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Conference of the Parties to the Minamata Convention on Mercury
Fourth meeting
Online, 1–5 November 2021*
Item 4 (e) (i) of the provisional agenda**

Matters for consideration or action by the Conference of the Parties: financial resources and mechanism: Global Environment Facility

The eighth replenishment of the Global Environment Facility trust fund: draft programming directions and strategic positioning framework

Note by the secretariat

1. As is mentioned in the note by the secretariat on the eighth replenishment of the Global Environment Facility (GEF) trust fund (UNEP/MC/COP.4/10), the annexes to the present note contain the draft GEF-8 programming directions and GEF-8 strategic positioning framework documents prepared for the second GEF-8 replenishment meeting, scheduled to take place from 29 September to 1 October 2021. The documents are presented without formal editing, as posted[1] on the GEF-8 replenishment website on 30 August 2021 in advance of the second GEF-8 replenishment meeting.

2. It is expected that the programming directions and strategic positioning framework will be finalized during the third GEF-8 replenishment meeting, scheduled to be held from 17 to 19 January 2022. The documents will guide the programming of GEF-8 funding for individual projects, including projects undertaken by GEF in its role as part of the Minamata Convention financial mechanism pursuant to article 13.

3. The following sections of the programming directions and strategic positioning framework may be particularly relevant to parties in coordinating to prepare for the replenishment meetings at the national level and through relevant national and regional processes. The introduction to the GEF-8 programming directions draft document, on page 2 of annex I of the present note, explains the GEF-8 architecture, which combines integrated programmes with focal area actions. The chemicals and waste focal area strategy, which begins on page 179 of the present note, describes the approach for most of the Minamata Convention programmatic work carried out by GEF pursuant to the guidance provided by the Conference of the Parties. Additional programmatic work will be conducted through the elimination of hazardous chemicals from supply chains integrated programme, which begins on page 88. Programming relevant to the Minamata Convention may also be conducted through other focal areas, integrated programmes and global programmes mentioned in the document.

4. The GEF-8 strategic positioning framework document, found on page 245 of annex II of the present note, describes the "Healthy Planet, Healthy People" framework within which the GEF-8 architecture is situated. The framework recognizes the interdependency between human well-being and a healthy environment.

* The resumed fourth meeting of the Conference of the Parties to the Minamata Convention on Mercury is to convene in person in Bali, Indonesia, and is tentatively scheduled for the first quarter of 2022.

** UNEP/MC/COP.4/1.

[1] https://www.thegef.org/council-meetings/gef-8-replenishment-second-meeting.

Annex I

GEF/R.8/05

August 30, 2021

Second Meeting for the Eight Replenishment of the GEF Trust Fund
September 29 – October 1, 2021

GEF-8 Programming Directions
(PREPARED BY THE GEF SECRETARIAT)

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GEF-8 PROGRAMMING DIRECTIONS

INTRODUCTION

The Global Environment Facility (GEF) is the largest and most experienced multilateral fund dedicated to addressing environmental threats to the planet. The GEF's role is to support developing countries to prioritize environmental action that delivers global environmental benefits. The GEF is the only entity whose mandate embraces all facets of a healthy environment, from biodiversity, to climate change, to land degradation, to international waters, and including chemicals and waste.[1] Established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems, the GEF's core mission is to help ensure the protection and sustainable use nature, upon which all life depends.

The GEF is mandated with investing in Global Environmental Benefits (GEBs) that respond to national and international commitments made within the realm of the Multilateral Environmental Agreements (MEAs) and their associated protocols. This is accomplished through dedicated focal area windows that ensure targeted investments in response to guidance from the MEAs, while at the same time anchoring integrated approaches that deliver impactful outcomes for the people and planet. Additionally, ensuring that these GEBs serve as the basis for achieving several of the fundamental Sustainable Development Goals (SDGs) that underpin the health of the biosphere and on which most other SDGs depend on, is crucial.

One of the GEF's defining characteristics (and its comparative advantage) lies in the fact that it is the financial mechanism for the three Rio Conventions (CBD, UNFCCC, and UNCCD) and two Chemical Conventions (Stockholm and Minamata), along with acting in other global environmental areas such as International Waters and Forests. Through the focal area windows, the GEF has played a critical role in supporting developing countries to meet their obligations and commitments under these conventions. The GEF also acts in other global environmental areas related to International Waters (marine and freshwater systems) and Forests and has contributed significantly in safeguarding these ecosystems throughout the developing world.

According to the latest IPCC Report it is now unequivocal that human-caused emissions, from burning fossil fuels and deforestation are responsible for the observed warming of the Earth's atmosphere, oceans and land.[2] In the face of the scale and urgency of the threats facing the planet, and the emerging opportunities and needs to accelerate and scale up the transformation of key economic systems to deliver positive impacts for the global environment,

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Early findings from the IEO's ongoing evaluation on "The GEF's comparative advantage in supporting a greener future" show strong evidence of the GEF's strategic role in this space. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press.

the GEF cannot afford to stand still.[3] Within the context of all of the Multilateral Environmental Agreements, for which the GEF serves as a financial mechanism, major international commitments have been made and signed on by countries for delivering significant global environmental benefits in the next decade (to 2030). It is imperative that the GEF continue to ramp up its programming both in scale and also impact.

Science, environmental practice, and economic information are indicating that the integration of environmental actions towards addressing common drivers of degradation is a necessary condition to restoring the health of the environment and ensuring equitable and prosperous sustainable development. Since its inception, the GEF has promoted integrated programming as a key strategy for harnessing synergies across focal areas (see Box 1). The Integrated Approach Pilot (IAP) programs and other larger-scale systemic investments introduced during the GEF-6 cycle were the first to focus explicitly on tackling major drivers of environmental degradation. In GEF-7, the Impact Programs were launched to promote large, integrated, and impactful programs across more sectors and address multiple drivers of environmental change.

Much learning is emerging from these programs that can be used to ensure the most effective and efficient use of GEF resources for delivering longer-term and more durable global environmental outcomes. Also, emerging findings from the OPS-7 study on Innovation supports the integrated approach as being more conducive to the incorporation of innovation in multiple sectors as part of GEF's business model.[4]

Findings of the GEF-6 and GEF-7 programming cycles indicate that programs addressing the drivers of environmental degradation using an integrated framework result in more impact per unit of investment than comparable GEF investments, as well as creates the conditions for transitions towards lasting systems transformation. This outcome was also underscored in the recent MOPAN Assessment of the GEF which highlighted the need for the GEF to continue to use its limited resources in the pursuit of transformational change and assessed integrated programming to be more relevant to the type and complexity of global environmental challenges.[5]

Also see, GEF/R.8/07 GEF-8 Strategic Positioning Framework
GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"
MOPAN 2017-18 Assessments, Global Environment Facility, http://www.mopanonline.org/assessments/gef2017-18/

Box 1. Evolution of Integrated Programming in the GEF

GEF invests in projects designed by countries to address specific focal area objectives, which are developed in accordance with guidance from the relevant conventions that the GEF serves as financial mechanism. Depending on country-specific needs reflected in the design of projects and programs, the use of GEF grants has evolved over the years from multi-focal area to integrated approaches. The evolution largely reflects the increasing need for GEF resources to harness better integration and opportunities for generating multiple global environmental benefits (GEBs).

Multi-focal Area (MFA) Programming

Multi-focal area (MFA) programming involves the use of GEF financing from more than one GEF focal area to address a combination of GEF objectives and outcomes under each of the focal area involved. MFA projects have increased over the years, accounting for 13% of GEF funding GEF-4 and 28% in GEF-5. MFA programming presents a myriad of opportunities for countries to harness GEF financing based on their own needs and priorities for generating GEBs. MFA programming was also key to advancing the SFM program, which was designed to incentivize countries toward harnessing cross -focal area synergies for safeguarding globally important forest landscapes. A major limitation of MFA programming is the inherent expectation that GEBs from projects will be proportional to the amount of focal area resources invested. This is not only difficult to establish, but also undermines the potential for harnessing synergies and avoiding negative tradeoffs.

Integrated Approach Programs

The "integrated approach" was formally launched as a programming option during GEF -6 with three pilot programs that were structured around major emerging drivers of global environmental challenges: two were global programs on urbanization (Sustainable Cities) and commodity-driven deforestation (Commodities), and the third on sustainability and resilience for food security in the drylands of Sub-Saharan Africa. GEF financing for the programs was not "siloed" by focal area, but rather invested in a coherent manner to promote the sustained flow of multiple GEBs, while ensuring that progress in any dimension of the global environment does not negatively affect other related objectives. The integration therefore creates opportunities for projects to harness synergies and avoid negative tradeoffs. Because of the direct link with sectoral priorities underpinning economic growth and development in the countries, the prospect for multi-stakeholder engagement was greatly enhanced by the programs.

Impact Programs

Building on the GEF-6 experiences, a set of Impact Programs were introduced in GEF-7 to promote transformational shift in key economic systems that in turn meet multiple convention goals and form an integral component of each focal area strategy. GEF financing closely matched key objectives and guidance received from the conventions and are complemented by priorities that can best be delivered as separate investments under each of the focal areas. This is consistent with the Leaders' Pledge for Nature which calls for better integration across the multi-lateral agreements. Through impact programs the GEF is helping countries pursue holistic and integrated approaches that deliver impactful outcomes, and in line with their national development priorities. The focused set of country-driven priorities enhances integration among GEF investments and creates opportunity to crowd-in private sector financing.

Integrated Programs

With growing urgency to turn the tide on pressures and threats facing the planet, integrated programming will be further harnessed as a means to scale up investments for global environmental benefits during GEF-8 and beyond. In GEF-8, integrated programs are being proposed to promote blue and green recovery from the COVID-19 pandemic. The programs are also responsive to global aspirations for development pathways that nature-positive, carbon-neutral and pollution-free pathways, including commitments by mulit-lateral environmental agreements to address interdependencies between human well-being and a healthy planet. The GEF-8 programming architecture specifically addresses the critical need for ensuring that GEF investments are targeted toward tackling the breakdown in food, energy, urban, health, and natural systems that underpin human development.

As a general rule, GEF investments should be designed to produce lasting and transformative impacts. Several guiding principles have been identified and articulated with the support of STAP:

Integration across sectors, thematic areas and drivers:

Address ecological, economic and social drivers and outcomes. This includes consideration of factors such as cultural norms, consumption patterns, economic demand and incentives, as well as the distribution of costs and benefits from investment activities. For example, how well do investments in fisheries management also address associated livelihood improvements, or the incentives driving illegal fishing?
Avoid leakage (displacing negative impacts elsewhere). This includes displacement of destructive production practices as well as flows of toxins and waste. For example, are efforts to halt deforestation in one region diverting this pressure to other intact forest landscapes?
Work across sectors and scales. This includes the linkages between biodiversity conservation, habitat protection and restoration, food systems, transportation, energy production, chemical pollution, and supply chains. For example, how well does urban planning integrate wastewater treatment, biodiversity conservation, green infrastructure, and green energy for sustainable cities development? Working across scales may involve integrating the local objective (better agricultural yields), with the project objective (improved soil fertility), with focal area objective (reduce land degradation), and finally with the integrated program objective (restore degrade ecosystems).

Transformative Investments:

Credibly address one or more transformation levers identified in GEF strategy. For GEF-8, these levers are provisionally identified as governance and policy, financial leverage, innovation and multi-stakeholder dialogue.
Take purposeful programmatic risk to achieve impact at scale. This recognizes that transformational change requires novel approaches in the domains of policy and finance, technology and management practices, and social change. For example, how are motivations (e.g. social norms, attitudes, beliefs) being addressed?

Durable Investment:

Design for resilience in the face of multiple, plausible future scenarios. This includes explicit consideration of climate risk along with other dimensions of environmental change.
Build institutional and financial mechanisms to sustain impact. This recognises that the greatest opportunities to scale impact typically come after the period of GEF investment. For example, what kinds of twinning arrangements or other capacity strengthening measures will enable the effectiveness of transboundary governance institutions for Large Marine Ecosystems (LMEs)?

GEF-8 Programming Architecture

The GEF-8 programming architecture builds on the successful approach in GEF-7 of investing in integrated programming and focal area actions to maximize potential for more impactful outcomes to ultimately support Convention needs and expectations. In GEF-8, we intend to encourage countries to move more of their programming through eleven (11) Integrated Programs that address the major environmental needs of the planet for which the GEF has a mandate. The IPs were identified through a consultative process involving experts from the GEF Partnership, who also reinforced their critical importance for transforming key economic systems. This will be complemented with more targeted GEF-8 investments along focal area specific entry points to ensure that all Convention commitments are also addressed (Figure 1).

At core of the overall GEF-8 architecture is the *Healthy Planet, Healthy People* framework,[6] which was adopted because of the explicit recognition of the interdependency between human well-being and a healthy environment (Figure 2). This interdependency is key to ensuring that GEF investments are targeted toward tackling the breakdown in food, energy, urban, health, and natural systems that underpin human development. Hence GEF investment through the integrated programs will not only generate global environmental benefits, but also create innovative pathways for transforming these systems toward sustainability and resilience.

The proposed integrated programs collectively address major drivers of environmental degradation and/or deliver multiple benefits across the many thematic dimensions the GEF is mandated to deliver. The thematic scope and geographical coverage of the programs are consistent with global aspirations for development pathways that are nature-positive, climate-neutral and pollution free. They are also intended to accommodate the diverse range of country needs for investing in a blue and green post-COVID-19 recovery. Many of the priorities are also making use of increasingly more relevant global or regional platforms that are attracting a multitude of stakeholders and resources in response to political commitments. Integrated programs also allow the GEF to better crowd-in other stakeholders, including the private sector, enhance knowledge sharing and learning, and ensure a more effective use of GEF resources.

While the integrated programs will deliver substantial global benefits across the different focal areas of the GEF (Figure 1), many elements of guidance from conventions can be best dealt with through distinct focal area complementary investments directed at objectives not fully reflected within the set of proposed integrated programs. These investments are presented in detail within the individual Focal Area Investment Frameworks for Biodiversity, Climate Change, Land Degradation, International Waters, and Chemicals and Waste.

