or interaction with local-level stakeholders for consultation (figure 8). In addition, in many instances procurement and delivery of goods and equipment were delayed or stalled due to disruption of international and national supply chains.

32. The COVID-19–related disruptions affected some types of projects more than others. The data from the review of midterm reviews and PIRs shows that projects focused on climate change were more likely to experience procurement-related challenges than projects of other focal areas (63 percent compared to 23 percent). A likely reason for this is that climate change projects include more activities that involve procurement of physical assets. Similarly, projects implemented in Small Island Developing States were more likely to face challenges in conducting stakeholder consultations than other projects (69 percent versus 42 percent). In several Small Island Developing States, travel to the project sites was not possible for a long time because of restrictions (including, in some instances, a complete ban) on international commercial flights.

33. Information gathered through interviews indicates that projects financed through the GEF-administered Capacity-building Initiative for Transparency (CBIT) trust fund faced challenges because COVID-19–related travel restrictions made it difficult to engage international consultants to conduct trainings of national trainers. Respondents also observed that projects aimed at development of legal, policy, and regulatory frameworks were adversely affected by the pandemic, because it was difficult to conduct stakeholder consultations and get timely responses from relevant government agencies.

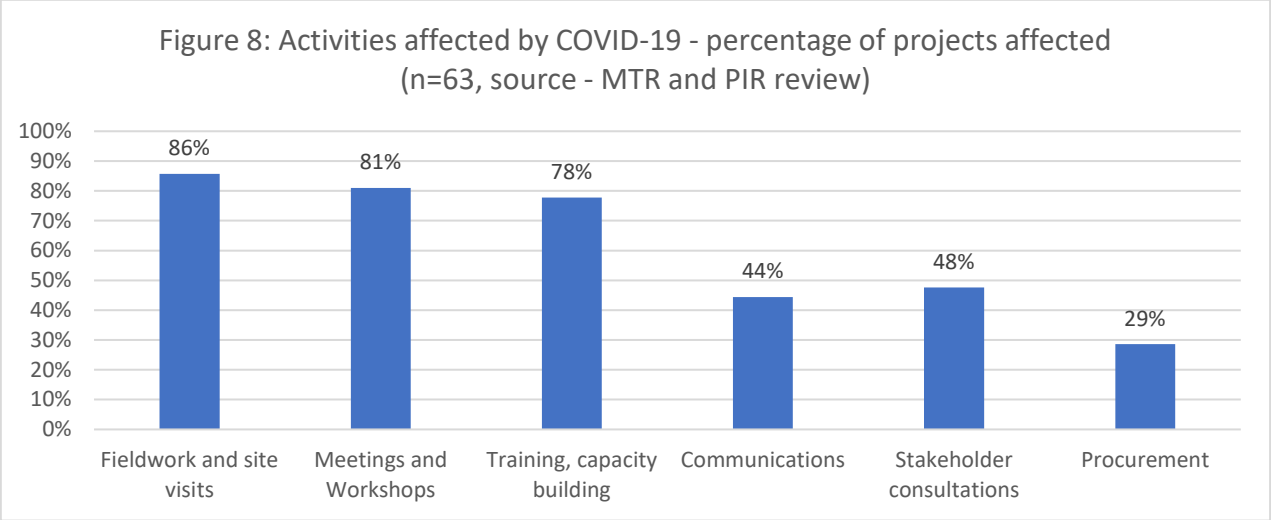


Figure 8: Activities affected by COVID-19 - percentage of projects affected (n=63, source - MTR and PIR review)

34. Project teams adapted to the challenges related to travel restrictions, social distancing, and restrictions of onsite working, by shifting (at least partially) their activities online. Eighty-seven percent of the projects covered through midterm review and PIR reviews reported this shift (figure 9). There were often barriers in moving to remote activities, for example, due to connectivity and technology-access in project sites and because not all in-person activities are effective in a virtual format. In some of these cases, executing agencies continued undertaking activities with reduced participation while adhering to physical distancing measures. Overall, where in-person interactions were shifted online, over half of the projects reported communication challenges. These posed barriers to collaboration among relevant stakeholders and effective coordination and/or engagement; for example, during the preparation of the midterm review the communities participating in a national protected area–focused project (GEF ID 9434, Timor-Leste, Conservation International) called for increased communication with the Project Management Unit to re-engage them into implementation activities. The midterm review for Participative Integrated Ecosystem Services Management Plans for Bakassi Post Conflict Ecosystems (ID 4739, Cameroon, UNEP) also reported a similar need to improve communication between the communities and the project team.

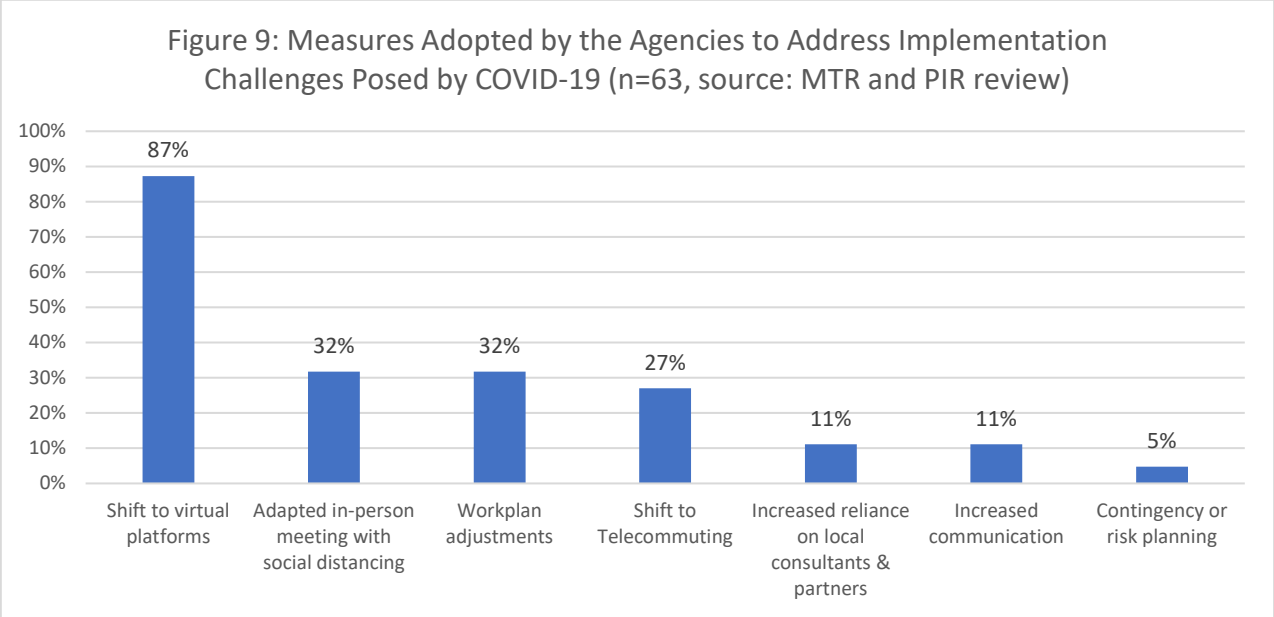


Figure 9: Measures Adopted by the Agencies to Address Implementation Challenges Posed by COVID-19 (n=63, source: MTR and PIR review)

35. One third of the projects reported adjustments in their work plans. The project teams prioritized work that could be accomplished despite restrictions on travel. This approach was especially useful during the early stages of the pandemic, March–June 2020. Several project teams took advantage of "opportunity windows"— temporary lifting of lockdowns or easing of restrictions to access field sites. These visits required more prior preparation so that these opportunities could be used when they became available, mainly during the 2002 fiscal year. With protocols for reduced capacity and biosafety, these "opportunity windows" occasionally enabled the normalization or restart of some of the activities.

36. Agencies were flexible in engaging with the communities, using in-person visits where these were feasible and desirable, or, alternatively, using virtual platforms. In a project focused on Conservation of Genetic Diversity of Agroecosystems (ID 9380, FAO) in Mexico, when fieldwork was suspended during the first months of the pandemic (April–June 2020), videoconference platforms were used to remain active and prepare for a return to the field. The field visits, following strict safety protocols, resumed in July 2020. A project on eliminating mercury in Guyana's mining (ID 9713) also reported starting fieldwork with prospecting activities in study sites in 2021, once the COVID-19 protocols and safeguards for local travel were in place. A similar pattern is observed with respect to other largely affected in-person activities such as trainings and workshops. For example, a regional project aimed at "Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian Countries and Turkey" (GEF ID 5000), resumed the in-person training activities in May 2021, when travel was feasible and safety protocols had been implemented.

37. Travel restrictions, along with risks involved in travel, led to increased reliance of the GEF Agencies on local staff, consultants, and partners. The review of midterm reviews and PIRs showed that some projects (11 percent), relocated staff, hired local consultants, and/or relied more on local partners for implementation. Some projects (11 percent) enhanced communications within technical teams and with stakeholders on the ground. This was done through an increase in virtual

trainings and knowledge-sharing sessions among the technical teams. Executing partners also created WhatsApp groups among community-level committees and provided phone credits to community members so that they could participate in stakeholder consultations.

4. Effects on project finances

38. **Because of the pandemic, some of the non-bank GEF Agencies encountered challenges in mobilizing co-financing.** As noted in the section on the effects of the pandemic on project preparation, a higher percentage of proposals for stand-alone full-size projects prepared by non-development banks experienced a drop in co-financing. These challenges were also experienced during project implementation. Of the 63 projects covered through the review of midterm reviews and PIRs, 6 (10 percent) faced challenges in materialization of promised co-financing because of a shift in recipient government priorities (because of the pandemic) or the co-financing partner's inability to meet the commitment; all these projects were being implemented by non-development banks. For the Reversing Deforestation and Degradation in High Conservation Value Chilgoza Pine Forests in Pakistan project (GEF ID 9516, FAO), less than 10 percent of the promised co-financing by the government had materialized by the midterm, leading to slower than anticipated progress in project implementation. The key informants from development banks recounted a somewhat different experience: they noted that they did not face challenges in mobilizing co-financing; rather, the pressure on them was to find "shovel-ready" activities that could be used to provide financial aid to COVID-19–affected communities.

39. COVID-19 had mixed effects on project costs: in some instances, it led to an increase in costs, whereas in others a decrease in costs was reported. Of the projects covered by the review of midterm reviews and PIRs, eight projects (13 percent) experienced a drop in costs because of savings generated from reduced travel and less reliance on physical venues to conduct meetings, trainings, conferences, and other events. Four projects (6 percent) experienced cost increases because of the increased cost of procured equipment and technologies. Key informant interviews indicated that no-cost extensions in some projects meant reduced expenditure on project activities and increased spending on administrative costs.

40. Several terminal evaluations report the use of cost savings from reduced travel to finance additional project activities. For example, the StewardFish project in the Caribbean (GEF ID 9720, FAO) used unspent travel funds to implement fish silage and livelihood recovery assistance activities. The pandemic also provided the project the opportunity to train stakeholders such as fisherfolk in the use of online technology, which allowed more beneficiaries than planned to participate.