[6] See GEF's Strategic Positioning Framework document GEF/R.8/07

Figure 1. GEF-8 Programming Architecture and the Contribution of Integrated Programs to GEBs

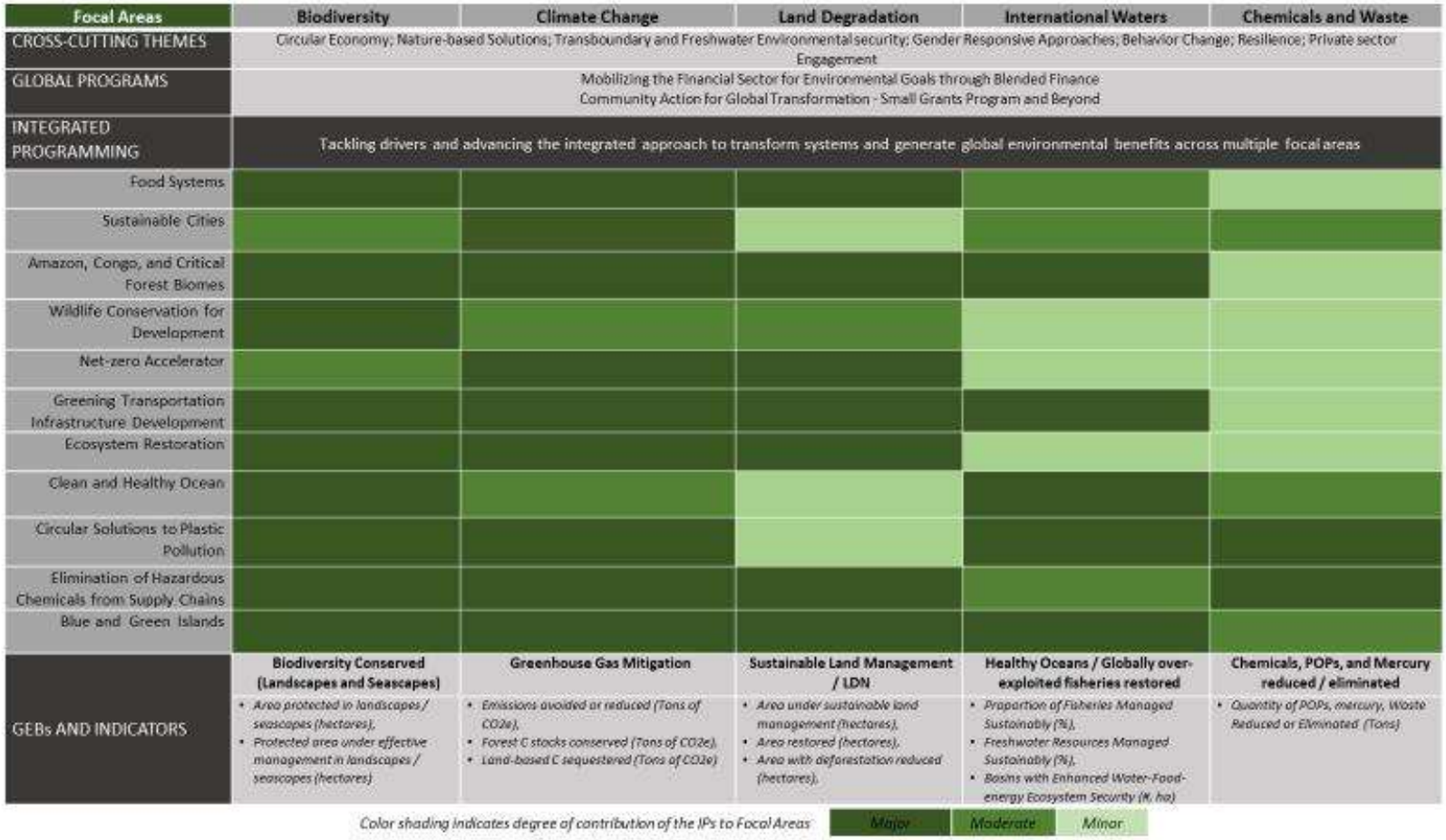
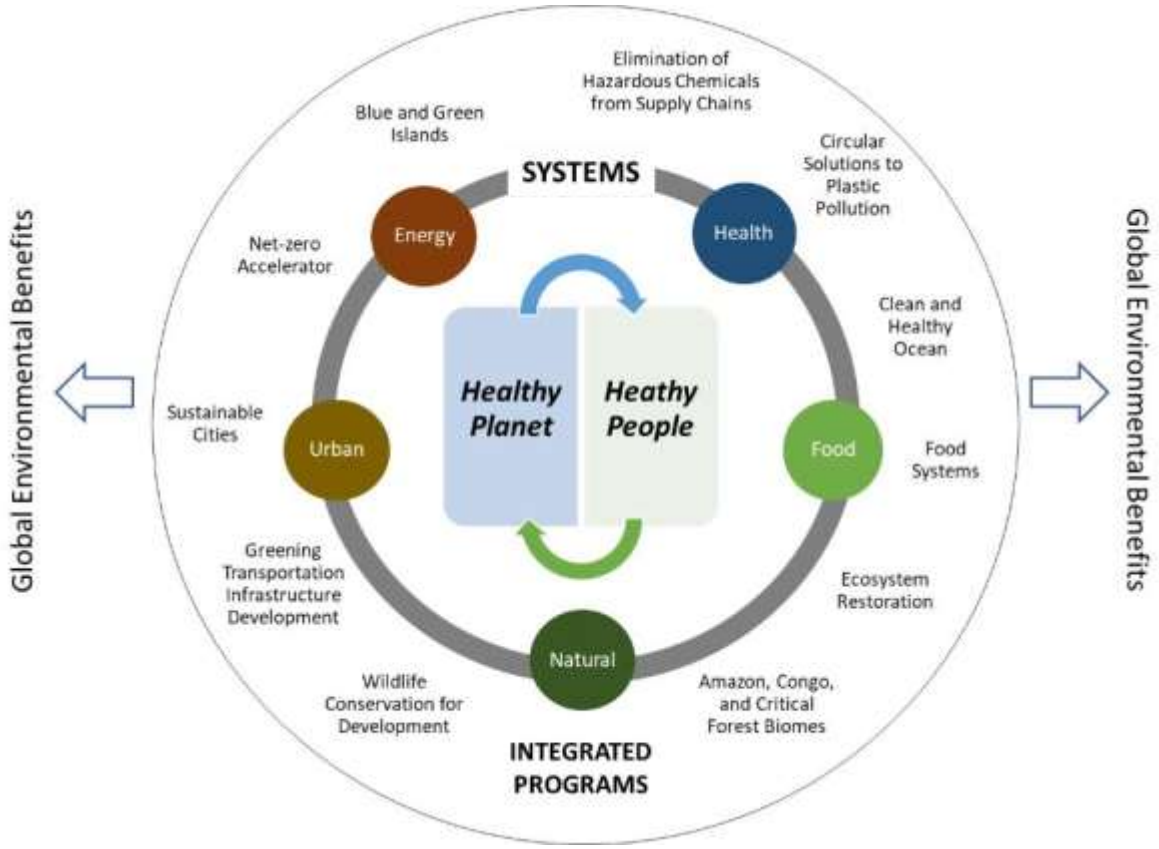


Figure 2. Integrated Programs for Systems Transformation and Global Environmental Benefits



INTEGRATED PROGRAMS

Food Systems Integrated Program

Introduction

Environmental Impacts of the Global Food System

Agricultural systems are essential for the health, food security and nutrition, and economic well-being of people around the globe. While there are many forms of agriculture that support healthy people and a healthy planet, food systems globally are also a key contributor to environmental degradation. Agriculture occupies about 37% of the world's total land area,[7] and unsustainable agricultural expansion has resulted in significant loss of forests and biodiversity, land and soil degradation, and considerable greenhouse gas (GHG) emissions. Cropland for animal feed and pastures accounts for an estimated 3.43 billion hectares (Figure 3), which is a major contribution to current global land use. Further, a rising global population and changes in consumption patterns towards higher protein diets will result in more carbon-intensive agriculture that will further strain global land-use systems. The many drivers of agricultural land use reinforce the need for a holistic and integrated supply chain approach in transforming food systems.

Agriculture accounts for 70% of global freshwater withdrawals[8] and is responsible for up to 80% of global deforestation. Drivers linked to food production cause 70% of terrestrial and 50% of freshwater biodiversity loss.[9] While agricultural landscapes can safeguard ecosystem services and biodiversity, the valuation of these services provided by the natural capital is generally not considered in land management decisions.[10] The uniformity of monocultures and industrial scale livestock rearing can leave these systems vulnerable to economic, climate-induced and natural disaster shocks that result in significant economic losses and large-scale suffering of rural communities.

The IPCC estimates that 23% of global anthropogenic emissions came from agriculture and land use between 2007 and 2016.[11] While agriculture is a significant driver of climate change, climate change itself further stresses land systems, worsening existing risks of land degradation and biodiversity loss.[12] Between 25–30% of total food produced is then wasted or

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Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5. Montreal.

AQUASTAT, FAO 2020, Water Use Overview http://www.fao.org/aquastat/en/overview/methodology/water-use

Ibid.

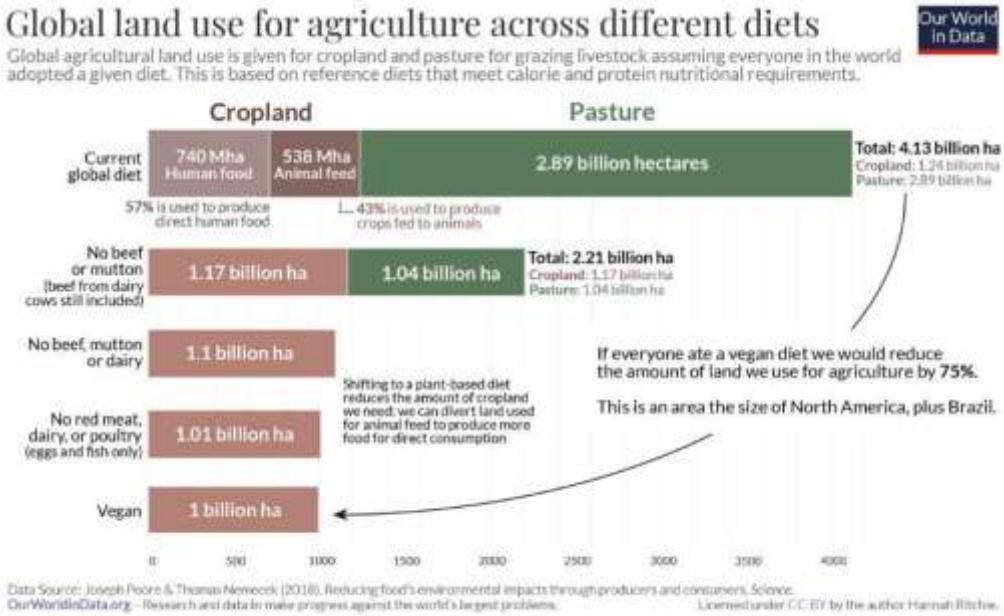
Christian, et al. 2017. An economic perspective on land use decisions in agricultural landscapes: Insights from the TEEB Germany Study, Ecosystem Services, Volume 25.

IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (IPCC, 2019).

WWF (2020) Living Planet Report 2020 - Bending the curve of biodiversity loss. Almond, R.E.A., Grooten M. and Petersen, T. (Eds). WWF, Gland, Switzerland.

discarded as a result of post-harvest losses. Combined, food loss and waste caused between 8-10% of GHG emissions from 2010-2016 and cost about 1 trillion USD a year.

Figure 3. How Diets Affect Global Agricultural Land Use



The consequences of unsustainable food production extend into aquatic systems. Fish provide 17% of animal protein consumed globally,[13] and an even higher percentage in some countries of the south. Agriculture is the largest source of water pollution, which then runs off into aquatic ecosystems and coastal areas. Nonpoint–source pollution from agriculture, including nutrients from fertilizers, animal waste, pesticides and herbicides, and other hazardous substances, can have profound impacts on both people and biodiversity.[14]

So called 'Blue Foods' (e.g. edible aquatic organisms including fish, shellfish and aquatic plants) are situated within the food system and have negative externalities like any other major commodities, but nonetheless are largely missing from key food policy dialogues. For example, SDG 2 (Zero Hunger) includes a focus on production systems but targets do not mention fisheries.

Michigan State University. "Scientists to global policymakers: Treat fish as food to help solve world hunger: Sustainable seafood central to strengthening food security if viewed as more than just a natural resource." ScienceDaily. ScienceDaily, 19 January 2021. www.sciencedaily.com/releases/2021/01/210119122051.htm

Tickner, D. et al., Bending the Curve of Global Freshwater Biodiversity Loss: An Emergency Recovery Plan, BioScience, Volume 70, Issue 4, April 2020, Pages 330–342, https://doi.org/10.1093/biosci/biaa002

Food Systems and Global Health Risks

The use of pesticides and the pervasive risk of food contamination are among the major health risks in food systems globally. As a result of the rise of the global Covid-19 pandemic, the role of food production is being recognized as one potential cause of future human health threats. Agricultural encroachment into natural habitats can bring humans and livestock into closer proximity to wildlife, contributing to conditions where zoonotic spillovers can result.[15]

The livestock sector is an important contributor to poverty reduction, food security and agricultural development—supporting the livelihoods and food and nutrition security of almost 1.3 billion people.[16] However, intensive systems that see the confinement of a large numbers of animals in small spaces and narrowed genetic diversity can increase the probability of outbreaks of high-impact animal diseases.[17] The impact of animal diseases on human health is magnified further by increasing levels of resistance in bacteria, parasites, viruses and fungi to antimicrobial drugs, such as antibiotics, antifungals, antivirals, and antimalarials.[18]

Clearing land for cattle raising was also responsible for 16% of global total tree cover loss from 2001-20015, and deforestation by this and other commercial commodities, such as oil palm (10.5 million hectares), soy (nearly 8 million hectares) cocoa and coffee (2 million hectares each), thins forest fringes and increases the likelihood of wildlife interaction with human settlements,[19] while also contributing to climate change and biodiversity loss.

For these reasons, there are growing calls for better management of livestock in many developing countries to mitigate their global environmental impacts, and to reduce the ecological footprint of diets, including through moderating consumption of animal products (particularly in Northern countries) as important inputs to sustainable food systems.

GEF-8 Integrated Program

The COVID-19 pandemic has laid bare the vulnerabilities of global food systems to shocks of this nature. Food supply challenges in Latin America, Africa, and Asia resulting from broken global supply chains seriously affected small and medium-sized enterprises (SMEs) and created food insecurity. The FAO estimated that 161 million more people in the world faced

Jones, et. al., 2013. Zoonosis emergence linked to agricultural intensification and environmental change. PNAS

World Bank Blog, 2020. Moving towards sustainability: The Livestock Sector and the World Bank. https://bit.ly/3rlxMSC

COVID-19 and the crisis in food systems: Symptoms, causes, and potential solutions, Communiqué by IPES-Food, April 2020.