5. Effects on project results

Negative effects

41. **COVID-19 affected the achievement of results in at least 28 percent of the projects, with projects in the biodiversity focal area more likely to be affected.** The data from the review of terminal evaluations show that a reduction in achievement of results due to COVID-19 was more likely to be reported for projects in the biodiversity focal area compared with projects in other focal areas (figure 10). Negative outcome effects were particularly observed in projects that supported protected areas, discussed in depth in the next section. Sixty-six percent of projects reported no or negligible negative effects from COVID-19 on their outcomes. These include five projects that also reported unexpected positive outcomes that would not have happened had the

pandemic not occurred. The data do not indicate a significant relationship between reduction of outcomes and characteristics such as project size, grant amount, project duration, GEF Agency, GEF replenishment period, geographic scope, region of implementation, or percent of implementation time remaining when the pandemic was declared.

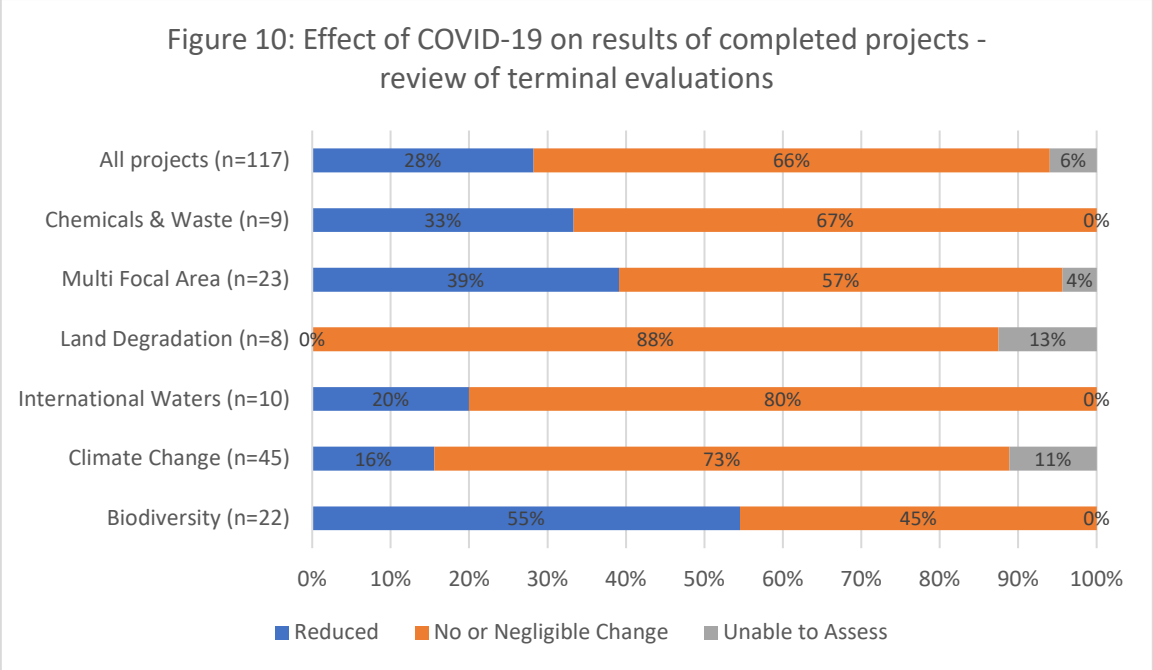


Figure 10: Effect of COVID-19 on results of completed projects - review of terminal evaluations

42. **Pandemic-related delays in procuring materials, constructing, and operationalizing infrastructure led in part to environmental targets not being met by project end.** In Jamaica (GEF ID 5843, UNDP), three solar photovoltaic systems with a total capacity of 172 kW were not commissioned in time. In Senegal (GEF ID 5449, World Bank), investors in irrigation infrastructure experienced serious delays in procuring pipes from Europe, which resulted in some project activities not being completed before its closing. Construction stoppage was also seen in a few protected area projects, where trails and learning centers could not be completed.

43. **Approvals for reforms in the legal and policy framework and for management plans were put on hold because government officials faced the urgent need to address the health crisis.** The effect was worsened by government officials being unable to meet virtually, as well as other contextual challenges. For example, the gazettement of Jokadu National Park and the revision of the Biodiversity and Wildlife Act in Gambia were delayed (GEF ID 5529, UNDP), as was the approval of a resolution for an environmental approach in the Dominican Republic (GEF ID 5088, UNDP). In a multi-focal area project in the Kyrgyz Republic (GEF ID 4761, FAO), a program drafted in 2019 to regulate greenhouse gas emissions and sinks in the forestry and land use sector was not adopted in 2020 because government attention shifted to COVID-19, and then further focus shifted to structural changes in the government until 2021. Similarly, the revised fee structure proposed by Grenada's Fisheries Department for marine protected areas was initially supported but then postponed by the government because of economic priorities in response to the pandemic (GEF ID 5069, UNDP); the expansion and creation of two marine protected areas were

also tabled by the Cabinet, while the inability of the Cabinet's intersectoral committee to meet kept the project-supported land use plan regulations from being approved.

44. **Outcomes of several projects faced increased risks to sustainability as governments, private sector organizations, and local communities prioritized health and economic concerns.** The review of terminal evaluations found several examples that illustrate these shifts. In the Gambia, due to COVID-19 the budget of the Department of Parks and Wildlife Management, the lead executing agency of a GEF project aimed at expanding and strengthening the management of priority protected areas, was cut by more than 61 percent in 2020 and was expected to reduce further by 32 percent in 2021. Consequently, the department was unable to fully implement the management plans developed for the project sites, including infrastructure maintenance and community support (GEF ID 5529, UNDP).

45. **Collaboration and follow-up with stakeholders stopped in some cases due to reduced opportunities for stakeholder engagement, thus also increasing risks to sustainability.** For example, inspired by the work in Suriname, stakeholders in three other Caribbean countries started to discuss the establishment of a system or network for pesticide container management (GEF ID 5407, FAO). However, the onset of COVID-19 stopped the discussions. At the community level, the development and approval of management plans were stopped due to the inability of consultants to conduct community consultations in remote areas, such as in the Cook Islands (GEF ID 5348, UNDP) and Mauritania (GEF ID 5792, World Bank). Some terminal evaluations reported that COVID-19 restrictions prevented key follow-up visits with stakeholders. These in-person visits are important to monitor and encourage the continued adoption of pro-environment practices, address stakeholder concerns, and consolidate learning through peer-to-peer knowledge exchange. In the case of the Sound Chemicals Management Mainstreaming and UPOPs Reduction in Kenya project (GEF ID 5689, UNDP), materials recovery facilities were created in four communities, but by project end none of them were operationalized; travel restrictions reduced the project team's engagement with community organizations and monitoring of their activities, which made the community organizations unresponsive when it came time to turn over the equipment to the beneficiaries.

46. Several terminal evaluations noted that the inability to conduct training activities—or in some cases, the shift from hands-on training workshops to self-paced videos—may have compromised the effectiveness of these trainings. For example, stakeholders of the regional project Disposal of Obsolete Pesticides including POPs, Promotion of Alternatives and Strengthening Pesticides Management in the Caribbean (GEF ID 5407, FAO) expressed that a virtual knowledge exchange was not the same as having practical experience in the remediation of contaminated soils. In Cabo Verde (GEF ID 5344, UNDP), the failure to train and certify professionals due to travel restrictions was noted to hamper implementation and enforcement of the new building code. During interviews, several key informants from the GEF Agencies expressed skepticism as to the efficacy of the virtual trainings and capacity building activities, when compared with in-person workshops.

Positive effects and opportunities

47. **COVID-19 necessitated the use of new technologies, which in some cases led to better outcomes than planned.** World Bank projects in Ghana and Albania (GEF IDs 3369/ 5221/ 9340 and 4778) turned to remote sensing to collect better-quality forestry data than they previously

had, and in the process strengthened national capacity in this aspect. Many regional projects found that shifting to online platforms could be a regular form of meeting, which allowed them to reduce participation costs for countries, include more participants, conserve scarce funding for operations, and in some cases divert it towards strengthening their human resources or implementing additional on-the-ground interventions. The StewardFish project in the Caribbean (GEF ID 9720, FAO) experienced several positive outcomes as a direct effect of COVID-19. According to its terminal evaluation, the regional partners worked much more closely together than planned in implementing activities. More frequent virtual meetings facilitated coordination among partners, which created synergies in implementing project activities through local teams. Unspent travel funds were used to implement two additional activities (fish silage and livelihood recovery assistance). The pandemic also provided the project the opportunity to train stakeholders such as fisherfolk in the use of online technology, which allowed more beneficiaries than planned to participate. Even more significant, this new skill facilitated direct interaction between regional partners and beneficiaries, which would not have happened without COVID-19.

48. The Rehabilitation of Degraded Agricultural Lands in Kandy, Badulla and Nuwara Eliya Districts in the Central Highlands (CH) project in Sri Lanka (GEF ID 5677, FAO) was another project that reported several enhanced outcomes as an effect of the pandemic. By deciding to conduct farmer field schools via WhatsApp and Zoom, the project reached farmers even in remote areas who would normally not want to take time out and travel for the training. WhatsApp groups enabled farmers to connect directly with government staff providing agriculture technical services all the way up to provincial director level, increasing both accessibility and trust in what was previously seen as an unreliable service. The digital platforms encouraged more youth and women to participate in the project and earn a substantial income from farming in their hometowns, after having to come home from the cities where they worked before the pandemic. Farmers who did not have smartphones—usually older in age—accessed the content through their neighbors or younger members of their household who were already using digital platforms for their online schooling. WhatsApp is now used not just for training by the project but for knowledge exchange and marketing among farmers, which has facilitated replication among nonbeneficiaries. The government is now scaling up the use of WhatsApp groups for agriculture extension services and plans to establish the digital farmer field schools within training institutes.

49. **In twenty percent of the projects, project activities became opportunities to respond to COVID-19–related concerns such as food security, safety, and sanitation, while promoting environmental interventions.** In many cases, projects that supported community-based livelihood activities helped to bridge the loss of income during the lockdowns through grants (supplemented by government funds), or through sustainable farming activities that produced fresh and nutrient-rich organic produce for households at a time when markets were closed. Projects that supported community groups for knowledge exchange and early warning systems to build climate resilience used these established interventions to deliver important COVID-19 updates to communities. The Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh project (GEF ID 4700, UNDP) used multiple interventions as opportunities to meet both environmental targets and COVID-19 needs, as well as needs arising from a cyclone that hit the country in 2020. Climate-resilient livelihoods introduced to 9,000 beneficiaries provided food security during this challenging period, as well as for future shocks. The project team increased the budget for these livelihoods to meet the need, so that more vulnerable communities could

benefit. Volunteers trained to respond to climate emergencies became critical for maintaining COVID-19 safety measures while moving communities to cyclone shelters at the project sites.

50. In India, depots supported by a World Bank–implemented climate change project (GEF ID 4921) made it possible for transit operators to clean their buses more quickly and with less manual labor during the pandemic, thus also helping them cope better with staff shortages. The e-payment app introduced by the project provided commuters with reliable advance information on routes and fares, while also reducing potential virus transmission through handling of cash. As an added benefit, the project's gender-disaggregated data collection revealed that women were more dependent than men on public transport during the pandemic, and the project's improvements to the public transport system encouraged women to use it. Similarly, a chemicals and waste project in Kenya (GEF ID 5689, UNDP) took the opportunity to develop additional guidelines for medical and infectious waste related to COVID-19 to build knowledge and awareness on segregation, collection, storage, treatment, and disposal of waste generated in healthcare facilities. The project's distribution of materials for healthcare waste management to beneficiary facilities was timely as the volume of waste greatly increased during the pandemic. In Costa Rica, water management methods promoted by a UNDP-implemented climate change project (GEF ID 6945) became a requirement by the National Emergency Commission to finance aqueducts in the south of the country as part of the country's COVID-19 response. At the same time, the project used the opportunity to promote safety practices such as chlorination and hand washing, climate change adaptation measures such as responsible water use during the pandemic, and the importance of water resources and community water resource managers in protecting against viruses.

Factors influencing COVID-19 effects on project outcomes

51. **Pandemic-related challenges were more likely to reduce outcomes when the project was already struggling with internal challenges prior to the global lockdowns.** Seventy-one percent of projects reported having challenges related to project design, startup, and/or management. Of these, 67 percent had outcomes negatively affected by COVID-19; in contrast, 12 percent of projects that faced only contextual challenges were negatively affected by the pandemic. Very commonly, delays due to bureaucratic barriers at startup or poor project management prior to the midterm review were exacerbated by the onset of the pandemic lockdowns. Some projects were incapacitated by high turnover of project managers, lack of full-time technical staff, or frequently changing government counterparts. Overly ambitious designs or inappropriate interventions were other internal project-related factors identified as affecting outcomes.

52. **Despite severe disruptions to implementation, in general projects successfully mitigated negative COVID-19 effects—and in some cases exceeded their outcomes—when they had a highly adaptive project management team and strongly collaborative partners.** In half of the projects whose outcomes were not negatively affected by COVID-19, terminal evaluations highlighted the crucial role of the project management team in quickly adapting to the challenging circumstances. Project teams that were already using their M&E system effectively for adaptive management were able to respond more quickly to COVID-19–related limitations. These timely shifts included 1) moving meetings and trainings online more quickly than other projects, 2) increasing the frequency of communication with partners and field-based staff in lieu of supervision missions, and 3) relying more on—and in some cases, building the capacity of—local staff and partners to implement the project.

53. The support of district-level technicians and provincial-level partners in collecting data for the FAO-implemented Strengthening Capacities of Agricultural Producers to Cope with Climate Change for Increased Food Security through the Farmers Field School Approach project in Mozambique (GEF ID 5433) was fundamental for the central project management team's learning of potential challenges and its response to them. This responsiveness was possible because project planning was done at the central, provincial, and district levels, allowing greater autonomy for partners and technical teams to adapt priorities to the needs and contexts of each province, district, and farmer field school. Local teams were equipped for virtual communication to maintain regular reporting to the central project team, which then also reduced the need for field monitoring missions.

54. Terminal evaluations also highlighted the importance of strong partnerships in mitigating negative COVID-19 effects on outcomes. Continued collaboration, albeit virtually, often driven by strong ownership of the project's objectives, was key to activities continuing on the ground despite the many restrictions. In some projects, strong partner collaboration was an outcome of efforts exerted by the project management team to build the partnership prior to the lockdowns. In Armenia, the Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes project (GEF ID 5353, UNDP) was noted for the "excellent collaborations with a multitude number of stakeholders at national level and local level" developed by the project team, which were found valuable not just for implementing activities but also for contributing to national ownership of the activities and achievements. The partnerships helped guide the project through several government reorganizations. Conversely, conflicts or ambiguity of roles among partners in some projects led to reduced outcomes overall, exacerbated by COVID-19.

Thematic Focus: Effects on GEF-supported protected areas

55. **Eighty-three percent of the projects in GEF-supported protected areas (n=44) reported at least one challenge because of the pandemic.** The remaining 17 percent also reported challenges that could be associated with the pandemic, although they were not explicitly identified as COVID-19–related. Most of the challenges identified were related to project implementation (79 percent), followed by negative effects on project outcomes (38 percent), challenges with project management (36 percent), M&E (30 percent), and sustainability (19 percent). The types of challenges associated with key project phases are outlined in figure 11. Implementation challenges were related to delivering activities such as stakeholder engagement, conducting needs assessments, preparation of work plans for protected areas, capacity building, technical assistance, awareness raising, installation/maintenance of equipment or physical infrastructure, surveillance, signing of cooperation agreements, and passing/approving legislation, among others. Issues with the delivery of capacity building or technical assistance as per protected areas' work plans were the most frequently reported (43 percent of GEF projects), followed by issues with stakeholder engagement in 34 percent of projects (figure 12). These issues are often attributed to the complete halt of in-person training or of meetings to provide technical advice or carry out consultations, which later were resumed through virtual modes. Other challenges also frequently reported were related to the impossibility of building physical infrastructure or maintaining equipment for the correct functioning of the protected areas (19 percent), the interruption of surveillance activities to detect illegal activities or anomalies within the PAs (15 percent), as well as disruptions in completing activities such as further planning of protected areas, needs assessment, awareness raising, knowledge sharing, approval/signing of agreements or legislation, and simple

decision-making processes by government counterparts that lasted longer than expected due to changes in priorities. Each of these cases was reported by less than 11 percent of projects. Finally, 34 percent of projects mentioned that they faced an implementation challenge but did not provide details.

Figure 11: Types of challenges associated with key project phase

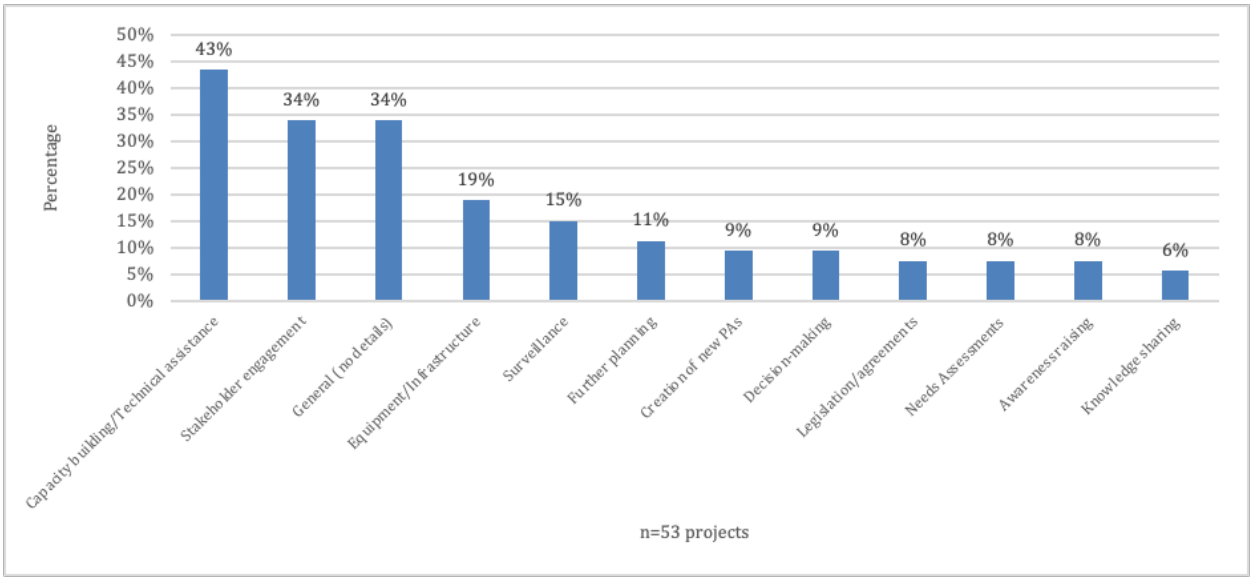


Figure 12: Key challenges related to implementation in the portfolio review

56. **COVID-19–related challenges identified at the project outcome level were observed in 38 percent of GEF projects that supported protected areas.** Challenges at the project outcome level were further disaggregated into several subcategories, such as incidents related to illegal logging, deforestation, reforestation issues, poaching, illegal hunting, encroachment from individuals, fire, and mining or extracting activities that occurred in protected areas, as well as negative impacts on the livelihoods or income of the communities that depended on the protected areas. The most common challenge faced by GEF projects at the project outcome level was the pandemic's adverse effects on livelihoods in 30 percent of the cases. These effects included loss of income from tourism-related activities. The drop in tourist visits in many cases also meant that projects could not demonstrate sustainable financing mechanisms, which were intended to fund protected area management activities. In Eswatini, for example, the loss in income to already underfunded protected areas severely affected their capacity to protect wildlife (GEF ID 5065, UNDP). Financing had been a challenge throughout the project's seven-year implementation period, and COVID-19 further exacerbated the situation. Privately owned protected areas had to be supported by government grants because these properties had completely shifted to tourism-funded conservation activities. Community-based conservation areas could barely maintain basic operations and in one area had to retrench employees due to their inability to pay salaries. In Project ID 9213 (Zambia), smallholder farmers, pastoralists, and fishers are mentioned as the most affected groups, because with the pandemic all the work on alternative livelihoods in the protected areas was stopped for these beneficiary groups. Consequently, it is envisioned that they may turn to hunting and illegal exploitation of resources inside the protected areas. Project ID 4639 (Zambia) mentioned limited tourism and hunting revenues being realized in national parks and game management areas, with adverse impacts on project outcomes.

57. **Fewer law enforcement patrols and reduced community participation in environmental monitoring were reported in some completed projects, which negatively affected environmental outcomes.** Reduced patrols and community monitoring were attributed to mobility restrictions

and/or a decrease in the budget. Incidents of illegal logging/deforestation and poaching/illegal hunting were reported by 9 percent and 7.5 percent of the GEF-supported protected area projects. The terminal evaluations and midterm reviews of Project ID 4589 (Angola), Project ID 5458 (Peru), and Project ID 9434 (Timor-Leste) mentioned incidents related to deforestation and illegal logging. Project ID 4589 (Angola) reported that the lack of community involvement and representation in protected area management during the COVID-19 crisis is impeding results as increased deforestation and logging for agriculture and commerce (timber and charcoal) have been recorded in three national parks. Similarly, Project ID 5458 (Peru) and 9434 (Timor-Leste) mentioned suspensions of reforestation activity and a decline in engagement in community tree planting activities. The latter was attributed to the delayed provision of seeds and saplings in Timor-Leste due to COVID-19. In a climate change project in Senegal (GEF ID 5566, UNDP), the terminal evaluation noted that only 10 percent of sites visited could be considered successful, as seedlings planted in schools were not monitored or cared for during the lockdown. Project ID 9213 (Zambia) reported that the pandemic has adversely affected the availability of human resources for patrol and security of protected areas, which is likely to have potential implications resulting in reversal of gains in current forest protection. One consequence of more limited patrols was an increase in turtle egg poaching in 2020 and 2021 in a national park in Comoros (GEF ID 5062, UNDP). Reduced stakeholder participation in culling invasive lionfish allowed the increase of its populations in Grenada (GEF ID 5069, UNDP). The population is expected to be under control again once diving resumes on the island. Encroachment by individuals, fire, deforestation, and mining or extraction issues individually were found in very few reports (3.8 percent).

58. **Management challenges were identified in 36 percent of GEF-supported protected area projects' reports published after the pandemic.** Management challenges were further classified into those related to disbursement or reduction of funds, procurement, and staffing. Most GEF projects that supported protected areas reported issues with the disbursement or lack of funds to support current arrangements because of changes in government priorities; these were reported in 21 percent of the cases, followed by procurement issues reported by 19 percent of projects, and, in relation to staffing, reported by 8 percent of projects.