FAO. 2017. The future of food and agriculture – Trends and challenges. Rome

WRI 2021.

hunger in 2020 than in 2019 and that nearly 2.37 billion people did not have access to adequate food in 2020 – an increase of 320 million people from the previous year.[20]

Clear actions are required that target the most affected: poor producers—including many women—and consumers without social safety nets whose food security is potentially at risk. Minimizing distortions and disruptions in international markets and supply chains remains critical for global food security and nutrition. Furthermore, strengthening resilience in domestic and regional markets can enhance access to fresh food, ensure greater value goes to the farmer, and reduce vulnerability that led to increased food insecurity.[21]

The GEF-8 Food Systems Integrated Program will advance approaches that drive greater sustainability in both food production and global demand in order to reduce agriculture's environmental footprint.[22] In supporting the movement from frameworks to action, the IP will contribute in concrete ways to the transformation of food systems. With a specific focus on "green" and "blue" recovery, the IP will generate significant GEBs, including: sequestering greenhouse gases, conserving and managing forests and biodiversity, restoring productive lands, and ensuring access to clean water supplies. Policy options will be harnessed to improve enabling conditions and generate incentives necessary to maximize outcomes and enhance durability of results.

The IP will learn from and build on experiences of the GEF's integrated approach programs from GEF-6 (Food Security in Africa and Taking Deforestation out of Commodity Supply Chains) and GEF-7 (Food Systems, Land Use and Restoration Impact Program), building on the lessons learned thus far generated, many of which have been documented by the IEO.[23] The IP will also serve as a timely opportunity for countries to harness the momentum being created by the UN Food Systems Summit, which is focused on transforming the global food system toward sustainability and resilience.

Efforts will be targeted at farm-level and smallholder farmers, but, as with previous GEF integrated approach programs, also toward demand and financing actors across the global supply chain and including intermediaries to markets. This is because land use decisions related to agriculture are increasingly driven by external factors, including corporations involved in their trade and retailing,[24] financiers bankrolling their production and shifts in dietary and nutritional

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FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en

Communiqué by IPES-Food, April 2020..

Implementation of the FS IP will be in accordance with the Cartagena Protocol on Biosafety in those countries that are Parties to the Protocol.

GEF/E/C.60/04, Formative Evaluation of the GEF integrated Approach to Address the Drivers of Environmental Degradation, GEF IEO, 2021. https://bit.ly/3iDiLZz

Lambin E.F. et al., Effectiveness and synergies of policy instruments for land use governance in tropical regions. Global Environmental Change 28 (2014)

demands. These global drivers are difficult to address with approaches at the national or local levels solely targeted at the producer or supply-side of agricultural commodities.[25]

The GEF already addresses the role of diets, nutrition and hunger as drivers by promoting engagement with relevant stakeholders from across the supply chain, and aligning its mandate with other diverse platforms and programs focused on dietary shifts, and nutrition and hunger. This approach enables the GEF to crowd-in expertise and financing (public and private) that is focused specifically on health and nutrition dimensions of food systems.

Today, approximately 30% of farms worldwide (160 million plus) are practicing some form of sustainable intensification[26] on more than 450 million hectares of agricultural land,[27] and much inland-water aquaculture is also considered sustainable. Building upon practices of sustainable farming is the concept of regenerative food systems, which calls for production of food in ways that actively restore habitat, reduce GHG emissions, increase soil carbon and protect biodiversity.[28] Regenerative agriculture in this context involves the specific focus of moving agriculture from being "non-degrading" to being "nature-positive" and "climate-efficient." [29, 30]

In order to transform food systems, sustainable practice must move from boutique to taking place at scale. Sustainable and regenerative approaches require a shift from a narrow focus on production landscapes to the entire food systems. These practices should build around a principle of enhancing diversity and integration, while linking across spatial (landscapes) and vertical (demand) dimensions for the food system.[31]

A critical component of this will be supporting national and subnational governments to fully engage across public agencies to incorporate nature-positive production systems into their national strategies for climate, biodiversity, and land degradation. This will require strengthening multi-stakeholder partnerships to overcome sectoral silos for integrated action across multiple scales. In parallel, policy changes should better assess, account and value the natural capital, and shift financial flows away from perverse subsidies and nature-degrading investments toward nature positive investments, including landscape level payment for ecosystem services (PES) and other forms of financial compensation for good practice.

Aquaculture has been responsible for the continuing growth in the supply of fish protein for human and animal consumption and will play a key role in future food security needs.

Henders, S. et al, Do national strategies under the UN biodiversity and climate conventions address agricultural commodity consumption as deforestation driver?, Land Use Policy, 2018.

Sustainable intensification is defined (https://doi.org/10.1093/aob/mcu205) as a process where agricultural yields are increased without adverse environmental impact or conversion of additional non-agricultural land.

Secretariat of the Convention on Biological Diversity (2020).

TNC Blog (2020). Beyond Sustainability: A Food System to Restore the Planet.

Burgess PJ., et al, (2019). Regenerative Agriculture: Identifying the Impact; Enabling the Potential. Report for SYSTEMIQ. 17 May 2019. Bedfordshire, UK: Cranfield University.

Giller et al. (2021). Regenerative Agriculture: An agronomic perspective. Outlook on Agriculture, 1-13.

Jeffries, N. (2019). Regenerative agriculture: how it works on the ground. Circulate (Ellen MacArthur Foundation)

Sustainable intensification of yields from aquaculture, while simultaneously sparing and restoring natural habitat, offers potential for people to meet escalating food demand with the least harm to other species.[32] By focusing explicitly on land-based aquaculture, this IP will complement the IW focal area, and as a result create opportunity for engagement by countries where aquaculture development is crucial for achieving sustainability in the food system.

Given the impact of the current pandemic and the threat of future zoonotic disease spread, transforming food systems will need to be tackled in the context of the Healthy Planet, Healthy People approach. Working across sectors is necessary to mitigate the risk of disease emergence, as is recognizing the inherent links between people and animals and their shared environment.

More sustainable food systems require a focus on the vital role women and youth play in the global food system. Women are responsible for some 60% to 80% of food production in developing countries, particularly through rearing small livestock and growing food crops. Women also have a critical economic stake and role in demand and investment, controlling 64% of consumer spending, and their global earnings are in the trillions of dollars.[33] Youth is an important demographic as they are on the front lines of dealing with the effects of environmental and climate change, which are likely to accelerate and intensify during their lifetimes and those of their children.[34] By unleashing the power of women and youth as full participants and shareholders, the agriculture sector can catalyze greater productivity and sustainability and hence greater financial flows.[35]

Objectives, Key Interventions, and Selection Criteria

The overall objective of the proposed Food Systems Integrated Program is to catalyze the transformation to *sustainable food systems that are nature positive, resilient, and nutrient pollution-free*. The IP will seek to reduce environmental degradation and negative externalities in food production systems (food crops, commercial commodities, livestock, and aquaculture) and on the demand side across supply chains. This will generate Global Environmental Benefits for climate change mitigation, biodiversity conservation, land degradation and water resources, and also contribute to food security, livelihood and climate resilience, and better health and nutrition. The approach is complementary to the Ecosystem Restoration IP as it focuses explicitly on the food production landscapes where practices are needed to sustain soil health and quality, improve water resources management, reduce deforestation from commercial commodities and the knock-on effect to biodiversity, etc.

Phalan B. et al., Green R.E. (2011) - Reconciling Food Production and Biodiversity Conservation: Land Sharing and Land Sparing Compared. Science 333, 1289; DOI: 10.1126/science.1208742.

GGP Knowledge Product. (2019). How can gender mainstreaming in global agricultural supply chains accelerate good growth? What works and for whom? UNDP https://bit.ly/3caD38l

Glover D. et al. (2020) Youth and Food Systems. Transformation Frontiers in Sustainable Food Systems. Vol. 4

Ibid

The need for transformation in food systems has been the focus of extensive research and synthesis,[36] all of which call for urgency to shift production and supply chain practices toward nature-positive, low emission and hazardous chemical-free pathways. While the GEF has a critical role to play in advancing this transformation, such efforts cannot be made in isolation of other food system priorities, including health, diets, and nutrition. Hence the GEF approach is to mobilize and engage diverse stakeholders involved in supporting different dimensions of food systems in order to create synergies and minimize negative tradeoffs from actions and investments.

To maximize potential for transformative change, the program will operate at two levels—global and national—and take into consideration the proposed "levers" for advancing systems transformation (governance and policies, financial leverage, multi-stakeholder dialogues, and innovation and learning). Globally, the program will establish links with relevant platforms and initiatives that foster multi-stakeholder dialogue and collective action to transform food systems. Key interventions at global level will include:

Leveraging Private and Financial Sectors: The program will encourage concrete actions on both the production and demand sides by actors from smallholders/SMEs to global corporates– e.g., traders, manufacturers, commodity buyers and retailers – toward use and expansion of sustainability standards and commitments to environmental and socially responsible sourcing. The program will also engage a spectrum of financiers to shift investment screening practices toward environmental sustainability. It will also work to mobilize additional and larger scale financing, including through blended finance mechanisms, in order to maximize country outcomes and increase the program's impact and contribution to transformational change.

Cross-scale support: This will catalyze access to knowledge, technical expertise and capacity development on issues that represent common challenges across multiple countries or specific geographical regions. It will support efforts to influence public policy and private actions toward sustainable food systems, shifting production and landscape management practices, building effective multi-stakeholder dialogue, and promoting multi-country or regional planning and coordination to improve implementation.

Scaling impact: While individual countries will deliver substantial benefits through their nationally focused projects, the potential for global transformation will require that such impacts are amplified beyond national boundaries. This will be achieved by catalyzing new opportunities across spatial (landscapes) or vertical (supply chain) dimensions to help maximize potential for impact. Fostering decision making across scales is likely to

[36] Lilliana S. et. al., Food System Outcomes: An Overview and the Contribution to Food Systems Transformation, Frontiers in Sustainable Food Systems, volume 4, 2020. www.frontiersin.org/article/10.3389/fsufs.2020.546167

induce effective adaptation to social and ecological change because feedback loops can relay information between levels and foster improved decision-making.[37]

At country level, the program will draw on the proposed global framework to develop innovative projects that demonstrate a holistic and systemic approach to food systems, including commitment to addressing the "levers" for transformation, integrating cross-cutting priorities including private sector engagement, Nature-based Solutions, gender responsiveness, and livelihood and climate resilience. Specific interventions suitable for GEF support include the following:

Sustainable and Regenerative agriculture: Creating an enabling environment for countries and industries to shift agricultural food production towards sustainability *through a diversity of approaches* including but not limited to: agroecology, regenerative farming, avoiding deforestation from commercial commodities, rehabilitating and restoring food production landscapes – including through agroforestry – to improve flow of ecosystem benefits, improving watershed management, and promoting sustainable land including wetlands and soil management. The primary crops of focus will include commodities that are causing significant deforestation in the tropics (soy, palm, coffee and cocoa) as well as globally important food crops (rice, wheat and maize) whose production results in a range of negative environmental externalities (e.g., GHG emissions, nutrient runoff, sediment flows, biodiversity loss, etc). Additional scope will be allowed to integrate other crops into the program if a compelling case can be made on how they lead to systems transformation through nature positive, carbon neutral and chemical-free production and contribute to shifting away from intensive monocultures to more diversified systems.

Livestock Management: Reducing livestock's impact on the environment, particularly forest degradation and clearing, could come through such means as improving productivity on existing pastureland, supporting integrated crop-livestock systems, restoration of degraded and extensive pastures into richer, more productive environments with trees and shrubs interspersed with grasses, and fodder crops. Identifying, introducing and supporting incentives and policies required to encourage ranchers to adopt better practices[38] will be key, as will improving disease prevention and control in animal production systems is also critical in reducing the likelihood of exposure of domesticated animals to/from wild populations and the possibility of zoonotic spillover events. Finally, finding ways to support more diversified and environmentally friendly diets,[39] including

van Bers, C. et al. Advancing the research agenda on food systems governance and transformation. Current Opinion in Environmental Sustainability 39 (2019): 94-102.

Cerri, C. et al. Reducing Amazon Deforestation through Agricultural Intensification in the Cerrado for Advancing Food Security and Mitigating Climate Change. Sustainability 2018, 10, 989. https://doi.org/10.3390/su10040989

Drivers of diet change. Nat Sustain 2, 645 (2019). https://doi.org/10.1038/s41893-019-0366-3

through moderating consumption of animal products and increasing production of alternative protein sources.

Sustainable Aquaculture: Expanding investment in sustainable aquaculture management that is explicitly linked to land-based practices impacting freshwater and coastal marine ecosystems. Aquaculture has been responsible for the continued growth in the supply of fish protein for human and animal consumption and will play a key role in meeting future food security needs. As such, blue foods have an important role to play in the transition to healthy and more sustainable diets and can serve as an alternative to more destructive protein production. The program will position nature at the core of the sectors delivery of affordable and low-footprint fish protein and human health improvements. Blue food interventions could include farming of freshwater fish in pond systems, cultivation of aquatic plants (e.g., seaweed and algae), and shellfish culturing.

Selection Criteria

The Food Systems Integrated Program will consider all recipient countries seeking to catalyze systemic change by delivering integrated solutions that lead to multiple benefits at national, subnational and global scales. The GEF will prioritize countries that demonstrate potential for achieving transformational change based on the following criteria:[40]

The country strategy should be underpinned by science with clear long-term pathways for how the country's food systems will meet national development needs, generate high impact global environmental benefits at landscape and country level, and contribute globally to Food Systems transformation;

The enabling policy and regulatory environment are conducive to generating positive results through implementation of the program, including clear opportunities to engender cross-ministerial support (e.g. environment, agriculture, finance, economy, trade, etc.) necessary to address challenges through a 'whole of government' means. This will create opportunities to foster coherence and cross-institutional integration in formulating "enabling" policies and ensure that environmental priorities are mainstreamed at all levels;

Private sector entities with the ability to have on-the-ground impact are interested and willing partners, including companies and SMEs involved in various stages of the supply chain (producers, aggregators, processors). Partnerships should also be viable on the demand side with multi-national companies, including traders, manufacturers and consumer facing companies, as well as those financing food production;

Promotion of sustainable and effective agricultural production can be shown to better support women farmers and their rights to the land they cultivate, and strengthen the

[40] Please refer to STAP's transformation brief (https://stapgef.org/sites/default/files/2021-06/Achieving transformation through GEF investments - FINAL_0.pdf)

voice of women at all levels of the food system, including through the backing of women smallholder and women farmers organizations, business networks, workers unions, and consumer organizations;

Results from smallholder, farm and landscape can be reasonably sustained and converted into larger scale impact at subnational and national levels. Such scaling is necessary so that positive results generated by an on-ground intervention do not simply lead to poor practice shifting to a different landscape or region, thus generating negative environmental impact (e.g. deforestation, increased GHG emissions, ecosystem degradation, etc) 'leakage' from one place to another. This is key to both generating significant global environmental benefits and ensuring net contribution to global food systems transformation;

Strong safeguards are in place or can be developed to ensure that the sustainable and regenerative techniques applied do not increase likelihood of negative environmental impacts, or leakage; a particular focus in this area should be the potential for removing or repurposing subsidies associated with any practices that lead to negative externalities;

Ability to adopt food systems value chain approaches that recognize the risks of environmental impacts and pathogen transmission, particularly from livestock production, in order to mitigate and manage Healthy Planet, Healthy People risks and reduce environmental impacts;

Willingness to factor crop and systems resilience and reduce food loss and waste along the length of the food systems value chain, including the potential for scaling-up innovations that will increase efficiency from farm to fork.