59. Relevant examples dealing with management challenges include Project ID 4848 (South Africa) and Project ID 4639 and 9213 (Zambia), which reported in the PIR and terminal evaluation respectively, delays in staff appointments, staff turnover, obstacles in the disbursement of funds and purchase of equipment, or moratorium on procurement because of the pandemic. Similarly, Project 9199 (Bhutan) and Project ID 6949 (Tajikistan) reported in their midterm review and PIRs, respectively, delays in procurement related to the inability to access external markets, fluctuations of market price, and the increase of prices for goods, services, or transportation. Finally, Project ID 8031 (Uzbekistan), Project ID 5078 (St. Kitts and Nevis), and Project ID 5069 (Grenada) saw a slowed pace of expenditure or budget reduction due to government's refocusing their priorities on social resilience. For example, Project ID 8031 (Uzbekistan) saw a decrease in the project's budget delivery target of at least 50 percent

60. **A spatial analysis of 409 GEF-supported protected areas found that most experienced fire frequency and deforestation rates within the predicted range, with some exceptions**. In both 2020 and 2021, most of the protected areas experienced fire frequency rates within the predicted range (197 out of 399 in 2020 and 209 out of 399 in 2021) (figure 13). Of the 399 protected areas that experienced fire during 2020–21, approximately 25 percent experienced higher fire frequency

than expected (figure 14). These included the following protected areas: Mont Peko National Park in the Côte d'Ivoire; Akure-Ofosu, Ologbo, Ukpe-Sobo, and Ifon protected areas in Nigeria, Delta del Paranà protected area in Argentina, Cerro Quiabuc protected area in Nicaragua, and the Àrea De Relevante Interesse Ecològica Serinal Nova Esperanca in Brazil. Mont Peko National Park experienced increases in fire frequency from an annual average of 414 fire observations from 2012–19 to an annual average of 850 fires in 2020 and 2021, despite stable precipitation.

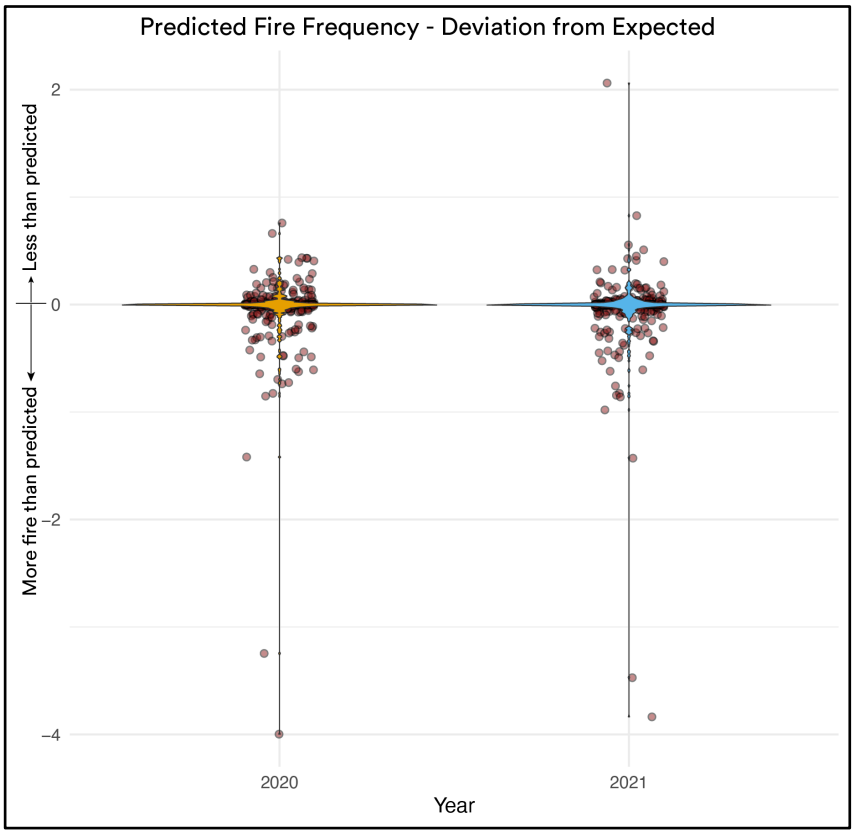


Figure 13: The distribution of the difference between predicted and observed fire frequency for 2020 (orange) and 2021 (blue). Negative values indicate where observed frequency was greater than predicted frequency, indicating a possible effect of the COVID-19 lockdowns

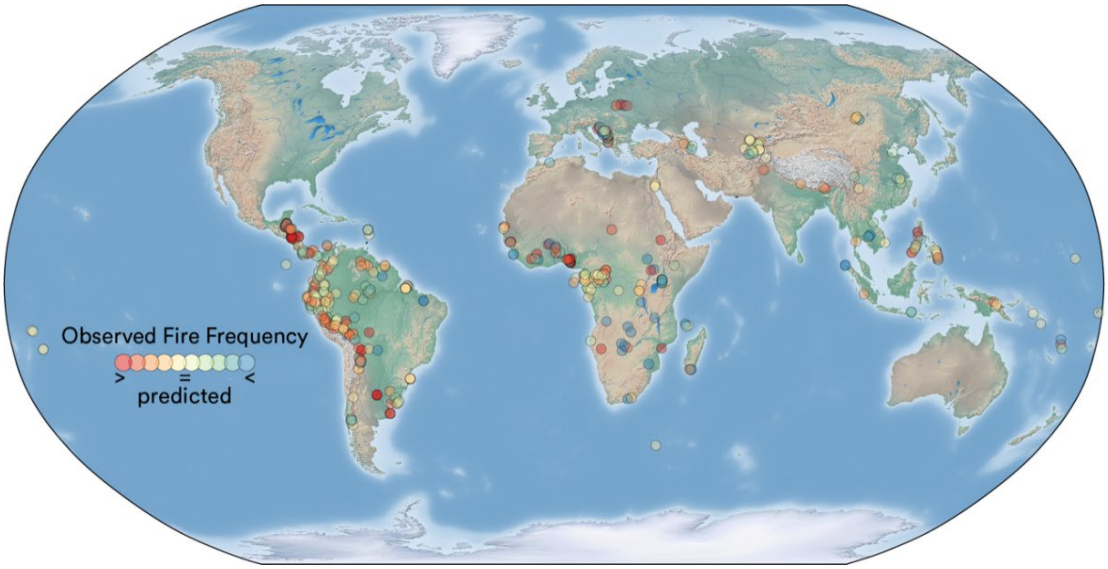


Figure 14:The global distribution of PAs and predicted vs. observed fire frequency for the post pandemic period.

Like the results from the fire analysis, post-COVID-19 deforestation rates over 2020 and 2021 were within the expected range for most of these protected areas (1 standard deviation from 0) of deforestation (n=234), given the historic data. Sixty-five protected areas (28 percent) experienced higher than expected rates of deforestation, and 38 areas experienced lower than expected rates of deforestation (figure 15). Several protected areas showed substantially higher than expected rates of deforestation. These were La Sagesse Protected Area in Grenada, Limbaika Nature Reserve in Nicaragua, Cerro Alamikamba Nature Reserve in Nicaragua, and Mischner & Bowen Reserve in Belize. The Grenada site, though extremely small, experienced no observed deforestation from 200–1–19, but saw 20 percent of the forested areas lost in 2020 and a further 6.2 percent lost in 2021. The two Nicaragua nature reserves experienced a nearly 10-fold increases in deforestation from the prepandemic averages (Figure 16).

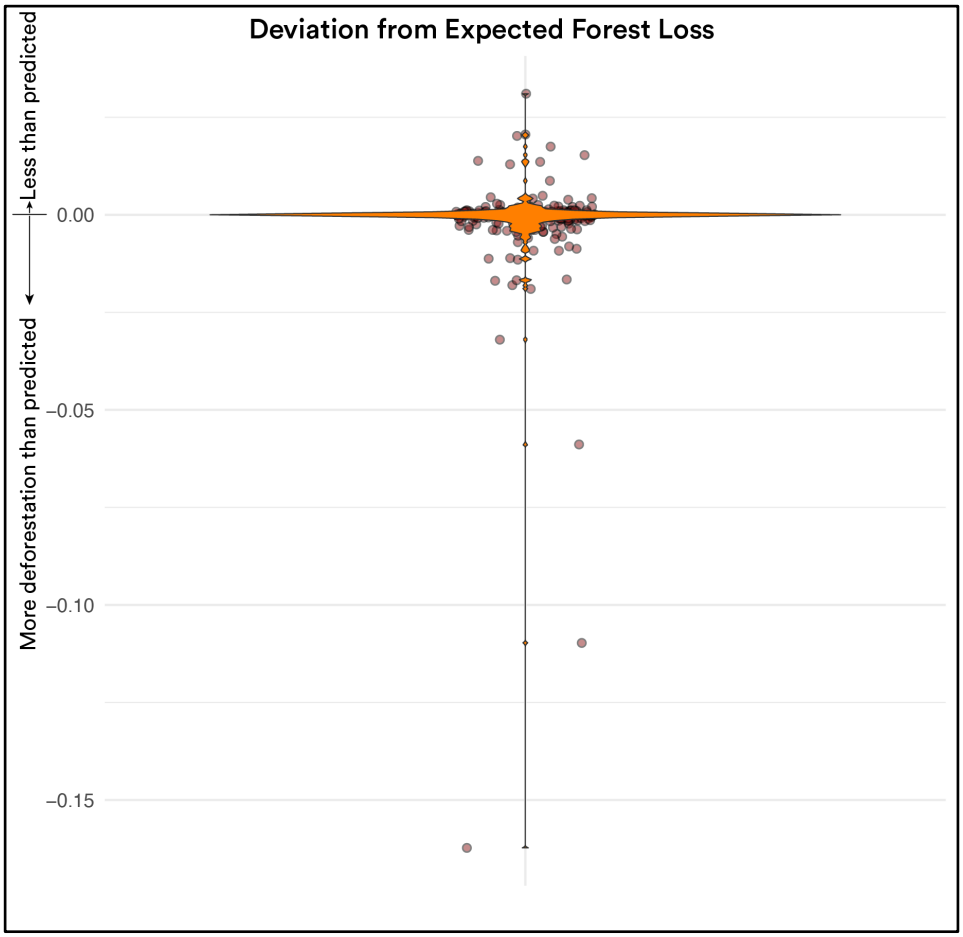


Figure 15: The distribution of the difference between predicted and observed deforestation for 2020 - 2021. Negative values indicate where observed deforestation was greater than predicted, indicating a possible effect of the COVID-19 lockdowns. Although some PA

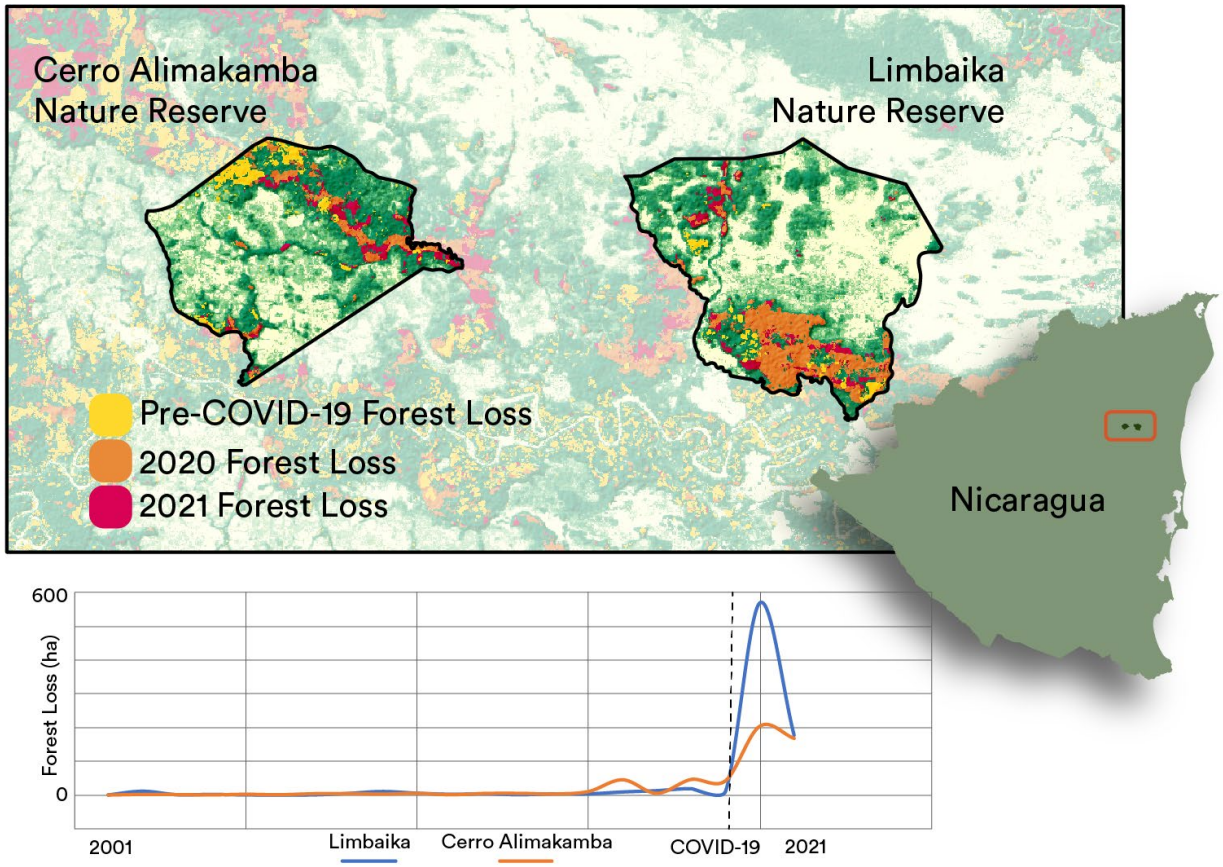


Figure 16: Forest loss inside Cerro Alimakamba and Limbaika Nature Reserves, Nicaragua. Substantial forest loss occurred within the protected areas in 2020 and 2021, after the beginning of lockdowns, as compared to almost no deforestation in the pre-pandemic time

61. **Even though some GEF-supported protected areas experienced higher than expected deforestation, some cases were observed where they performed better compared to neighboring protected areas.** A clear example of this is in the Kafue ecosystem, Zambia (figure 17). The Kasonso Busanga Game Management Area, a GEF-supported protected area, while showing some change in the rate of deforestation over the COVID-19 pandemic period, stands out compared to neighboring game management areas, possibly a result of increased resilience and sustainability due to GEF support for improved management. We did note evidence of decline in economic activity (proxied by nighttime lights) in and around GEF-supported protected areas (box 1).

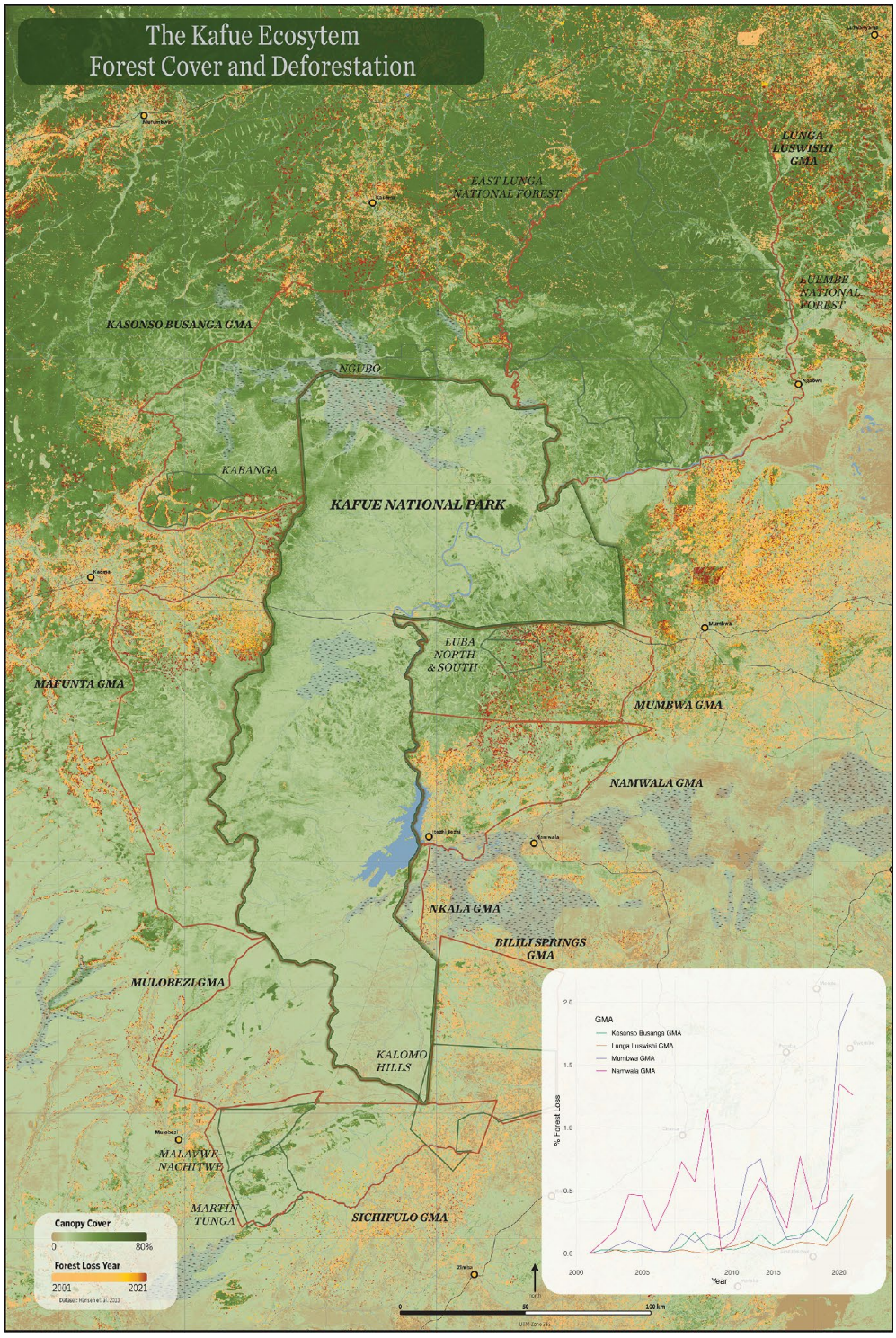
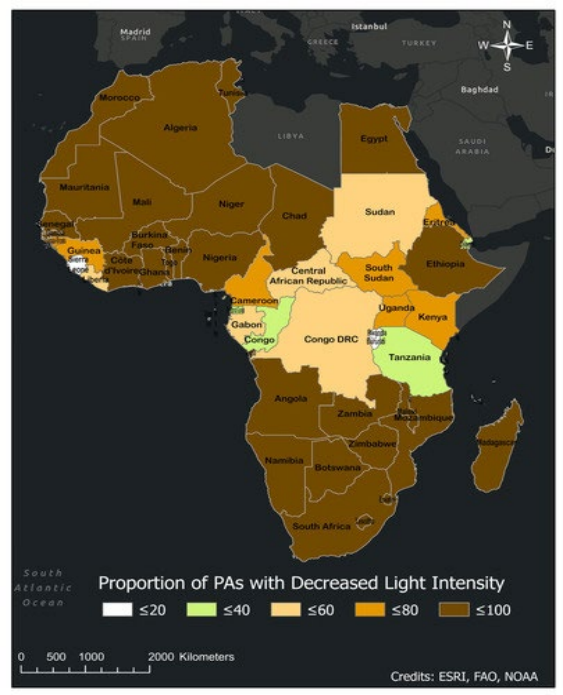


Figure 17: The Kafue Ecosystem with the GEF supported Kasonso Busanga Game Management Area to the north west of Kafue National Park. This GMA, like many GEF supported PAs showed more resilience to forest loss during the pandemic period as compared to other surrounding forested GMAs

Box 1: Effect of COVID-19 on economic activities around Global Wildlife Program–protected areas

Nature-based tourism and economic activities typical of protected areas are common features of many GEF-supported protected areas. These activities are often clustered around protected area sites, and travel restrictions imposed to contain the spread of COVID-19 have brought such activities to a halt. We used pre- and post-pandemic nighttime light data as a proxy measure for economic activity to assess change due to the pandemic. Our analysis shows that overall, 75 percent of the 8,427 protected (figure B1.1) areas saw a decrease in light intensity in varying degrees in all countries and across categories of International Union for Conservation of Nature protected areas in Africa, including in popular protected area destinations, indicating a reduction in tourism-related economic activities. An analysis of 40 protected areas in the GEF-supported Global Wildlife Program (GEF ID 9071) showed a decrease in light intensity (figure B1.2), including at some popular destinations such as the Serengeti National Park(figure B1.3a) and Kruger National Park (figure B1.3b), indicating the impact of the pandemic on protected area income generation, operations, and programs.



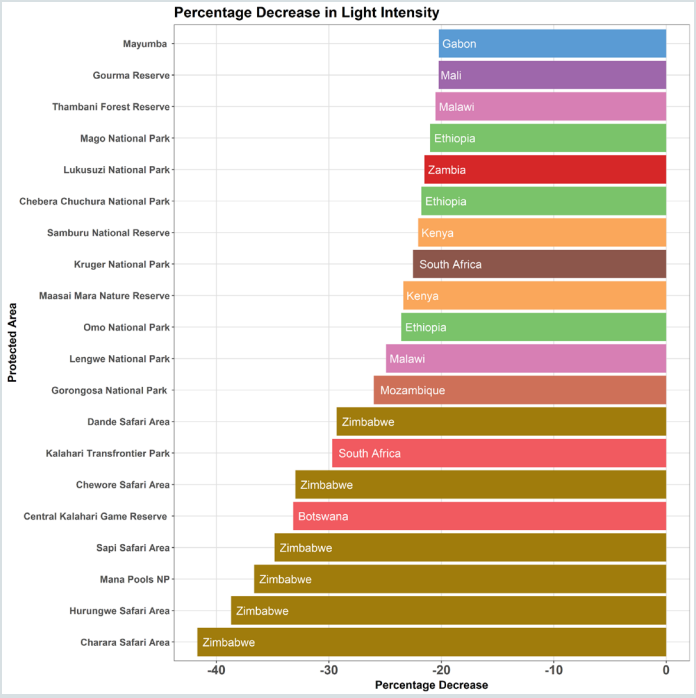


Figure B1.1) Map showing the proportion of protected areas (PAs) with decreased light intensity.Figure B1.2)The decrease in light intensity at the top 20 GEF supported protected areas within the Global Wildlife Program.