Existing Platforms and Potential Partners

Strong engagement with platforms engaging governments, financial institutions, food companies and agribusiness multi-national and Small and Medium Enterprises in the proposed program is necessary to create opportunities for scaling-up best practices and resilient options across entire food value chains. Among the coalitions and initiatives with which to engage are the following:

Global Agribusiness Action on Equitable Livelihoods Project (GAA-EL), a private sector platform of agricultural supply-side companies tackling environmental, social and sustainability challenges to improve the well-being of farmers across the world.

Tropical Forest Alliance, a partnership dedicated to achieving zero deforestation supply chains for palm oil, beef, soy, and timber.

Cocoa & Forests Initiative, which has generated commitment by world's top cocoa and chocolate producers to achieve zero deforestation in cocoa supply.

The Sustainable Rice Platform, a multi-stakeholder platform made up of a mix of research (IRRI), Development (UNEP, FAO, GIZ), and private sector actors (Olam and others)

working with governments to promote sustainability in the global rice sector.

The Global Aquaculture Alliance, which engages stakeholders worldwide who are dedicated to advancing environmentally and socially responsible aquaculture practices and is the leading standards-setting organization for aquaculture seafood.

Initiatives of the Consultative Group on International Agricultural Research (CGIAR) for ongoing scientific work on crop diversification, assessment of ecosystem services (e.g. land and soil health, agrobiodiversity), GHG mitigation in crop and livestock systems; and the International Treaty on Plant Genetic Resources for aspects related to crop and genetic resources management;

Act4Food Act4Change, which is a global youth-led movement campaigning for action to combat hunger, improve health and heal the planet.

Contributions of this Program to MEAs and Related Global Environmental Benefits

The improved landscape management and sustainable practices resulting from the Food Systems IP will help to maximize the generation of GEBs, as is already being seen with current GEF integrated approach programs. The GEF-6 Good Growth Partnership, for example, has improved the enabling environment for producers to adopt sustainable practices in Indonesia, Paraguay, and Liberia that has led to better land management and generated more than 5.8 million hectares that benefit biodiversity, and still has nearly a year left in the program. The GEF's $344m investment in the FOLUR program has garnered commitments of nearly $2.7bln in co-financing, which will amplify the capture of BD, LD and CC GEBs. Many of the global environmental conventions explicitly refer to sustainable agriculture and forestry, and the improved landscape and seascape management sought through the Food Systems IP will contribute to meeting climate goals under the Paris Agreement, is essential for meeting several of the Aichi Biodiversity Targets as well as the proposed Global Biodiversity Framework targets under the UN Convention on Biological Diversity (CBD), and Land Degradation Neutrality targets under the UNCCD.[41] The IP will also contribute to meeting SDG 6 on improving water quality and to conserving and enhancing water-related ecosystems,[42,43] and will deliver to targets of the GEF International Waters Focal Area, including GEBs from aquaculture activities that will be measured via nutrient pollution reduction, marine habitat under improved practices to benefit biodiversity, and land restored.

Role of the private sector in supporting this program

Contributing to LD FA and LDN and aligned with STAP guidelines on LDN; https://www.stapgef.org/sites/default/files/publications/LDN Technical Report_web version.pdf)

All references to the Global Biodiversity Framework in the Programming Directions refer to the First Draft of the Post-2020 Global Biodiversity Framework (CBD/WG2020/3/3). The Programming Directions document will be updated to reflect changes in the GBF as needed.

OECD 2020.

Private sector engagement will be critical to attuning policies and practices necessary to achieve the innovation and transformational change in land use sought by the Food Systems Integrated Program. GEF financing will contribute to levelling the playing field for progressive companies and investors through changes to national policies and regulations that can lead to sustainable food production.

The 2021 GEF IEO review[44] into private sector engagement with MSMEs showed that capacities and access to resources are lower among small and micro enterprises. Investing in smallholder capacity building, including supporting national extension and other support services targeting smallholders and SMEs, will help to scale improved sustainability of these critical actors in the supply chain.

Promoting innovative financial mechanisms (including micro-finance for SMEs) and blended finance for investments will be critical to scale nature-positive production and achieve landscape regeneration. Agricultural PES approaches that value natural capital and reward ecosystem service delivery through activities of farmers and compensates them accordingly[45] is one such mechanism. PES projects in agriculture may fall under several ecosystem services including water regulation; maintenance of soil fertility and health; carbon sequestration; maintenance of natural genetic diversity; and the conservation of natural habitat.[46]

Efforts will be made to incentivize actions by national and subnational governments to promote private sector investment, such as through policy options for scaling-up existing technologies and good practices that reduce negative externalities along food value chains.

GEF IEO, 2021 “Highlights: Evaluation Findings 2018-2021”

Rodríguez-Ortega T. et al. A novel management-based system of payments for ecosystem services for targeted agri-environmental policy, Ecosystem Services, Volume 34, Part A, 2018,

Chen, Y. et al. Analyzing Farmers’ Perceptions of Ecosystem Services and PES Schemes within Agricultural Landscapes in Mengyin County, China: Transforming Trade-Offs into Synergies. Sustainability 2017, 9, 1459.

Ecosystem Restoration Integrated Program

Introduction

There has never been a more urgent need to restore and heal ecosystems than now. The healthier our ecosystems are, the healthier the planet – and its people.[47] Restoration is a key nature-based solution and contributes to green and blue recovery as it stimulates investments and creates jobs primarily in rural areas and helps to secure livelihoods of local communities. The United Nations General Assembly proclaimed 2021–2030 to be the United Nations Decade on Ecosystem Restoration, with the primary vision that *the relationship between humans and nature has been restored, where the area of healthy ecosystems is increasing, and where ecosystem loss, fragmentation and degradation has been ended.*[48]

Ecosystem restoration makes economic sense and generates a huge variety of benefits.[49] These include ecological benefits such as safeguarding ecosystem services- soil protection, pollination, nutrient cycling and soil water-holding capacity, which are crucial for both short- and long-term agricultural productivity,[50] biodiversity benefits such as avoided species extinctions[51] as well as climate change mitigation benefits through carbon sequestration.[52] Measures to restore land and improve its management, contribute to food and water security, improved livelihoods, jobs, and to the avoidance of conflict and migration.[53]

The strong value proposition of restoration has resulted in commitments submitted by countries across the international conventions on climate change, biodiversity and desertification as well as voluntary initiatives, such as the Bonn Challenge. A total of 115 countries have committed to restore between 765 million and 1 billion hectares, and approximately half of the world's restoration potential is now tied directly to the UNCCD's LDN national voluntary targets (approximately 450 million hectares). In addition, in the NDCs to the UNFCCC, about 250 million hectares are committed.[54] To reach the 2050 Vision for the Post-2020 Global Biodiversity Framework, it is necessary to ensure that at least 20% of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems. A viable pathway towards this outcome requires that net gain, or at minimum no net loss, be achieved by 2030.[55]

UN Decade on Restoration https://www.decadeonrestoration.org/

Strategy for the UN Decade on Restoration, 2020

See for example Ding, H. et al. (2017): Roots of Prosperity: The Economics and Finance of Restoring Land.

Tripathi V et.al 2017. Biotechnological Advances for Restoring Degraded Land for Sustainable Development.

Strassburg B et.al 2019. Strategic approaches to restoring ecosystems can triple conservation gains and halve costs.

Cook-Patton S et al. 2020. Mapping carbon accumulation potential from global natural forest regrowth.

http://www.fao.org/3/i7896e/i7896e.pdf

Sewell et.al, PBL Netherlands Environmental Assessment Agency 2020, Goals and Commitments for the Restoration Decade

Post-2020 Global Biodiversity Framework: Scientific and Technical Information to Support the Review of the Updated Goals and Targets and Related Indicators and Baselines, SBSTTA, 2021

Inadequate land use and soil management practices are negatively impacting ecosystems, biodiversity, land productivity and carbon stocks. Degradation affects agricultural systems, urban areas, forests, rangelands, and wetlands.[56] Climate change exacerbates land degradation mainly by affecting water availability and land degradation increases vulnerability to climate change.[57] Global estimates suggest that nearly 2 billion ha of agricultural land, pasture, forest and woodland are degraded.[58] This has negative impacts on food systems and ecosystem services, including the provision of freshwater, food, fuel and fiber, air and water purification, climate regulation, and on habitats for wildlife.

Degradation of landscapes weakens governance and institutional frameworks and exacerbates income inequality and human migration since the negative impacts fall disproportionately on vulnerable people depending on the land for their livelihoods, including women, IPLCs, and lower income groups.[59] This can trigger competition for scarce resources, resulting in local and regional conflicts.

Integrating gender considerations into restoration efforts is desirable from a gender equality perspective and promotes the efficiency and effectiveness of restoration work. Recent evidence points to the importance of women as landowners[60] for secure access to land and decision-making power on how land is used and restored. Restoration has the potential to improve gender equality, equitable benefits sharing, and sustainability of the interventions in the long-term.[61]

GEF-8 Integrated Program

The Integrated Program aligns with the vision of the UN Decade on Ecosystem Restoration and supports the global commitments towards restoration under the MEAs by mobilizing a diverse coalition of stakeholders from all relevant sectors, catalyzing finance, and fostering global cooperation. It responds to strong demand by countries for financial, technical, and policy support to meet their restoration targets while ensuring multiple global environmental benefits.

The Program draws on a decade of GEF experience, through projects that included restoration as a cross-cutting issue and regional programs such as The Restoration Initiative (TRI) in support of the Bonn Challenge, the Sahel and West Africa Program (SAWAP) in support of the Great Green Wall Initiative (GGWI), and the Dryland Sustainable Landscapes (DSL) Impact Program. The Program will build on the lessons learned and make use of GEF's comparative advantage with proven business practices and multi-stakeholder engagement to further advance global restoration efforts and bring impactful investments to scale.

IPBES Assessment Report on Land Degradation and Restoration, 2018
https://www.ipcc.ch/srccl/chapter/chapter-4/
Gibbs and Salmon, 2015, Mapping the world's degraded lands
Ibid
https://climate-xchange.org/2020/07/21/to-solve-the-climate-crisis-women-must-own-more-of-the-worlds-land/
Siquiera et al., 2021: Gender inclusion in ecological restoration.

Restoration is forward-looking and dynamic, focusing on strengthening the resilience of landscapes and creating future options to adjust and further optimize ecosystem goods and services as societal needs change or new challenges arise.[62] Ecosystem restoration is defined as the process of assisting the recovery of landscapes that have been degraded, damaged, or destroyed.[63] Ecosystem restoration encompasses a wide continuum of activities that contribute to protecting intact ecosystems and repairing degraded ecosystems.[64] In this sense, restoration can range from rehabilitating and improving systems that are under human use and management towards restoring disturbed natural ecosystems to their natural state and ensure their conservation.

Conventional planning and policy decisions for natural resource management at landscape level are still siloed in different ministries and discussed with different stakeholders.[65] The Program will apply comprehensive integrated land use planning, including spatial land use planning where pertinent, and promote cross-sectoral coordination between environment, agriculture, forestry, water, energy, tourism, transport, mining, finance sectors, including the harmonization of policies and financing streams. It will address the interactions, competition and trade-offs between different land uses and thereby avoiding further degradation of land and ecosystems. Restoration planning at landscape level will fit within a land management strategy that applies the LDN hierarchy: avoid, reduce, reverse.[66]

Access to adequate finance is still a key constraint to achieve restoration at scale. The Program will therefore help create the enabling conditions to catalyze and leverage the needed investments for restoration at scale. To enhance impact, the Program will work with the existing global platforms to promote cooperation and global exchanges and engagement with policy partners and funding opportunities. In this context, linkages to relevant work under the CBD, the global REDD+ process, and locally to Payment for Environmental Services (PES) and other relevant schemes such as watershed funds will be sought. The program will also ensure that national and jurisdictional financing mechanisms are strengthened to support restoration.

Focusing GEF interventions at either regional, transboundary, or subnational level will allow for an integrated and programmatic approach to work across multiple sectors and complement other GEF Integrated Programs on Food Systems, Amazon, Congo, and Critical Forest Biomes, Sustainable Cities, and Blue and Green Islands.

See Global Partnership of Forest and Landscape Restoration (GPFLR) principles: See Global Partnership of Forest and Landscape Restoroation (GPFLR) principles: See Global Partnership of Forest and Landscape Restoration (GPFLR) principles: https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration

Gann et al. 2019. International principles and standards for the practice of ecological restoration. Second edition. Restoration Ecology DOI:10.1111/rec.13035. See https://www.ser.org/page/SERStandards/International-Standards-for-the-Practice-of-Ecological-Restoration.

https://www.decadeonrestoration.org/what-ecosystem-restoration https://www.decadeonrestoration.org/what-ecosystem-restorationibid

International Resource Panel (2019): Land Restoration for Achieving the Sustainable Development Goals.

Cowie, A. et al. 2018. Land in balance: The scientific conceptual framework for Land Degradation Neutrality

Objectives, Key Interventions, and Selection Criteria

The main objective of the Program is to generate multiple environmental and socio-economic benefits by applying integrated approaches for restoration of degraded ecosystems. This objective contributes to GEF's overarching goal to achieve healthy and resilient ecosystems and will foster green recovery and secure livelihoods within the Healthy Planet, Healthy People framework.

The programmatic approach will complement biophysical and technical interventions with instruments focused on policies, governance, institutional, financial, and social structures to bring countries and all relevant stakeholders together in a global movement for transformational impact on reversing environmental degradation. Support will be provided in the following areas:

Promoting policy coherence and providing advisory support for sectoral integration at national and sub-national level, including the elimination of harmful subsidies in the agricultural sector;

Integrating spatial land use planning into the existing planning frameworks (e.g. NBSAP, NAP, NDC, etc.) and participatory land-use planning over a range of governance models to meaningfully involve local governments, IPLCs, and women into the restoration work;

Community mobilization and CSO involvement, promoting a meaningful stakeholder involvement (including vulnerable groups, women, youth, IPLCs) in all aspects of program implementation from the planning stage to implementation and monitoring;

Building capacity to restore and maintain functional landscapes and avoid degradation, and making decision support tools widely available. This will include promoting the ecosystem restoration theme through a common message and actionable knowledge as well as through building institutional/community capacity to effect beneficial changes in behavior as a way to ensure projects are durable and transformative;

Developing monitoring and information systems including baselines, and targeted research on impacts, trade-offs, and costs-benefit analysis of restoration;

Resolving land tenure and resource use rights issues that are barriers to achieve restoration objectives and promoting good governance in view of land rights and access to natural resources, gender equality, and securing livelihoods of smallholders;

Implementing restoration activities on the ground, in particular by involving smallholders and IPLCs through gender responsive community based approaches;

Scaling up PES initiatives and setting up effective systems and mechanisms ensuring the smooth flow of financial resources between and among the PES actors. This will also include strengthening of local innovative financing mechanisms such as watershed funds and microcredit schemes to facilitate resource mobilization for ecosystem restoration.

The Program will focus on restoration of ecosystem types with a high potential to generate multiple benefits,[67] such as:

Converted or degraded ecosystem types and habitats, such as wetlands, peatlands, headwaters and watersheds, estuaries, riverine forests, mangroves, coastal areas, including near-shore coral reefs and seagrass ecosystems, native woodlands, shrub and grasslands, and steppingstone habitats and corridors, using best practices for ecological restoration;[68]

Degraded natural forest landscapes, drylands, grasslands and pastures, applying a range of best practices and focusing mainly on cost-effective interventions such as natural regeneration and assisted natural regeneration to restore ecosystem functions and services; and

Degraded agro-ecosystems in mosaic landscapes with a high potential for multiple environmental benefits, through investments in sustainable land management, including agro-silvo-pastoral models and agro-ecological diversification, and rangeland restoration.

The nature of restoration will vary across a landscape, with different approaches and solutions for different ecosystems, depending on specific objectives and socio-economic needs, and socio-cultural context. Along the restorative continuum, it can range from activities repairing ecosystem functions in, for example mosaic landscapes, to fully restoring native ecosystems. Coupling the concept of the restorative continuum with the LDN response hierarchy will ensure the selection of restoration activities within socio-ecological landscapes.

The contribution to generating multiple GEBs, including the desired outcomes for ecosystems, species and genetic diversity, as well as cost-effectiveness, can be enhanced by evidence-based prioritization of the areas to be restored. For example, restoring 15 per cent of converted lands in priority areas could avoid over 60 per cent of expected extinctions.[69]

Selection criteria for targeted landscapes will consider drivers of degradation, the potential and scale of restoration, including soil properties, landscape features, habitat connectivity, and climate stressors and risks. It will consider the prospects for multiple benefits in biodiversity, sustainable land management, climate change mitigation and adaptation to support sustainable developments and secure livelihoods, as well as the potential for private sector engagement and for scaling up. Investments will be based on existing targets set by countries under the MEAs and will require strong baselines for success such as established relevant multi-stakeholder platforms

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The focus on multiple objectives under the CBD, UNCCD, and UNFCCC distinguishes the Program from the more narrow objective 2 of the LDFA: “Reverse land degradation through landscape restoration”, which focuses on bringing degraded agricultural lands back into production to contribute to LDN and to create socio-economic benefits and improve livelihoods.

SER 2019. International Principles and Standards for the Practice of Ecological Restoration, 2nd edition.

Post-2020 Global Biodiversity Framework: Scientific and Technical Information to Support the Review of the Updated Goals and Targets and Related Indicators and Baselines, SBSTTA, 2021

and partnerships, potential leverage of public and private sector funding, engagement opportunities with the private sector, gender equality and women's empowerment, and potential for scaling up.

Existing Platforms and Potential Partners

In order to achieve the programmatic objectives, working with and through existing platforms is paramount to create the global cooperation and synergies needed for transformational change and scaling.[70] The following platforms are considered important in these efforts.

The UN Decade on Ecosystem Restoration (2021 – 2030)[71] is a platform that is led by UNEP and FAO, consults closely with the Rio conventions and presently includes 85 members from 32 different institutions. It has task forces on best practices, finance, monitoring, science and youth, as well as its own communications strategy. The UN Decade provides an umbrella for the many platforms and commitments. Joining and closely working with this platform will ensure better integration between the Rio conventions and implementation of restoration towards achieving the SDGs.

The Bonn Challenge, supported by Germany, Norway, IUCN, and WRI is an important platform not only collecting the pledges made by countries, sub-national government, and companies but also supporting and monitoring its implementation. The Bonn Challenge is steered by the actions of the Global Partnership on Forest Landscape Restoration (GPFLR), a worldwide network of restoration practitioners, scientists, policymakers and key supporters from government, international and non-governmental organizations and businesses.

A particularly important partnership platform is the Great Green Wall Initiative (GGWI) in the Sahel, which has restoration efforts at its core, and the GEF has over the last decade supported the GGWI to promote innovative practices for sustainable land management. The GGWI aligns very well with an integrated approach to generate multiple environmental benefits and support of rural development. The initiative has grown beyond its original geographic scope to over 20 dryland countries across North, West and the Horn of Africa. More importantly, the GGWI has now evolved into a comprehensive sustainable development initiative that contributes directly to the 2030 global agenda of the SDGs. It has become a country-driven platform that engages diverse partners for advancing integrated responses to the effects of climate change, biodiversity loss, desertification and land degradation, in the context of promoting socio-economic development and resilience across the Sahel. With the recent pledge of $14 billion in funding[72] over the next 5 years from a coalition of the Green Climate Fund (GCF), international development banks and governments, the GGWI platform is poised to profoundly scale-up and accelerate efforts

A Theory of Change for scaling the program's impacts will be developed in partnership with existing platforms and potential partners during detailed program design.

https://undocs.org/A/RES/73/284

https://www.unccd.int/news-events/great-green-wall-receives-over-14-billion-regreen-sahel-france-world-bank-listed-0

to sustain livelihoods, conserve biodiversity, and combat desertification and climate change.[73] The GEF experience and achievements with SLM over the years offers an appropriate anchor for countries to harness this opportunity in a holistic and coherent manner, which will be critical for building back better and green recovery.

The 14 international organizations of the Collaborative Partnership on Forests (CPF) are providing significant support to implement the 2017 – 2030 UN Strategic Plan for Forests and are helping implement restoration commitments through policy support, research, technical and financial assistance. CPF's recent contributions include a special study on forest degradation, and outreach activities and information exchange through the Global Landscapes Forum (GLF), which has become one of the most important outreach and communication platform in this context.

Several platforms connect the public with the private sector and foster innovation, such as the (i) the Trillion Tree Initiative[74] as part of the World Economic Forum's efforts to accelerate Nature-based Solutions, which aims at mobilizing the private sector, facilitating multi-stakeholder partnerships in key regions, and supporting innovation and entrepreneurship on the ground; (ii) the Land Accelerator network for entrepreneurs who restore degraded forests and farmland, contributing to efforts to restore land through the African Forest Landscape Restoration Initiative AFR100, Initiative 20×20 in Latin America, and the Bonn Challenge; and (iii) Terra Match, a global platform that pairs funders' preferences, with vetted projects on planting trees.

Contributions of this Program to MEAs and Related Global Environmental Benefits

The Integrated Program provides a vehicle to meet the many of the restoration targets that countries have incorporated within their MEAs and other international commitments.

Under the UNCCD, 127 countries set LDN targets, of which 90 countries have set approximately 450 million hectares of restoration targets. The Restoration Program will thus contribute to the commitments of countries under the Convention and the UNCCD Strategy (2018-2030), by helping to avoid and reduce desertification and land degradation and restoring the productivity of degraded land to achieve LDN.

Restoration of ecosystems is vital for protection of global biodiversity. The Program will contribute to the objectives of the CBD relevant action targets of the Post-2020 Global Biodiversity Framework on restoration[75] and the implementation of the NBSAPs assisting countries to meet the goal to increase area, connectivity and integrity of natural ecosystems supporting healthy and resilient populations of all species.

https://www.ifad.org/en/web/latest/news-detail/asset/42264232

https://www.1t.org/

"Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems"

With about 250 million hectares committed to restoration under the Nationally Determined Contributions to the UNFCCC, the program can contribute to mitigation actions under the agriculture, forestry and other land use (AFOLU) sector in coordination with the NDC partnership. The Program also contributes to Article 5 of the Paris Agreement on carbon sinks and REDD+[76] and Article 7.1 on climate adaptation.[77]

The benefits of restoration of land, ecosystems and forests extend well beyond an increase in vegetation cover, or the mere number of hectares accomplished. Through the application of an integrated approach, restoration will contribute significantly to the achievement of all 17 SDGs.[78]

Role of the private sector in supporting this program

The Program will specifically focus on the business case for restoration in order to enable private sector involvement. Given the enormous investments needed to implement global targets on restoration, a concerted effort of the public and private sector is necessary, including viable financing models, with public sector finance serving to de-risk investment from the private sector. This will link with GEF's Blended Finance Program and include private sector initiatives such as the Sustainable Banking Initiative, the Sustainable Trade Initiative (IDH), and "smart finance" innovations that include national banks and innovate through PPPs working at the interface of the public and private sector across farmer support, finance, development planning, policy reform, and implementation. The Program will also benefit from the outcomes of the GEF funded initiative "Green Finance for Sustainable Landscapes" led by UNEP and CIFOR under the CPF.

The integrated approach to restoration offers a wide suite of entry points for the private sector, and may well include significant landscape actors with interests in natural resources, certain extractive industries, infrastructure development, tourism and water resources management. Regionally appropriate incentive mechanisms shall be designed or strengthened for these stakeholders and landowners to invest in restoration. These entry points will be explored through regional multi-stakeholder dialogues to determine alignment with the overall goals of the program and opportunity to extend the delivery of GEBs.

The Program will specifically address engagement of the private sector at all scales, taking onboard the recommendations of the GEF IEO Evaluation of MSMEs.[79] It is noted from

Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases' and 'reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.'

'Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with the view to contributing to sustainable development and ensuring adequate adaptation response in the context of the temperature goal.'

https://www.resourcepanel.org/reports/land-restoration-achieving-sustainable-development-goals

The GEF IEO Evaluation on GEF's Engagement with Micro, Small and Medium Enterprises https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_05_MSME_evaluation.pdf

the evaluation that successful MSME partnerships engage at least three types or scales of private sector actors and that value chain and landscape level approaches offer opportunities to link MSMEs with other actors beyond the physical project boundaries or national level context. Specific consideration is made for MSME support to create backward and forward linkages within supply chains noting the key role that mid-value chain actors (processors, traders) can play in market linkage, including standards for market access for sustainable products that increases the likelihood of market development. Such approaches can also include new financial products and instruments including crediting approaches, offsets and PES.

In line with the GEF PSES modalities of engagement beyond finance, the following themes will be explored for private sector engagement:

technical assistance and capacity building, e.g. through farmer field schools, seed banks, nursery development, and sustainable forest management training. Such support for technical assistance can include expert staff, e, South-South knowledge exchange, extension providers, knowledge resources and access to IOT technical equipment such as drones, sensors and monitoring stations.

value chain development for various products arising from restoration (e.g. bamboo, phytopharmaceuticals, honey, livestock products, wood products, and bio-energy);

Supporting national public-private schemes for establishing multi-level financing mechanisms linking global finance (e.g. climate finance) with national incentive mechanisms and smallholders, communities and cooperatives

helping smallholders and communities to access carbon finance (voluntary and compliance markets) including domestic carbon markets and certification schemes;

the use of digital technology for data collection, optimization on where to prioritize investments, to monitor and track the progress of restoration investments, and to capture and repackage knowledge that is generated by the projects. This element links to the broader GEF private sector “digital to environmental dividend” approach.

These private sector capabilities can be deployed in support of many private sector goals, including those of biodiversity restoration, carbon sequestration, NbS and the support of equitable livelihoods, giving the Program a wide scope of possible entry points and partnerships with the private sector at all scales.

Sustainable Cities Integrated Program

Introduction

The speed and scale of urbanization in recent decades have brought several challenges for the environment and human well-being. While cities are key drivers of economic growth with contribution to nearly 80% of global GDP, unplanned urbanization and unsustainable resource consumption in cities have led to 70% of global greenhouse gas emissions[80] and could lead to loss of 290,000 sq. km. of natural habitat by 2030.[81] Expansion of urban land is outpacing population growth by 50%,[82] leading to unsustainable urban sprawl causing degradation of land, loss of biodiversity, unsustainable food systems, toxic waste generation, pollution and increased vulnerability to impacts of climate change such as flooding, heat waves and other climate extremes. Cities also consume 80% of global food production which is likely to expand further with rapid urbanization and could result in 38% of total urban GHG emissions by 2050.[83] The UN International Resource Panel further estimates that material consumption in cities will more than double by 2050 from 2010 level with severe implications on natural resources.

Cities are also at the frontline of the global COVID-19 pandemic, which has led to economic, social and health crises on top of environmental degradation. While scientific studies and evidence clearly indicate that density is not directly correlated to the spread of infection and that its advantages outweigh the risks,[84] there is a misleading negative perception triggering further urban sprawl.[85] All this have challenged urban governance systems and there is a need to support cities towards a transformational path to advance dense, clean, and inclusive growth that ensures efficiency of infrastructure and urban services to deliver benefits for people and the environment.

This decade is critical for transformative action to achieve global ambitions including Paris Climate Goals, SDGs and ecosystem restoration goals by 2030. Cities are at the center of the movement towards net zero emissions with integrated solutions backed up by ambitious policies and urban planning.[86] They are also integrating nature in the urban growth agenda by adopting Nature-based Solutions (NbS)[87] and enhancing urban biodiversity.[88] Cities are increasingly taking an integrated approach to tackle multiple urban challenges and deliver greater

[80] World Bank, 2020, Urban Development Overview

[81] TNC, 2018 Nature in the urban century
World Bank, 2020, Urban Development Overview
https://eatforum.org/initiatives/cities/
UN, 2020, Policy Brief: COVID-19 in an Urban World
World Economic Forum, 2021, COVID-19 is pushing Americans out of cities and into the country
https://www.weforum.org/agenda/2021/02/cities-are-at-the-heart-of-our-journey-to-net-zero/
ICLEI, How Cities are Using Nature Based Solutions for Sustainable Urban Development,
https://cbc.iclei.org/cities-using-nature-based-solutions-sustainable-urban-development/
World Economic Forum, BiodiverCities by 2030, https://www.weforum.org/communities/biodivercities-by-2030

sustainability.[89] It is critical to build on this global momentum led by cities, leverage them as engines of innovation and build multi-stakeholder partnerships that can catalyze transformative action to deliver multiple global environmental benefits, ensure human well-being and contribute to global green recovery.

GEF-8 Integrated Program

The GEF-8 Sustainable Cities IP will advance the GEF's integrated approach to enable cities in tackling key drivers of environmental degradation and deliver multiple global environmental benefits related to decarbonization, biodiversity conservation, reduced land degradation and reduction of chemicals and waste. The program will place a strong emphasis on integrated land use planning both within cities as well as surrounding ecosystems, support institutional coordination at multiple levels, and catalyze integrated approaches such as Nature-based Solutions, Transit Oriented Development and Circular Economy to scale up innovative sustainability solutions. It will adopt a people centric approach with integration of gender, health and inclusion perspectives which are critical to ensure sustainability and equitable distribution of environmental benefits. It will also focus on urban priorities including plastics and air pollution reduction as key co-benefits.