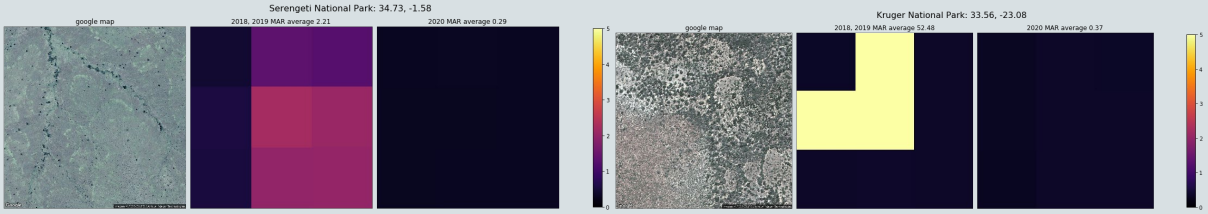


Figure B1.3. On the left part of each panel, satellite images show the popular tourist lodges, camp settlements, and markets around the three parks. The nighttime light data for these same sites, showing before (in the middle part of each panel) and after (right part of each panel), indicates that they have undergone a decrease in light intensity: (a) Serengeti National Park (-11 percent); (b) Kruger National Park (-22 percent).

Effects in countries based on satellite data

62. Recognizing the complex drivers of deforestation—and the even more complex ways in which those can be mediated by an international pandemic—we narrowly establish quantitative evidence of the directionality of impact of COVID-19 on proxy measurements of (a) vegetation and (b) economic activity. We focus on GEF intervention areas but do so at a global scope, analyzing activities across hundreds of project locations in 10 different countries. Recognizing that we cannot today answer questions related to the long-term effects of COVID-19 on GEF interventions, we explicitly seek to answer the research question: To what extent do we observe the effects of COVID-19 on shifts in vegetation and human activities in GEF intervention areas, based on satellite observations?

63. Based on an analysis of 102 projects across 595 locations in 10 countries we find that during COVID 19 GEF intervention areas tended to improve local conditions of vegetation in 9 of the 10 study countries, with the exception of Vietnam where the change was neutral In areas neighboring GEF interventions, we find positive increases in vegetation in Mexico, Costa Rica, India, Nepal, and Lao People's Democratic Republic, and evidence suggests that COVID-19 slowed the increase in lights within GEF areas in India, Bangladesh, Chad, and Botswana, consistent with results presented in figure 18.

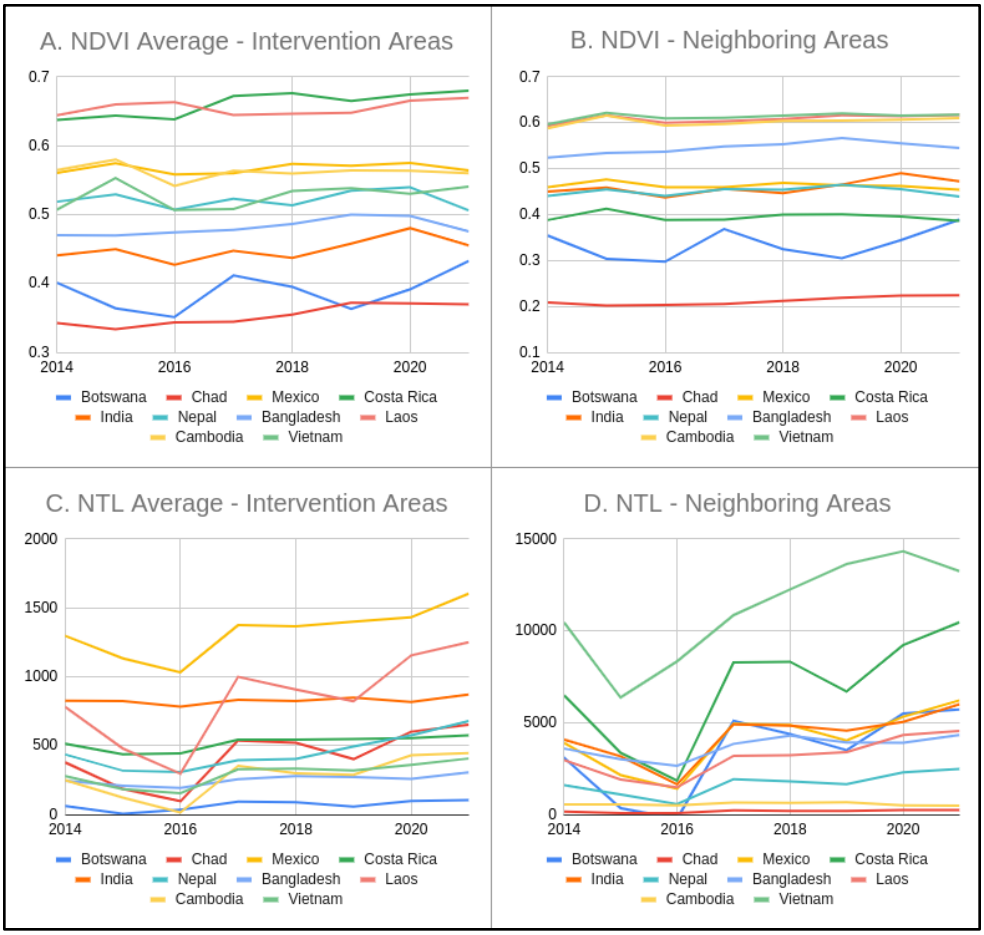


Figure 18: Trends in the mean outcome metric over time (2014 - 2021) by country. Panel (A) shows the trend in NDVI across each region within GEF intervention areas. Panel (B) shows the trend in NDVI for areas surrounding GEF projects (10km). Panel (C) show the average nighttime lights value, as measured by

VIIRS, within intervention areas. Panel (D) shows nighttime lights trends in neighboring (10km) areas.

64. Table 2 provides the results of these analyses, subdivided by region. Of note, GEF projects in Bangladesh are excluded from the "within intervention areas" analysis due to an insufficiently large number of geocoded locations (8). GEF projects in Chad and Botswana are pooled into a single model due to their low number of locations (17 and 7, respectively). A few clear trends emerge from table 2. First and foremost, in case A**,** it is illustrated that of the 10 countries included in this study, in 9 cases improvements in vegetation within GEF intervention areas could be attributed to the COVID-19 period. This result was consistent across a wide range of geographies and continents, and the only exception, Vietnam, was positive but not statistically significant. Case B shows mixed evidence of the impact of COVID-19 on nighttime lights *within* GEF intervention areas. India, Bangladesh, Chad, and Botswana all exhibited a downward impact of the COVID-19 period; Nepal was the sole case in which evidence of an upward trend attributable to COVID-19 was detected. Case C illustrates that areas neighboring but not within GEF interventions saw mixed impacts of COVID-19 on vegetation. In Mexico, Costa Rica, India, Nepal, and Lao PDR, evidence suggests that irrespective of whether a location was inside or neighboring a GEF intervention, a positive increase in vegetation was attributable to the COVID-19 period. The opposite was true in Bangladesh, where areas *within* GEF intervention areas tended to observe a positive COVID-19 effect, and areas *neighboring* GEF interventions tended to have a negative outcome. No significant neighborhood effect was found in Chad, Botswana, or Cambodia. Finally, Case D highlighted limited evidence that COVID-19 affected nighttime lights in areas neighboring GEF interventions across three countries. In India and Lao PDR, upward trends were identified; in Chad a negative trend was observed.

*Table 3: Results of autoregressive time series models, by country. The arrows indicate directionality (positive or negative) of findings. Darker shades indicate strong evidence (*** or .01), and lighter shades indicate weaker evidence (** or .05); neutral values (indicated by a dash) indicate no detectable effect (no significant at a = .05).*

	Natural Experiment Type			
	Temporal Break Time Series Intervention Areas		Temporal Break Time Series Neighboring Areas	
Case	**A**	**B**	**C**	**D**
Question	**RQ1. What was the impact of GEF activities within GEF project boundaries on vegetation?**	**RQ2. What was the impact of GEF activities within GEF project boundaries on nighttime lights?**	**RQ3. What was the impact of GEF activities in neighboring areas on vegetation?**	**RQ4. What was the impact of GEF activities in neighboring areas on nighttime lights?**
Latin America				
Mexico	▲	—	▲	—
Costa Rica	△	—	▲	—
South Asia				
India	▲	▽	▲	▲
Nepal	▲	▲	▲	—
Bangladesh	▲	▽	▼	—
Africa	▲	▼		
Chad			—	▼
Botswana			—	—
Southeast Asia				
Vietnam	—	—	▼	—
Cambodia	△	—	—	—
Laos	▲	—	▲	△

6. Effects on monitoring and evaluation

65. **Several aspects of project M&E were affected by COVID-19.** The analysis of midterm reviews shows that in 60 percent of projects challenges linked to COVID-19 were faced in conducting the midterm review. It was difficult for the international consultants to conduct country missions in such cases, the review teams met their data needs through virtual meetings and through the desk review of the project implementation–related documents. In some instances, the respective GEF Agency either relied exclusively on a local consultant or hired a team of international and national consultants. These arrangements allowed the review teams to gather data through field verification and on-the-ground consultations. COVID-19 affected the regular M&E and/or oversight activities for 19 percent of projects, because timely and regular monitoring visits, and regular meetings of project steering committees, were not always possible.

66. Similarly, several terminal evaluations report that because of COVID-19 related travel restrictions and public health risks, the evaluation team could not verify the results through field visits or could do so to a limited degree. In such cases, information on results was mainly obtained through monitoring reports, if available, or through online interviews and focus group discussions. Key informant interviews confirmed the challenges reported in the midterm reviews and terminal evaluations.

67. Because of COVID-19, it often took longer for Agencies to conduct a midterm review or terminal evaluation, especially when it involved heavy reliance on virtual modes of data gathering. Information gathered through key informant interviews suggests that it took longer to set up online interviews and talk to the relevant stakeholders. Where evaluators could travel to the project sites, it took longer to complete the visits. The evaluators often had to include time for quarantine. Sometimes the travel restrictions hit in the middle of the review/evaluation process. In a few instances, evaluators fell sick during travel, further increasing the time required to complete the data gathering phase. In some Agencies staff reported that they adapted the terms of reference for midterm reviews and terminal evaluations so that these could be carried out over a longer period of time.

68. **COVID-19 restrictions prevented projects from assessing progress on some indicators.** In many completed projects where outcomes were reduced by COVID-19, progress in environmental targets could not be measured because travel restrictions prevented project staff or community members from collecting monitoring data in the field. Challenges with M&E activities identified in documents were found at both the project level and protected area level in 30 percent of GEF projects. For example, the terminal evaluation of Project ID 5749 (El Salvador) reported that the follow-up of pilot microprojects on composting, biogas, and agropastoral systems with cattle breeders and farmers has been stopped in protected wetlands after the pandemic. Project ID 5089 (Mexico) mentioned in the terminal evaluation that an aerial survey for biological monitoring of endangered species in the protected areas of the Baja region was not carried out due to COVID-19. Similarly, the terminal evaluation of Project ID 4652 (China) mentioned that the pandemic made it difficult to complete activities related to infrared camera monitoring for wildlife, while the PIR of Project ID 8031 (Uzbekistan) acknowledged that snow leopard monitoring activities were suspended. Other projects such as Project ID 9157 (Ethiopia), Project ID 5510 (Papua New Guinea) and 5458 (Peru) reported that field monitoring visits and meetings were not possible because of travel restrictions. In the case of Ethiopia, the midterm review attributes the poaching of eight

elephants in one national park to the decline in patrolling due to lack of monitoring and review meetings at the site level.