The program will work with urban, sub-national and national governments, and other actors with specific importance given to upstream systemic interventions related to policy development, planning, implementation models and capacity building to complement downstream support to cities such as project preparation facilities and capital investments. Integration will be advanced across key sectors which have high potential to deliver environmental benefits including energy, buildings, transport, waste, water and urban food systems. In addition to delivering climate benefits by decarbonizing urban infrastructure, the Sustainable Cities IP aims to strengthen urban biodiversity linkages acknowledging the importance of bringing nature into cities for ecological and human well-being benefits as well as role of cities in conserving biodiversity globally. The IP will also support reduction of hazardous chemicals and waste, particularly POPs and mercury, in cities which result from improper landfills and use of building materials with hazardous chemicals.

The Integrated Program will adopt a two-fold approach with global and country level investments in selected cities, building on the two previous cycles of GEF investment in sustainable cities. The program will build on the implementation structure of the GEF-6 and GEF-7 phases, and will incorporate recommendations of the IEO to catalyze value addition of the programmatic approach by further strengthening the governance and reporting mechanisms.

"Mehrotra, Shagun; Lewis, Lincoln; Orloff, Mariana; Olberding, Beth. 2020. Greater Than Parts : A Metropolitan Opportunity. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/34820 License: CC BY 3.0 IGO

The Integrated Program will also build on lessons and experience of GEF-6 and GEF-7 Sustainable Cities program and aims to expand the integrated approach to an additional cohort of cities with committed leadership in sustainable urban transformation. The value-added of the program comes from four key aspects. First, it will work to raise cities' ambition level towards net zero and nature positive cities, aligned with global 2030 goals. Second, the program will expand the integration approach to include nature and circularity principles in urban planning to deliver multiple environmental benefits related to climate, biodiversity and chemicals and waste. Third, it will aim to support global green recovery driven by action at cities level. In this context, the program will focus on developing solutions that enable flow of public finance, stimulus funding and private investment to cities. This will also make the program solutions-based going beyond planning to support financing and implementation of sustainability solutions. Finally, the program will take a human-centric approach to integrate gender, health and inclusion in the sustainability framework.

Objectives, Key Interventions, and Selection Criteria

The Sustainable Cities IP will expand the GEF's partnership to foster collaboration with a diverse set of actors in the urban space to develop innovative sustainability solutions and strengthen institutional capacity to move towards building net zero carbon, nature positive, inclusive and resilient cities. The program will have the following global functions to deliver large scale environmental benefits and contribute to GEF-8 transformation objectives:

Catalyze shared and collaborative city action to scale up integrated urban planning and sustainability investments: By supporting a cohort of ambitious and motivated cities and utilizing their global influence, the program will extend outreach and create a significant scale and impact of the integrated approaches to contribute to global climate and nature ambitions. The program will strengthen the evidence base for integrated approaches, strengthen collaboration between cities and other stakeholders, and create an enabling environment for increased flow of finance to cities.

Support knowledge exchange and city-to-city learning on sustainability approaches: The program will enable cities to collaborate and build capacities through a global platform by facilitating exchange of knowledge and experiences. Through this, the program will scale up best sustainability practices and unleash innovation.

Promote a harmonized portfolio of innovative sustainability solutions at global scale: With a focus on systemic drivers of environmental degradation, the program will target investments that will yield long term benefits for a 'Healthy Planet, Healthy People' outcome. It will focus on themes of global importance including technology innovation, policy coherence and governance models for net zero emissions in the built environment, urban Nature-based Solutions, models for circularity pathways and application of spatial data and digital technologies. The portfolio of cities supported through the program will result in a set of private sector and community engagement models, prototypes of

technology and infrastructure solutions, incentive mechanisms, scientific approaches and governance frameworks that will collectively tackle systemic urban sustainability challenges and deliver multiple and large scale global environmental benefits.

Strengthen multi-stakeholder coalitions for higher ambition and collective action: The program will foster multiple stakeholder partnerships between national governments, sub-national governments, cities, private sector, investors and civil society to address inter-linked urban challenges, co-create solutions and raise ambitions on climate, nature and green recovery. The IP will also focus on chemicals and waste in cities, and facilitate global collaboration on this important, yet relatively under-explored, aspect of urban sustainability.

With the above key global programmatic functions, the Sustainable Cities IP will work with partner cities and stakeholders on the following strategic entry points to support urban transformation while ensuring green recovery:

Advancing integrated and systems-based interventions: Adopt an integrated approach for systems level transformation through integration in three key dimensions: 1) *Spatial integration* with a regional/territorial aspect, to holistically be able to tackle the drivers of environmental degradation in and around cities, 2) *Institutional integration* both though vertical integration between national, sub-national and local governments to enhance the capacity and leadership of cities, and through horizontal integration between departments at all levels to break sectoral silos in cities; and 3) *Strengthening people's engagement,* which is key to urban inclusion and environmental justice for a fair green urban recovery, as cities offer opportunities to address societal aspects such as inequality, poverty, gender discrimination, and climate vulnerability.

Integrating nature in urban development and regional planning: Advance the integration of Nature-based Solution and urban biodiversity to generate multiple global environmental benefits, climate resilience as well as social and economic benefits. There has been a growing recognition of the role of cities in conserving biodiversity. To meet global biodiversity goals, the alarming loss of natural habitats due to urbanization must be addressed through sustainable land use planning, demarcating urban, agricultural and conservation boundaries. Better ecological planning is also a foundation for the Healthy Planet, Healthy People approach, and presents social and economic benefits such as new jobs, diversified livelihood opportunities, and food security which can contribute to a green recovery and enhanced resilience. The program will adopt a wider regional planning approach including peri-urban areas, adjacent rural/forest regions, and key biodiversity areas, for bringing nature into cities as well as strengthening the role of cities in protecting global biodiversity.

Decarbonizing the built environment: Support development of plans, policies and strategies needed to design and implement solutions to decarbonize urban infrastructure, including buildings, energy and transportation systems. The program will focus specifically on promoting livable density through compact land use planning, mass and clean transport including TOD, sustainable construction and integrated waste management. It will also support improved landfill management and increased energy efficiency in buildings and lighting systems which can contribute to the reduction of hazardous chemicals, including POPs and mercury.

Adopting circular economy approaches: Cities offer unique opportunity to adopt circularity approaches for economic growth and reduce the "weight of cities".[90] The program will support the development of policies and physical infrastructure targeting strategic entry points for circularity, including local and sustainable building materials, water and waste management, urban food system value chains (production, packaging, transportation and consumption patterns), plastic value chains (production, consumption, disposal), and urban industries. To prevent build-up of harmful materials and chemicals in cities, the program will support effective circular and life-cycle management systems, promoting Green Standards and Certifications, Green Procurement, and increased transparency of environmental reporting to inform cities' evidence-based decision-making.

Promoting innovative financing: The program will catalyze increased flow of finance to cities to meet the sustainability financing gap in collaboration with global financial institutions including Multi-lateral Development Banks, bilateral financial institutions, private sector and other institutional investors, to leverage financial resources. It will support cities in building their capacity related to public finance management, public-private partnership frameworks, creditworthiness, and strengthening national policy and fiscal frameworks including utilizing stimulus funding for green investments. A key element will be to develop innovative financing mechanisms and business cases for the built environment and Nature-based Solutions, to accelerate investment from diverse sources in both the public and private sector.

Accelerating digital technologies and analytical tools: The program will accelerate use of digital technologies and data management systems that enable application of geospatial data for integrated land use planning, greater uptake of sustainability solutions and enhance engagement of urban stakeholders through improved governance and information dissemination.

The program will advance gender-inclusive approaches including the empowerment of women across urban sectors, and identify potential entry points, indicators and targets to be able

IRP (2018). The Weight of Cities: Resource Requirements of Future Urbanization. Swilling, M., Hajer, M., et al. A Report by the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya

to track the integration of gender issues across the program. Compared to men, women in cities have less access to decent work opportunities, financial assets, housing security, urban services and governance engagement.[91,92] Better inclusion of gender dimensions within city policies and plans is crucial not only to address social inequities, but also to unlock the potential of both women and men to successfully address environmental issues. Against this background, the program will:

Promote women's voice in urban decision-making, policy, planning and governance;

Promote the use of gender-responsive approaches to urban climate policy, including gender assessments, gender budgeting, and capacity development;

Promote gender-inclusive design and use of urban spaces, infrastructure and services and support women's health, livelihood opportunities and economic contribution in cities.

Selection criteria: The Sustainable Cities Integrated Program will consider all countries and will aim to add strategic cities with diverse urbanization and environmental degradation challenges. The program will consider the following criteria for selection of countries and cities:

Diverse geographical distribution, focusing on rapidly urbanizing regions as well as highly urbanized regions with severe environmental degradation challenges. This may include secondary cities across different regions as well as strategic mega cities.

Integrated, systems based and innovative approaches to deliver multiple global environmental benefits and catalyze transformational change.

Projects that deliver social, economic and health benefits, climate resilience and air pollution reduction to support green and resilient recovery.

Demonstrated sustainability leadership of cities, sub-national and national governments and willingness to collaborate with multiple stakeholders including the private sector to ensure that GEF's catalytic support can enable scale up and sustainability of impacts.

Existing Platforms and Potential Partners

The Sustainable Cities IP will engage with various global urban platforms, networks, and alliances to strengthen collaboration between urban actors and bring together diverse expertise to tackle systemic environmental, social, economic, and public health challenges that cities face. It will promote new partnerships to co-create sustainability solutions, mobilize investments, distribute risks and influence collective leadership of urban actors to contribute to global environmental goals, SDGs, and a green recovery. In this context, the program will support cities

Chant S. & McIlwaine C. (2016) Cities, Slums and Gender in the Global South. Abingdon, Oxon: Routledge
Moser, C. (2016) https://journals.sagepub.com/doi/10.1177/0956247816662573

in their engagement in global initiatives such as the Race to Zero and Race to Resilience campaigns and BiodiverCities by 2030.

The program will build on the partnerships established in previous phases of the GEF's Sustainable Cities program with global programs and networks including ICLEI, C40, UCLG, UN-Habitat, and specific city led initiatives such as WRI's Cities4Forests initiative, ICLEI's Cities with Nature, IUCN Urban Alliance, FAO's Green Cities Initiative, the Resilient Cities Network and the GFDRR Cities Resilience Program. The IP will collaborate with the World Business Council for Sustainable Development, World Economic Forum and CDP which are advancing collaboration between cities and the private sector. It will engage with scientific, research and academic institutions and networks such as the UNEP's International Resource Panel and the Science Based Targets Network.

The program will coordinate with other GEF IPs and engage with sectoral platforms that link with urban sustainability, such as e-mobility, energy efficiency, transport, food system, waste management including for plastic waste and scrap (e.g. Global Plastics Action Partnership), and circular economy (e.g. Partnership to Accelerate Circular Economy). It will develop effective partnership with multilateral and bilateral urban sustainability programs and investment portfolios including those of MDBs (WB, AfDB, IADB, ADB), GCF, specialized institutions such as the European Space Agency and philanthropic organizations including Rockefeller Foundation, Bloomberg Philanthropies and Ellen Macarthur Foundation.

Contributions of this Program to MEAs and Related Global Environmental Benefits

MEAs are increasingly recognizing the role of cities both as drivers of environmental degradation and as key actors in meeting Convention objectives. By taking a systems-based approach, the program will create an enabling policy environment, build cities' capacity and promote cross-sectoral investment with benefits across all Conventions served by the GEF.

The UNFCCC recognizes that urban areas are responsible for 71-76% of global CO_2 emissions.[93] It states that directing infrastructure investment towards low-emission options should be ensured as it offers significant mitigation potential and also highlights the importance of aligning urban investment with the NDCs.[94] The program will directly contribute to climate change mitigation and adaptation through integrated approaches, decarbonization of infrastructure and carbon sequestration through Nature-based Solutions. Further, the Convention on Biological Diversity (CBD) acknowledges the transformative power of cities, and how urban planning and behaviors can contribute to global biodiversity conservation. The First Draft of the Global Biodiversity Framework[95] recognizes the importance of engagement beyond national

307. https://unfccc.int/resource/climateaction2020/media/1308/Urban_Environment_17.pdf
308. https://unfccc.int/sites/default/files/resource/SCF%20Forum%202019%20report_final.pdf
309. https://www.cbd.int/doc/c/d605/21e2/2110159110d84290e1afca98/wg2020-03-03-en.pdf

Governments, including subnational governments, cities and other local authorities. The IP will directly contribute to CBD's objectives particularly of increasing area, access to, and benefits from green and blue spaces in urban areas through its focus on integrating nature in cities. Lastly, by adopting a territorial planning approach linking cities with surrounding ecosystems and sustainable urban food system, the program will contribute to UNCCD's objectives related to sustainable management of land and water resources, and avoidance of land degradation.

272 Cities produce significant amounts of hazardous chemical waste and plastic pollution. The construction sector in particular is a major contributor to the emissions of mercury from the production of cement,[96] while open burning of waste at landfill and residential sites in cities are sources of POPs.[97] Cities are also responsible for 60% of plastics marine debris.[98] Circularity and integrated approaches that promote long-term management of materials and chemicals in cities can therefore lead to reduction of plastic waste and hazardous chemicals including those under the Stockholm Convention and the Minamata Convention.

Role of the private sector in supporting this program

278. Cities are characterized by the presence of a dynamic private sector providing innovative solutions and bringing expertise and finance to deliver urban services. The Sustainable Cities IP will engage with the private sector as an important actor to innovate, finance and scale up urban sustainability action, with the objective to co-create solutions and developing long-term partnerships for joint action. In line with GEF's Private Sector Engagement Strategy (PSES),[99] all scales and typologies of the private sector are included in the consideration of such networks.

279. The IP is well positioned to amplify the work of the UN Race to Zero initiative which brings the non-state actors such as cities and the private sector together under the common goal of net-zero emissions. The program can be a global partner of such initiatives and effect private sector commitments into results at the city scale through the entry point of climate change and biodiversity, and deliver multiple benefits including human health benefits related to cleaner air, more open space and reduced levels of extreme heat.

280. To ensure sustainability and replication of city-business partnerships, the IP will focus on developing mechanisms of private sector engagement across various levels:

Global level: Taking a multi-sectoral approach for global engagement though multi-stakeholder platforms such as C40, WBCSD, CBCA and others that can create networks,

273 UN Environment, 2019, Global Mercury Assessment 2018, UN Environment Programme, Chemicals and Health Branch Geneva, Switzerland

274 http://chm.pops.int/theconvention/overview/textoftheconvention/tabid/2232/default.aspx

275 https://wwf.panda.org/wwf_news/?1020291/CITIES-TAKE-LEAD-IN-THE-FIGHT-AGAINST-PLASTIC---WORLD-CITIES-DAY-2020

276 https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.59.07.Rev_.01_GEFs%20Private%20Sector%20Engagement%20Strategy_.pdf

bring new private actors on board and connect across institutions. A ‘whole of portfolio approach’ covering GEF-6-7-8 will be adopted to enhance the scale and depth of the program’s private sector engagement and provide global companies more incentive to partner in the programs.