69. Data collected during the COVID-19 period will need to be interpreted and attributed with caution. COVID-19–related lockdowns created atypical situations, and the observed changes were not always due to project activities, or within the project's control. For example, the *Achieving Low Carbon Growth in Cities through Sustainable Urban Systems Management in Thailand (LCC)* project (GEF ID 5086, UNDP) supported composting in 28 hotels on Samui and equipment to process coconut and milk waste into animal feed and fertilizer. The reduction in tourists and, overall, in the amount of commercial waste generated meant that these interventions were irrelevant, at least during the lockdown period. Climate change projects that aimed to increase public transport use as a way to reduce greenhouse gas emissions were in a similar position due to the overall decrease in ridership.

7. Response of the GEF Partnership

70. The GEF Partnership undertook several measures to address the challenges posed by the pandemic. These include measures designed to address long-term and medium-term challenges from COVID-19 and future pandemics; short-term challenges related to protecting GEF investments, adjusting its business processes to minimize disruption, and identifying ways to serve recipient countries better.

71. Soon after the onset of the pandemic, the GEF Secretariat established a task force of experts to support the GEF in addressing the COVID-19 crisis and to help prevent new ones. The task force prepared a White Paper on a GEF COVID-19 Response Strategy (GEF Secretariat 2020a) to explore ways to address the COVID-19 crisis and prevent future outbreaks, and to identify new avenues for GEF support. The White Paper emphasized the need to address the risks of future pandemic disease outbreaks through alliances among governments, civil society organizations, scientific institutions, development agencies, and financing bodies.

72. The GEF-8 Strategic Positioning Framework (GEF Secretariat 2022a) is built on the *Healthy Planet, Healthy People* theme and aims to deliver a blue and green recovery from COVID-19 through GEF-8 activities. The GEF-8 Programming Directions (GEF Secretariat 2022b) discusses the implications of the pandemic for the GEF's work and identifies ways through which the Integrated Programs and other activities would contribute to the recovery from COVID-19, resilience of targeted communities, and mitigating future pandemics.

73. The GEF Secretariat has regularly presented papers to the GEF Council providing updates on the effects of the pandemic on GEF activities, measures taken, and the road map for future actions. Several knowledge products prepared by the GEF Agencies, GEF IEO, and STAP, have also contributed to the knowledge base to address the challenges posed by the pandemic.

74. **Several actions by the Secretariat were aimed at addressing the challenges faced in managing the activity cycle.** On March 21, 2020, the GEF CEO extended by three months the deadline for CEO Endorsements and Approvals for projects approved after the new GEF Policy (2019) became effective. Subsequently, more measures were undertaken to provide for longer extensions. The Secretariat added new features to the GEF Portal to manage the activity cycle better, e.g., support alerts related to approaching deadlines, and to facilitate submission of the documentation, related extension of the deadlines. The GEF IEO also relaxed the deadline for preparation and submission of terminal evaluations. Through an email dated March 19, 2020, the

Director of the IEO extended by six months the deadline for preparation of terminal evaluations for projects affected by COVID-19.

75. The GEF Secretariat issued "Project Design and Review Considerations in Response to the COVID-19 Crisis and the Mitigation of Future Pandemics" (2020) to provide guidance to Agencies on addressing COVID-19 issues in project designs. The Secretariat also made changes to the PIF template to facilitate discussion on the topic in the proposals. This guidance led to an improved discussion in project proposals on themes related to COVID-19, such as increased attention to risks from future pandemics, greater attention to factors that may affect results, and scenario-based planning.

76. GEF Agencies took several measures to address the impacts of COVID-19 pandemic on the recipient countries and their activities. Several Agencies such as the World Bank and FAO established a task force to address the challenges posed by the pandemic. Some of the Agencies such as the World Bank, IFAD, and Conservation International, raised funds to address the pandemic. Almost all Agencies convened meetings of stakeholders to build and strengthen partnerships to address the pandemic.

77. Several Agencies, including the multilateral development banks and UN Agencies, established dedicated rapid response and financing facilities to address COVID-19–related needs (table 2). These facilities often provided funds at flexible terms using accelerated processes. For example, in 2020, the Asian Development Bank (ADB) established a rapid and flexible financing instrument, the COVID-19 Pandemic Response Option. These funds, provided through quick-disbursing countercyclical loans, were earmarked to help governments contain the disease; strengthen health systems; assist distressed businesses; support key sectors of the economy; and expand social protections for people affected by the crisis (ADB 2021b). Similarly, early in the pandemic UNDP launched a COVID-19 Rapid Response Facility funded through its existing resources. Through this Facility, 129 countries were able to access up to $250,000 for initial emergency actions. The Rapid Response Facility subsequently evolved into a Rapid Financing Facility, which provided additional funding support to UNDP's country offices.

78. Most GEF Agencies provided financing to support recovery from the pandemic and to mitigate risks to their existing investments. For example, IFAD's Rural Poor Stimulus Facility was launched in 2020 to support rural people economically and contribute to the availability of food. IFAD raised about $53 million from its members to finance these activities (IFAD 2021). All IFAD-supported country programs that were at risk of not achieving their development outcomes due to COVID-19 were eligible to receive financing from this fund.

79. Financing was generally used to provide for technical assistance, supply of goods and services, vaccine development and delivery, and to mitigate risks to activities that were already under implementation. For example, UNIDO launched a global health industry initiative which supported the local manufacturing of high-quality healthcare products, including vaccines (UNIDO 2022a). FAO provided access to vaccines as part of their "One Health" approach under the COVID-19 Response and Recovery Programme (FAO 2020c). IDB mobilized $182 million to purchase and deploy COVID-19 vaccines (IDB 2022). ADB's Asia Pacific Vaccine Access Facility (APVAX) helped countries procure COVID-19 vaccines (ADB 2021b). The World Bank provided technical support and advisory services to the COVID-19 Accelerator, a global coalition supporting the development of vaccines and their deployment (World Bank 2020a). Later, the World Bank provided financial

support for the procurement of vaccines along with support for vaccine cold chains, worker training, data and information systems, and communications promoting vaccine acceptance (World Bank 2021).

80. Almost all Agencies developed knowledge products to serve the needs of their staff, policy makers, and affected communities. For example, Conservation International produced several knowledge products related to COVID-19, including briefs, policy recommendations, factsheets, and blog posts. Conservation International also organized two online events as a part of their "People Need Nature" speaker series on the impact of COVID-19 on Amazonia and the economics and ecology of pandemic prevention. IFAD, in collaboration with the agencies of their recipient countries, produced several rapid assessments of agriculture and rural sectors (FAO Council et al. 2021).

81. Agencies gave attention to understanding the effects of COVID-19 on their activities. The GEF Annual Performance Report 2021 (GEF IEO 2021) reported that PIRs for all or almost all projects implemented by UNDP, UNIDO, IUCN, IFAD, FAO, and Conservation International, reported on the effects of COVID-19. High incidence of the reporting on COVID-19 in PIRs submitted by UNDP was attributable to the inclusion of a section in the PIR template for reporting on the topic. UNDP also introduced a COVID-19–related marker to track the use of funds that were repurposed for addressing COVID-19–related challenges. The marker helped in tracking the extent of repurposed funds and the nature of the shift.

82. Several GEF Agencies, such as ADB, the African Development Bank, FAO, IDB, IFAD, and the World Bank adapted their business and activity cycle processes to facilitate implementation of the COVID-19–related initiatives. For example, IDB approved several exceptional measures including temporarily increasing the policy-based loans limit, integrating a "COVID lens" into its impact scoring system to ensure project alignment with protections for vulnerable populations and micro, small, and medium enterprises (IDB 2021b). IDB also developed "project prototypes" to accelerate the project development and approval process. ADB streamlined and fast-tracked its procurement process and other business practices as part of its response to the pandemic. These included waiving some project preparation and approval requirements, as well as extending deadlines for completing annual audits (ADB 2020; ADB 2021b).

Table 4: Covid Response Measures by GEF Agencies

GEF Agency	**Agency type**	**Rapid Financing Facility**	**Financing type**		**Activities undertaken to address Covid-19**			
			Loans	**Grants**	**Technical Assistance**	**Delivery of Goods and Services**	**Vaccine development, vaccination programs**	**Knowledge Products**
CI	Non-bank							√
IUCN	Non-bank			√	√	√		√
WWF-US	Non-bank							√
ADB	Bank	√	√	√	√		√	√

AfDB	Bank	√	√	√	√		√	√
BOAD	Bank		√	√				
CAF	Bank		√	√	√			√
EBRD	Bank	√			√	√		√
IDB	Bank	√	√	√	√		√	√
WB	Bank	√		√	√	√	√	√
IFAD	Bank	√	√	√	√	√		√
DBSA	Bank		√			√		
FUNBIO	Non-bank			√	√	√		
UNDP	Non-bank	√			√	√	√	√
UNEP	Non-bank				√			√
FAO	Non-bank		√	√	√	√	√	√
UNIDO	Non-bank				√	√	√	√

83. In addition to measures adopted at the corporate level, Agencies also took several actions in response to COVID-19 at the project level. Generally, they were able to find creative ways to address the challenge at hand. Key informants from GEF Agencies noted that they revised the work plans of affected GEF projects, used virtual platforms to facilitate stakeholder engagement, and used local consultants to reduce the need for international travel. Project ID 9374 (Peru) for example, initially started to conduct some of these activities through mobile phone and then moved to online modes. Similarly, the midterm review mentioned that they started to use GIS and satellite images for remote monitoring, including monitoring land use and land cover. The midterm review acknowledges that the project management team needed to invest in training for the team to use these technologies effectively. The midterm review also mentioned that awareness about national protected area issues was conducted by radio amid the COVID-19 crisis. Project ID 5510 (Papua New Guinea) reported in the PIR that the pandemic exacerbated transportation issues for conservation coffee produced by a cooperative of farmers within the protected areas. To mitigate such issues, the project was reported to have commenced planning to develop operating procedures for the cooperative to ensure transport reliability and cost-effectiveness. Lastly, Project ID 3952 (Algeria) mentioned in the PIR that during the pandemic they focused on promoting national tourism to mitigate the adverse effects of changing international circumstances.

84. It is important to note that most of the projects in which delays or disruption of project activities were experienced because of the pandemic requested a no-cost project extension. Key informants also remarked that their communications with the GEF Secretariat remained largely unaffected because they were able to transition easily to virtual platforms, and reduced travel increased their mutual accessibility. They, however, noted that it was often difficult to

communicate with the GEF operational focal points and engage with the project stakeholders, because internet access varied greatly across countries and was often limited in rural areas.

IV. CONCLUSIONS

85. **COVID-19 primarily presented challenges in the implementation of some project activities, leading to delayed implementation or, in some cases, cancellation. Project monitoring was adversely affected.** Flexibility in the Project Cancellation Policy (2018), and subsequent decisions by the GEF Council to increase the duration of permissible extensions, allowed the GEF Secretariat and GEF Agencies to effectively address the challenges related to project preparation.

86. **Design features in projects have improved and demonstrated a shift to addressing resilience; addressing gaps in climate risk screening and scenario-based planning would be useful.** GEF projects are including several design features that are associated with systems thinking, resilience, and adaptive management. However, a substantial number of project proposals do not discuss the use of scenario-based planning, assumptions related to theory of change, and use of climate risk screening. Addressing these gaps is important for GEF activities to be more resilient and promote adaptive management.

87. Despite the challenges encountered in most GEF projects, outcomes were affected in less than a third of the projects; projects in the biodiversity focal area were more likely to be affected. Most GEF-supported protected areas experienced fire frequency and deforestation rates within the predicted range with some exceptions; GEF intervention areas had improved local conditions of vegetation in 9 of the 10 study countries, suggesting greater resilience. The impact of COVID-19 on nighttime lights, a proxy for economic activity within and around GEF intervention areas, varied but a decline could be observed in most countries. On the other hand, some projects reported unexpected, enhanced outcomes from using digital tools as a direct effect of the COVID-19 pandemic. In several cases, project activities became an opportunity to respond to COVID-19 needs for food security, safety, and sanitation while also meeting environmental targets.

88. **The evidence on the effects of the pandemic in protected areas highlights the risks associated with excessive reliance on livelihoods based on ecotourism, highlighting the need for greater diversification in income-generating activities.** GEF activities focused on biodiversity conservation, especially protected area management, were more affected by the pandemic. The pandemic showed that ecotourism-focused rural livelihoods are vulnerable to reduced tourist influx and increase risks to sustainability. However, livelihood activities in agriculture, forestry and fisheries were able to continue and provide food security at the household level during the lockdowns. Therefore, in GEF projects attention to a wider and diverse suite of livelihood activities may be important to reduce risks and increase resilience to shocks.

89. **GEF projects and Agencies adapted to minimize the effects of the shutdowns through the application of technology and a shift to virtual platforms, but the shift had implications for the breadth and depth of stakeholder engagement.** A few projects turned to remote sensing to collect better-quality forestry data than they previously had, and in the process strengthened national capacity in this aspect. Many regional projects found that shifting to online platforms included more participants, conserved scarce funding for operations, and in some cases diverted resources towards strengthening human resources or implementing additional on-the-ground interventions. However, communications with the operational focal points and stakeholders in

remote rural areas faced difficulties, especially those that involved crucial follow-up to ensure sustained outcomes. The shift to virtual platforms in some cases reduced the effectiveness of meetings that required stakeholders to reach agreement, and of some of the trainings. Given that dependence on the virtual platforms will continue, a judicious balance between virtual and in-person interactions will be necessary.

90. Responsive and adaptive project management is crucial for mitigating the effects of COVID-19. Project teams that quickly adapted their mode and frequency of communication and field implementation successfully mitigated and overcame the negative effects of COVID-19 and other contextual challenges. They were particularly effective when they developed and collaborated with partners who had strong ownership of the project's objectives, especially at the local level.

V. RECOMMENDATIONS

91. The GEF Secretariat should provide guidance and assist GEF Agencies in incorporating important features associated with systems thinking, resilience, and adaptive management in all project proposals.

92. The GEF Agencies should ensure that GEF projects include a broad suite of livelihood options and support diverse income-generating activities. GEF projects should diversify strategies and actions for risk mitigation and build the resilience of local communities to various shocks.

93. The GEF Agencies should strengthen remote supervision by using a variety of appropriate tools and methods such as rapid surveys, satellite data, and GIS-based technology for timely response and adaptive management. M&E in a pandemic or similar difficult situation is challenging, and these tools and methods can help identify areas which require priority attention, as well as being useful in planning and monitoring activities over time.

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Part A1. List of publicly accessible documents that address COVID-19[4] and covered

Annex A1.a: List of publicly accessible documents that address COVID-19[5]

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[4] This list includes documents that were publicly accessible at the websites of the GEF Agencies. The internet search of these documents was conducted in July 2022. The gaps in this list will be addressed by inviting the Agencies to validate the list and seek their help in addressing the gaps.

[5] This list includes documents that were publicly accessible at the websites of the GEF Agencies. The internet search of these documents was conducted in July 2022. The gaps in this list will be addressed by inviting the Agencies to validate the list and seek their help in addressing the gaps.

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Annex B:

B.1 Leading Questions for Key Informant Interviews

1. What are challenges that the GEF Policy and Operations Team faced due to COVID-19?

a. Effects on the project appraisal process?

b. Communications with the Agencies?

M&E activities

c. Effects on GEF Portal, its use, update?

d. Other challenges?

2. How has your team responded to these challenges? Which measures were prioritized and why?
    a. Decisions regarding cancellations and extensions, and its effect?
    b. Other measures taken
3. Which measures have been effective, and which have been less so?
4. What are the key lessons from the Pandemic? How are these lessons informing (or may inform) activity cycle management?

Annex B.2 Leading Questions to the GEF Secretariat – Programs

1. What are challenges that the GEF Partnership has faced due to COVID-19?
2. How has GEF responded to these challenges? Which measures were prioritized and why?
3. Which measures have been effective, and which have been less so?
4. How has the pandemic affected the programming priorities of GEF?
5. Has the pandemic affected how project proposals are reviewed? How?
6. What are the key lessons from the Pandemic? How are these lessons informing (or may inform) GEF strategies, programming, and projects?

Annex B.3 Leading Questions to the GEF Agencies

1. **Effect of the Pandemic:** How has the COVID-19 pandemic affected your activities? How has it affected your portfolio of GEF supported activities?
    a. project preparation: e.g. effect of guidance by GEF on risks screening, internal guidance of UNDP; and effect on stakeholder consultations, co-financing commitments, and preparation delays.
    b. Implementation: e.g. effect on procurement, stakeholder consultations, meetings and travel, project staff, materialization of co-financing, implementation delays, cancellations, cost increase – cost savings, repurposing of funds, restructuring of projects, M&E activities.
    c. results of projects: e.g. effect on environmental results pursued; attribution of observed results to GEF project in light of the pandemic .

2. **Agency Response:** How did your Agency respond to the COVID-19 pandemic at institutional level and project level? What actions did it prioritize and why? How has the response evolved?
    a. Institutional level: What were the challenges at the institutional level? e.g. policies and guidance; safety protocols; work arrangements; scenario based planning; specific programs launched.

b. Project level: What were the major challenges at the project level? Which activities were prioritized in project preparation and implementation? How were the project level challenges addressed by the teams?

3. **Lessons:** What are the key lessons from the COVID-19 pandemic? Which of these lessons have you been able to incorporate in your work? What are the lessons that are relevant for GEF?

Annex B.4 Codebook for Data Extraction: Effect of COVID-19 on GEF Projects

GEF COVID-19 EFFECTS	
1	**BASIC INFORMATION**
	GEF
1.1	ID
1.2	GEF Phase
1.3	Focal Area
1.4	Lead Agency
1.5	Country
1.6	Actual Start Date
1.7	Expected Completion Date
1.8	Actual Completion Date
	IMPLEMENTATION
2.1	Implementation effects
	Activities delayed
	Activities on hold or suspended
	Activities cancelled
2.2	Activities affected
	Procurement, delivery of goods & equipment
	Installation, manufacturing, construction
	Paperwork: Approvals, licensing, certification
	Fieldwork, onsite data collection
	Training, capacity building
	Stakeholder consultation
	Meetings, workshops and conferences
	Evaluation

Other in-person activities

Other activities

2.3 New Activity: COVID response

Provision of PPE to staff or community

Small grants

Health information

Access to water, food or healthcare

Technology access or assistance

Other

2.4 New Activity: COVID activity

[open]

2.5 Budget and financial effects

Low financial delivery

Increased costs

Budget allocation or adjustment

Budget increase reported

Payment issues

Decreased or delayed co-financing

Other

2.6 Staffing effects

Reduced staff (Furlough, layoffs or hiring freezE)

Increased staff

Procurement delayed

Health and well-being

Financial security

Equity

Other

2.7 Demand for services

No change

Increased

Decreased

3	**MITIGATION**
3.1	Mitigation measures
	Contingency or risk planning
	Shift to virtual events or activities
	Shift to teleworking by project team
	Adapted in-person (reduced capacity, social distancing
	Adjust scheduling of activities to prioritize desktop
	Accelerate implementation
	Hire or shift to locally-based staff
	Extension requested
	No measures reported
3.2	Other mitigation measures
4	**RESULTS**
4.1	Effects on achievement of results
	Stalled
	On track
	Adversely affected
	Enhanced
4.2	Risks to goal attainment
	No change
	Increased risk
	Decreased risk
4.3	Other effects on results
5	**SYSTEMIC EFFECTS**
	(No change / Increased / Decreased / Not reported)
	Awareness of biodiversity
	Pressure on biodiversity and other natural resources
	Mass migration
	Enforcement and regulation of environmental laws
	Government capacity / priorities
	Community human well-being and rights

Environmental incentives
Economic stability
Other reported systemic effects

This codebook was first use for analysis on COVID-19 presented in Annual Performance Report 2021 (GEF IEO, 2021).

Annex C: Draft Instrument for survey of project documents

Section 1. Discussion on pandemics/public health crisis in project documents
Project documents mention pandemics and/or public health crisis
Project documents discuss how a pandemic and/or a public health crisis may affect implementation
Project documents discuss how a pandemic and/or a public health crisis may affect results
Project documents discuss how a pandemic and/or a public health crisis may affect the targeted system
Project documents discuss how the project will contribute to recovery from COVID-19
Project documents discuss how COVID-19 has informed the project design
Based on project documents, how has COVID-19 informed the project approach? Explain. (Qualitative)
Section 2. Systems Thinking: System description
Project documents describe the system that the project is trying to influence
Project documents describe the boundaries of the targeted system (including its scale, scope and geographical boundaries clarifying what is included and what is not included).
Project documents describe the system components/sub-systems
Project documents identify the components/subsystems that the project is trying to influence
Systems Thinking: Theory of change
Project documents discuss the project's theory of change
Project documents discuss how the project will achieve its main results
Project documents discuss factors that could affect the achievement of results
Project documents discuss the inputs that the project will provide
Project documents discuss key assumptions of the theory of change
Project documents discuss how project will assess whether the key assumptions hold
Systems Thinking: system resilience
Project documents mentions "resilience"
Project documents discuss known factors that may destabilize the system of concern
Project documents discuss mitigation of risks to the system
Project documents discuss general resilience of the system targeted by the project
Resilience as project benefit
The concept of resilience in considered in project design
Project benefits include supporting resilience of the targeted system or subsystem
Describe the resilience related benefit of the project (Qualitative)
Describe how GEF support will make the targeted system more resilient (Qualitative)
List of the areas where resilience benefits are expected (e.g. livelihoods, governance arrangements, society, infrastructure, cities, agriculture, ecosystem, etc.)
Project integrates resilience as measure for risk management
Project used climate risk screening and/or climate risk assessment to design the project
Project design – disaster preparedness
Project documents mention disaster preparedness
Project documents discuss disaster preparedness
Project includes measures to enhance disaster preparedness of targeted communities
Project design – redundancy/alternatives/diversity
The project documents mention alternatives to the approach implemented by the project (plan B)
The project documents provide details of one or more of the alternative approaches (Plan B, C….).
The project documents discuss when the alternatives (Plan B, C or…) may be appropriate
The project budget provides for contingency funds
The project design targets a diverse group of actors with overlapping roles or functions in the system
The project design addresses multiple components of the targeted system that perform similar functions

Project feedback loops
M&E plan design incorporates regular collection of data on key indicators of the targeted system
M&E plan design incorporates regular collection of data on key outcome/impact indicators
M&E plan includes indicators to measure changes in system resilience
M&E plan incorporates regular analysis of M&E data
Project documents discuss changes that will be made in case a key assumption or assumptions do not hold
Project design – stakeholder involvement
Key stakeholders of the project have been identified
Key stakeholders were involved in development of the project
Key stakeholders were consulted to develop/validate the project's theory of change
Key stakeholders will have an active role in project governance
Key stakeholders will be involved in project implementation/execution
Project supports regular interaction among multiple government bodies for development of plans/rules
Project supports regular interaction among multiple government bodies for enforcement of rules and/or implementation of plans