280. *National – sub-national level:* In collaboration with national governments, sub-national governments and the private sector, the program will advance public private partnership models for urban sustainability solutions. In this context, the program will work with governments and businesses to create enabling environment including country-city policy cohesion, land use planning, and standards for green procurement and resilient infrastructure.

281. *City level:* The program will support innovative, agile approaches and small-scale opportunities, organically building ideas from smaller businesses, start-ups and tech companies to develop innovative, cutting edge and tailored sustainability solutions. Private sector collaboration will be extended to universities and community-based organizations to develop solutions closer to citizens. This can include mentoring, idea competitions, calls for proposals, and development of innovation hubs.

Amazon, Congo, and Critical Forest Biomes Integrated Program

Introduction

280 Forests still cover around 30% of Earth's land area. They provide critical ecosystem goods and services such as food, fiber, water, shelter, and nutrient cycling among others. Forests play a fundamental role for biodiversity: they are host to over half of the world's known terrestrial plant and animal species and they contain 80% of terrestrial biomass. In addition, around 300 million of the world's poorest people depend almost entirely for their subsistence and survival on forests, including 60 million indigenous peoples and a further 1 billion people depend on them for their livelihood.[100] Forests are also critical for climate change mitigation as they stock around 662 Gt C[101] of which 2.2 Gt C is released in the atmosphere each year because of deforestation and other disturbances.[102] Tropical forest ecosystems, where most of the deforestation occurs, have a biomass carbon stock estimated to be 247 Gt C (193 Gt C stored aboveground and 54 Gt C stored belowground in roots), with almost half in Latin America (49%), and the rest divided between sub-Saharan Africa (25%) and Southeast Asia (26%).[103] It has become clear that the goals of the Paris Agreement will not be met without fully functioning Amazon and Congo Basin systems, representing the two largest blocks of tropical forests in the world.

281 An intact forest landscape (IFL)[104] is a seamless mosaic of forest and naturally treeless ecosystems with few signs of habitat degradation and a minimum area of 500 km^2. IFLs are critical for stabilizing terrestrial carbon storage, harboring biodiversity, regulating hydrological regimes, and providing other ecosystem functions. Although the remaining IFLs comprise only 20% of tropical forest area, they account for 40% of the total aboveground tropical forest carbon. They are also home to millions of IPLCs whose livelihoods, culture and traditional stewardship is tightly intertwined with the ecosystem. Among these, the Amazon and the Congo Basin are globally critical for biodiversity and carbon storage, provide livelihoods and subsistence to communities that rely on forests and agriculture for their survival. Beyond the large intact biomes, some regions are also home to smaller forests that are vital as biodiversity refugia and can serve as cornerstone for ecological restoration efforts in fragmented landscapes.

282 Forest carbon stocks are often considered the principal mitigation value of IFLs. However, recent research has shown that intact forests are removing carbon from the atmosphere in far greater quantities than previously expected. It is estimated that forest ecosystems soak

284. FAO & UNEP (2020). The State of the World's Forests 2020. http://www.fao.org/3/ca8642en/online/ca8642en.html
285. Global Forest Resources Assessment (2020). http://www.fao.org/3/I8661EN/i8661en.pdf
286. Harris N. L. et al. (2021). Global maps of twenty-first century forest carbon fluxes (Nature Climate Change, 2021)
287. Saatchi et al. (2011). Benchmark map of forest carbon stocks in tropical regions across three continents. PNAS
288. (24) 9899-9904; https://doi.org/10.1073/pnas.1019576108

[282]Potapov et al. (2017). The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. Science Advances, 2017; 3:e1600821

up to 30% of the anthropogenic GHG emissions, 84% coming from old and primary forests.[105,106] So, when such forests are cleared, not only is their carbon stock released but also their role as carbon sinks is lost to the future.

1 Since 1990, it is estimated that some 420 million hectares of forest have been lost through conversion to other land uses. Loss of these globally important ecosystems can also increase the risks of zoonotic diseases and spillovers. Protection of IFLs and forests with globally significant biodiversity is therefore a major imperative for advancing this integrated program through the Healthy Planet, Healthy People Approach (HPHP). This will reinforce the critical importance of forests as natural climate solutions and for the health and well-being of humanity.

2 Many challenges still exist to reverse the trend of forest loss and degradation with regional differences: Agriculture, including animal husbandry, is the main proximate driver of deforestation worldwide while logging is the biggest single driver for forest degradation. In Africa, fuelwood for energy plays also a much larger role.[107] Market failures and perverse incentives still create the conditions that promote forest clearance to more "productive" uses such as agriculture. Governance at all scales and the rule of law including land tenure are often weak or non-existent. Current incentives for forest protection are insignificant compared to other land uses. And competing land uses, especially for food production to feed a growing global population is exacerbating the pressure of the remaining standing forest.[108] Poorly managed forests and basins add to the risks of flood, droughts and can impact various infrastructures. Finally, poverty and lack of economic alternatives also put pressure on land use change and deforestation.

3 Achieving a global net-zero goal for CO_2 emissions is critical for the health of the planet, the stability of ecosystems, including forests, and to ensure safe conditions for future generations.[109] Ambitious policies that prioritize the maintaining of forest integrity, especially in the threatened primary forests, are now urgently needed alongside current efforts aimed at halting deforestation and restoring the integrity of forests globally. Strategies and policies to safeguard tropical forests must explicitly consider both carbon stocks and biodiversity.[110]

290. Harris N. L. et al. (2021). Global maps of twenty-first century forest carbon fluxes (Nature Climate Change, 2021)

291. Funk J. M. et al. (2019). Securing the climate benefits of stable forests. https://www.tandfonline.com/doi/full/10.1080/14693062.2019.1598838

292. Curtis et al. (2018). https://science.sciencemag.org/content/361/6407/1108

293. Pendrill F. et al. (2019). https://www.sciencedirect.com/science/article/pii/S0959378018314365

109 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf

290. Sullivan M. Talbot et al. (2017). Diversity and carbon storage across the tropical forest biome. Sci Rep 7, 39102. https://doi.org/10.1038/srep39102

292. IPLCs are well known to play a key role to impede deforestation, forest degradation, fragmentation, and associated greenhouse gas emissions and biodiversity loss.[111] Recent research indicates that protecting IPLC lands is not only important for human rights, but is a cost-effective way to preserve forests.[112,113] These contributions can be greatly enhanced through policies that recognize land tenure, access and resource rights, the application of free, prior and informed consent, fair and equitable sharing of benefits, and transparent co-management strategies with IPLCs with considerations of the different roles and responsibilities of IPLC women, youth, and men.

293. The GEF has to-date played an important role in safeguarding forests globally. Targeted investments have included the creation and effective management of protected areas, sustainable forest management, .and integrated approaches to tackle drivers of deforestation. Through these efforts, the GEF has been promoting innovative approaches to deliver impactful outcomes for biodiversity and climate change with co-benefits for sustainable livelihoods. But recent trends in deforestation from anthropogenic sources (e.g. fires in the Amazon) and emerging lessons from the COVID-19 pandemic reveal the need for more transformative actions to safeguard tropical forests. As countries work toward a "green" recovery from the pandemic, the Amazon, Congo, and Critical Forest Biomes Integrated Program will focus on increasing protection and effective governance of the major IFLs to maintain their integrity and resilience for people and the planet. Beyond the protected areas, and in the context of a jurisdictional or landscape approach to tackle the drivers of deforestation and forest degradation, it will be important to consider other effective area-based conservation measures (OECMs).[114] This program will also support PES, corridors and also coordinated management with neighboring countries to improve connectivity at transboundary or regional level.

GEF-8 Integrated Program

283 The Amazon, Congo, and Critical Forest Biomes Integrated Program aims to increase and strengthen the protection and governance of IFLs and maintain the integrity of the last and globally important intact tropical forests in view of maximizing multiple global environment benefits related to carbon and biodiversity. The program will catalyze stakeholder engagement at different levels -global, regional, national, and sub-nationals- to enable transformational changes in governance models, policies, financial frameworks, information, and social systems and

294. Walker W. et al. (2020). https://www.researchgate.net/publication/338858779_The_role_of_forest_conversion_degradation_and_disturbance_in_the_carbon_dynamics_of_Amazon_indigenous_territories_and_protected_areas

295. Bradbury R. et al. (2021). https://www.nature.com/articles/s41893-021-00692-9

296. Baragwanathand K. & Bayi E. (2020); Pnas: Collective Property Rights Reduce Deforestation In The Brazilian Amazon, HTTPS://DOI.ORG/10.1073/PNAS.1917874117

297. The CBD has defined "OECMs" as "A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio– economic, and other locally relevant values" (CBD Decision 14/8).

reconcile social, economic, and environmental objectives. The role of IPLCs and marginalized groups, including women, will be central, and will require robust safeguard systems. Gender equality will be mainstreamed in this program.

284 This program will address the drivers of forest loss and degradation -specific to each region- through strategies aimed at creating a better enabling environment for forest governance; supporting national and sub-national land use planning across mixed-use landscapes; strengthening of protected areas; clarifying land tenure and other relevant policies; supporting alternative livelihoods and the sustainable management of commercial and subsistence agriculture lands to reduce pressure on adjoining forests; and utilizing financial mechanisms and incentives for sustainable forest utilization such as markets, REDD+ and other PES. If sustainably managed, success in these areas can serve as models for addressing the nexus between generating global environment benefits, poverty alleviation, and improved economic development.

285 Maintaining ecosystem integrity and resilience is fully aligned with a Healthy Planet, Healthy People approach. Healthy natural ecosystems, and especially primary forests, are providing a safety net for people that depend on forests and mitigate the risk of future pandemics for humanity. We must act rapidly as the ability of terrestrial ecosystems to continue to absorb GHG emissions will be compromised by ongoing climate change and land degradation.

Objectives, Key Interventions, and Selection Criteria

296. The objective of this program is to invest in the protection and effective governance of critical forest biomes that sustain the health of the planet and flow of vital ecosystem services that underpin human well-being. The program will focus specifically on the Amazon and Congo Basin but target other biologically important regions such as Indo-Malaya, Meso-America, and Western Africa where forest conservation will generate significant benefits for global biodiversity, climate, and people.

297. Key Interventions include the following:

- Expand the coverage of protected areas to safeguard globally significant biodiversity, carbon stocks, and improve ecological connectivity in the forest biomes (national, sub-national, transboundary).
- Strengthen the management of existing protected areas and protected area systems (national and sub-national).
- Promote Other Effective Area-Based Conservation Measures (OECMs) to achieve conservation outside the protected areas, and various Nature-based Solutions.

Develop integrated land-use planning, including information and monitoring systems to prevent large-scale exploitation and improve management of ecosystem service flows.

Support alternative livelihoods at the local level and improve the sustainability of the "productive" sectors to ensure that they are compatible with the conservation of primary forests.

Develop financial and other incentives for forest conservation while eliminating perverse incentives that increase the pressure on primary forest.

Strengthen multi-scale and multi-stakeholder governance and law enforcement for increased policy coherence on incentives and mechanisms to conserve forests and eliminate perverse subsidies.

Improve land tenure rights and policies especially the legal recognition of the customary rights and tenure security of IPLCs (e.g., free, prior, and informed consent processes and Indigenous and Community Conserved Areas).

Promote regional cooperation: South-South learning, technical exchanges, intergovernmental cooperation, knowledge management, and communication strategies, notably at the scale of river basins or shared ecosystems; and

Improve resource mobilization and contribute to the implementation of the international development agenda related to financial incentives to protect and restore primary forests, including REDD+ improved approaches, carbon markets, nature-positive trade policies that reward forest conservation and restoration, and long-term financing of protected areas.

301. As well, global and regional interventions will focus on:

Biome Connectivity: Actions will focus on connectivity of the forest and freshwater ecosystems and aquatic resources in each biome on which local livelihoods depend on for food security, transport, and water. Securing ecological connectivity and maintaining forest integrity will also help conserve important resident and migratory species that live in these forest biomes.

Capacity Building and Regional Cooperation: In each forest biome, actions will be aligned with existing initiatives to avoid duplication and maximize technical and financial resources. Regional actions will be designed to complement the national projects and maximize the efficiency of the broader approach. This component will provide opportunities for south-south learning, foster intergovernmental cooperation, use M&E tools and geospatial services, apply best practices and peer review and develop portfolio-wide training and communication strategies.

Global Agenda on Forests: Contribute to the implementation of the international development agenda related to financial incentives to protect and restore primary forests,

including REDD+ improved approaches, carbon markets, nature-positive trade policies that reward forest conservation and restoration. Actions at global level will also aim to better identify and monitor critical forest biomes and contribute to improving the international development agenda related financial incentives to protect and restore primary forests.

285 The Amazon and Congo Basins will be prioritized for this program by virtue of their global importance as IFLs, which creates opportunity for direct engagement and cooperation with all riparian countries. Forests in other regions will be considered based on the following criteria: evidence of globally important biodiversity, potential for restoring ecosystem integrity at the regional scale, and high carbon storage and carbon dioxide removal capacity. Potential targets include the following regions: Indo-Malaya, Guinean forests of West Africa, and Mesoamerica.

Existing Platforms and Potential Partners

301. At the global level:

The Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC) are natural relevant global platforms, as well as the Collaborative Partnership on Forests and the UN Forum on Forests (UNFF). The proposed IFL approach is very compatible with guidance from the UN Convention to Combat Desertification (UNCCD) and particularly the LDN framework.

International Climate Initiative (IKI;[115] The Legacy Landscapes Fund.[116]

The Coalition for Private Investment in Conservation (CPIC) initiative, the Finance for Tomorrow platform, the Global Agribusiness Alliance, Grow Asia, and sustainable commodity initiatives, such as the Roundtable for Sustainable Palm Oil (RSPO).

REDD+ partners: FCPF, UN-REDD, Green Gigaton Challenge dedicated to bringing REDD+ to scale, for instance.

International NGOs: African Parks, African Wildlife Foundation, Birdlife International IUCN, Conservation International, Rainforest Alliance, TNC, WCS, WWF, ZSL.

Research Centers, such as the CGIARs (CIFOR, ICRAF).

III. https://www.international-climate-initiative.com/en/about-iki/iki-funding-instrument

JJJ. https://legacylandscapes.org/

303. At the regional level:

Amazon: Knowledge Platform of the Amazon Sustainable Landscape Impact Program (ASL), Alliances and initiatives involved in the implementation of the Leticia Pact,[117] ACTO, IADB 's initiative for sustainable development, REDPARQUES.[118]
Congo: Regional Platform of the Congo Impact Program, Congo Basin Forest Partnership (CBFP), Economic Community of Central African States (ECCAS), Central Africa Forest Initiative (CAFI), Central African Forests Commission (COMIFAC), specialized networks (Network of IPLCs for the sustainable management of forest ecosystems in Central Africa, REPALEAC, and Conference on Dense and Moist Forest Ecosystems of Central Africa, CEFDHAC).

Asia Pacific: ASEAN (Asean Regional Network on Forest and Climate Change), regional programs from multi, bilateral, and NGOs.

Central American Commission for Environment and Development (CCAD) for the "5 Great Forests Initiative", The Dry Corridor Initiative.

Guinean Forests of West Africa: Critical Ecosystem Partnership Fund (CEPF), Transboundary Tai-Grebo-Krahn-Sapo Forest, Gola Transboundary Forest Landscape, Cross River-Korup-Takamanda Transboundary Initiative, private sector (Sao Tome and Principe).

Contributions of this Program to MEAs and Related Global Environmental Benefits

17 The Amazon, Congo, and Critical Forest Biomes Integrated Program responds to multiple MEA guidance and will also promote better integration between them.

18 By focusing on IFLs, the Amazon, Congo, and Critical Forest Biomes Integrated Program aims to provide a significant and efficient contribution to the net zero decarbonization goal by 2050. The focus on tropical forests will potentially secure IFLs in biomes that account for two-thirds of all terrestrial species on the planet, including the vast array of invertebrate species and microbes that underpin the productivity and stability of forest ecosystems.

19 The conservation of "healthy, biologically diverse, and resilient forests" is emphasized in the Ministerial Katowice Forests for Climate Declaration, as well as in the article 5.1 of the Paris Agreement, as a key mean to achieve the goal of limiting the temperature increase to 1.5°C above pre-industrial levels. Protecting primary forests will constitute a major contribution to the "+" of REDD+, a subject that has only obtained a limited attention from donors. Promoting

307. https://www.reuters.com/article/us-brazil-environment-amazon-summit/amazon-countries-sign-forest-pact-promising-to-coordinate-disaster-response-idUSKCN1VR2B1

308. ACTO: Amazon Cooperation Treaty Organization; REDPARQUES: the Latin America Network for Technical Cooperation in National Parks, other Protected Areas, Wild Flora and Fauna.

adequate framework to increase resource mobilization, the Program will also contribute to the implementation of Articles 5 and 6 of the Paris Agreement.

14. The proposed Integrated Program will respond to the decision adopted by the Convention on Biological Diversity (CBD) highlighting the "exceptional importance of primary forest for biodiversity conservation" and "the urgent necessity to avoid major fragmentation, damage to and loss of primary forests of the planet…" (COP 14/30).[119]

15. The overall approach is aligned with several elements from the UN Convention to Combat Desertification (UNCCD), and especially the LDN response hierarchy of avoiding, protecting, and reversing land degradation.

16. The program also contributes to work under relevant conventions and to the achievement of the UN Strategic Plan for Forests 2017-2030 under the UNFF and its six Global Forest Goals, notably through reversing the loss of forest cover, improving the livelihoods of forest dependent people, increasing the area of protected forest, mobilizing additional financial resources, promoting adequate governance frameworks and enhance cooperation, coordination, coherence and synergies worldwide.[120]

17. Beyond the Rio Conventions, stopping small-scale artisanal gold mining[121] and finding alternatives in IFLs will generate benefits potentially accountable under the Minamata Convention. Transboundary and regional water agreements will finally provide the framework for complementary interventions on freshwater and connectivity of aquatic resources.

Role of the private sector in supporting this program

308. The globalization of trade in agriculture and other commodities has created complex interactions between geographically distant actors and actions at the local level to the global level. The ultimate drivers of environmental and social change can be far from the places where many adverse impacts happen and where decisions on investment and resource allocation are made. The action at the local level is one critical aspect and will remain a priority in GEF-8. However, concerted action at the global level to drive positive environmental and social changes is also needed. There is a growing interest in the private sector community for promoting sustainability along the value chains (responsible sourcing,[122] gold mining for instance[123]). More

309. https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-30-en.pdf

310. https://www.un.org/esa/forests/documents/un-strategic-plan-for-forests-2030/index.html

311. This is responsive to one of the recommendations of the recent ASGM Evaluation that the GEF should seek opportunities for multi-focal area ASGM interventions due to the cross-sectoral linkages of the ASGM sector. GEF/E/C.59/02, Evaluation of GEF Interventions in the Artisanal and Small-Scale Gold Sector, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF_.E_C59_02_ASGM_Evaluation_Nov_2020.pdf

312. Cisco C. & Chorn B. (2009). https://www.bsr.org/reports/BSR_Responsible_Sourcing__KPIs_Summary.pdf

313. Van der Brink et al. (2019). https://www.sciencedirect.com/science/article/pii/S092134491930103X

than 190 companies, governments, and CSOs have signed the New York Declaration on Forests to end natural forest loss by 2030 and reduce deforestation by 50% by 2020; these engagements also being connected to the SDGs to ensure sustainable consumption and production patterns.[124,125] While these commitments go in the right direction, we can unfortunately note that enabling conditions are missing and the targets are not met.

344. This IP will connect with different global platforms to improve cooperation, information sharing, and transparency. Consistency with relevant elements of Article 6 of the Paris Agreement will be sought as well as opportunities to pursue or enhance private sector investment in implementation of the relevant NDCs, both for adaptation and mitigation. Such investments could include allocations made under Nature-based Solutions such as highlighted in Section VI on private sector engagement. The proposed private sector technology platform for GEF-8 could also provide valuable support for the development and deployment of advanced monitoring and observation systems to inform decision making and resource allocation. The GEF may also provide support for innovative finance using the blended instrument (or Non-Grant Instrument), including to IPLCs, through microfinancing institutions or the insurance sector. Private sector led multi-stakeholder initiatives such as the Fire-Free Village program (FFVP)[126] have the scaling potential to avoid millions of tons of GHG emissions from the burning of forests and peatlands and further support efforts to strengthen sustainable value chains in deforestation risk commodities.

[289] https://datatopics.worldbank.org/world-development-indicators/wdi-and-the-sustainable-development-goals.html

[290] https://sdg-tracker.org/sustainable-consumption-production

[291] The Fire Free Village program is an initiative led by major forestry and agribusiness with incentives to not use fire and take action to prevent and stop fires. Launched in 2015, the initiative has resulted in a 90% reduction in forest fires. https://www.aprildialog.com/en/?s=FFVP

Circular Solutions to Plastic Pollution Integrated Program

Introduction

347. The exponential increase in plastic production, consumption and waste is impacting marine, freshwater and terrestrial ecosystems as well as contributing to greenhouse gas and hazardous chemical emissions with implications for human health, economies and social wellbeing around the world.[127] These adverse impacts from both macro and micro plastics from sources ranging from car tires to textiles to plastic bags are expected to escalate as plastic production has increased annually ~9% since 1950 outpacing any other manufactured material.[128] Most recently, during COVID-19 single-use plastic consumption has surged raising further alarm worldwide.[129,130,131]

348. Tackling plastic pollution through circular solutions will deliver Global Environmental Benefits tied to Biodiversity, International Waters, Chemicals and Waste and Climate Change Mitigation focal areas.[132] In terms of marine and freshwater transboundary ecosystems, currently 8-12 million tonnes of plastic enter the ocean annually resulting in over >150 million tonnes in the ocean, including over 5 trillion plastic particles.[133] The resulting cumulative hazards and direct impacts to marine ecosystem services cost an estimated $500-$2500B/year.[134] With plastic waste flowing through multi-national rivers to the ocean[135] and found as remote as the Mariana's Trench,[136] this is truly a transboundary water issue.

349. The biodiversity effects of plastics are associated with entanglement, toxic ingestion, suffocation, starvation, and general debilitation.[137,138,139] These deadly effects are evident across the full breadth of marine life with 17% of affected species listed as threatened or near threatened on the IUCN Red List.[140] The adverse effects are also experienced at the ecosystem level with plastic pollution identified as the second biggest threat to the future of coral reefs as it increases

349. https://www.thegef.org/sites/default/files/publications/PLASTICS%20for%20posting.pdf
350. https://advances.sciencemag.org/content/3/7/e1700782
351. https://www.economist.com/international/2020/06/22/covid-19-has-led-to-a-pandemic-of-plastic-pollution
352. https://www.forbes.com/sites/lauratenenbaum/2020/04/25/plastic-waste-during-the-time-of-covid-19/?sh=ed6e7e67e484
353. https://www.weforum.org/agenda/2020/05/plastic-pollution-waste-pandemic-covid19-coronavirus-recycling-sustainability
354. https://www.stapgef.org/sites/default/files/stap/wp-content/uploads/2013/05/Marine-Debris.pdf
355. https://science.sciencemag.org/content/347/6223/768
356. https://enb.iisd.org/media/spbf-2021-feb-19-jacqueline-mcglade-unep-video
357. https://www.scientificamerican.com/article/stemming-the-plastic-tide-10-rivers-contribute-most-of-the-plastic-in-the-oceans/
358. https://www.nationalgeographic.org/article/plastic-bag-found-bottom-worlds-deepest-ocean-trench/
359. https://www.sciencedirect.com/science/article/pii/S2405844020315528
360. https://royalsocietypublishing.org/doi/abs/10.1098/rstb.2008.0265
361. https://www.sciencedirect.com/science/article/pii/S0025326X02002205
362. https://www.sciencedirect.com/science/article/abs/pii/S0025326X14008571?via%3Dihub

disease outbreaks by more than 20 times.[141] Most recently the draft Post-2020 Global Biodiversity Framework set a target of eliminating the discharge of plastic waste.

294 Tackling plastic pollution by reducing production, consumption and disposal will also reduce carbon emissions since GHGs are emitted at every stage of the plastic lifecycle. Conventional plastic production depends on virgin fossil feedstocks. The basic building block for plastic, ethylene, is produced from natural gas and crude oil, which is an energy intensive process. The most commonly used plastics produce greenhouse gases when exposed to sunlight[142] and once disposed, if incinerated, release CO_2. These adverse impacts are expected to rise. In 2014, 6% of oil production went toward plastic, which is expected to increase to 20% by 2050[143] as the oil and gas industry move out of the energy sector.

295 Further, in terms of chemical and waste concerns, the open burning of plastic wastes and incineration that is not done according to best available techniques can lead to releases of POPs. Moreover, many plastic products and plastic waste contain hazardous additives that are POPs (e.g. PBDEs, PFOS, PFOA, SCCPs), or may adsorb POPs like PCB on their surface while in the environment, and can have adverse effects on human health and the environment, including as a result of long-range environmental transport. The Stockholm Convention controls various intentionally and unintentionally produced POPs.[144] Exposure to POPs can lead to serious health effects, including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damage to the central and peripheral nervous systems.[145]

296 Plastic pollution is even more relevant to the GEF given our mandate to focus in developing countries, which contribute significantly to plastic production,[146,147] are growing consumers of single-use plastic items (e.g. plastic bags, sachets), often the recipients of plastic waste from developed countries[148,149,150] and are unable to manage waste adequately.[151,152] Given the prominence of women and children as waste pickers in the informal sector in developing countries, there is particular concern for poor labor conditions and the adverse health effects

350. https://science.sciencemag.org/content/359/6374/460
351. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200574
143 https://www.ellenmacarthurfoundation.org/assets/downloads/The-New-Plastics-Economy-Rethinking-the-Future-of-Plastics.pdf
352. http://www.pops.int
353. https://www.annualreviews.org/doi/10.1146/annurev-environ-102016-060700#:~:text=When%20released%20into%20the%20environment,complex%20toxicology%20of%20micrometer%2 D%20to
354. https://www.nytimes.com/2020/08/30/climate/oil-kenya-africa-plastics-trade.html
355. https://www.plasticseurope.org/en/resources/publications/4312-plastics-facts-2020
356. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7608798/
357. https://www.theguardian.com/us-news/2019/jun/17/recycled-plastic-america-global-crisis
358. https://enveurope.springeropen.com/articles/10.1186/s12302-019-0254-5
359. https://ourworldindata.org/plastic-pollution
360. Licciardello, F. 2017. Packaging, blessing in disguise. Review on its diverse contribution to food sustainability.

from waste. [153] Following documentation of Asia as the hotspot for plastic entering rivers and ocean[154, 155] and as a major producer and consumer of plastics and plastic products,[156] Asia has been a priority region for investment; however, with growing urbanization in Africa and Latin America, these regions are also priorities for addressing expected increases.[157]

21 Packaging (e.g. bags, lids, bottles, clamshells) is the primary use of plastic (30%) with single-use plastic constituting over half of plastic waste.[158, 159] The food and beverage industry is a particular concern due to the high volume of single use packaging. Nine out of 10 of the most common beach clean-up items are tied to the food and beverage sector[160] and the top brands tied to plastic pollution are associated with the food and beverage industry.[161] This concern is prevalent in developing countries as indicated by analyses of Viet Nam, Thailand, South Africa, Mozambique, and Kenya where packaging is the dominant category of plastic waste, particularly from the food and beverage industry, including bags, lids, caps, bottles, and food containers.[162]

GEF-8 Integrated Program

353. This Integrated Program will tackle plastic pollution using a circular economy approach through interventions across the entire plastic value chain from production to consumption to disposal (Fig. 4). Such a holistic approach leverages the interlinkages across the processes and sectors contributing to plastic pollution. Historically the focus has been on downstream actions related to disposal (i.e. collection, recycling, waste-to-energy, incineration, landfill). However, eliminating plastic pollution requires stopping the flow of plastic at its source by controlling production and consumption. These solutions require addressing the entire plastic value cycle: material engineering; product and process design; consumer use and behavior; and collection systems and recycling.[163,164,165] At a global scale such a system change is predicted to cut government costs $70 billion and save businesses $1.3 trillion dollars compared to the current business as usual trajectory while creating more economic opportunities and jobs, providing for

[298] https://learn.tearfund.org/-/media/learn/resources/reports/2019-tearfund-consortium-no-time-to-waste-en.pdf
[299] https://science.sciencemag.org/content/347/6223/768
[300] https://pubs.acs.org/doi/10.1021/acs.est.7b02368
[156] https://www.plasticseurope.org/application/files/5716/0752/4286/AF_Plastics_the_facts-WEB-2020-ING_FINAL.pdf
[299] https://www.unep.org/resources/report/mapping-global-plastics-value-chain-and-plastics-losses-environment-particular

[300] https://www.unep.org/resources/report/mapping-global-plastics-value-chain-and-plastics-losses-environment-particular

[301] https://www.unep.org/interactive/beat-plastic-pollution/
[302] https://oceanconservancy.org/wp-content/uploads/2019/09/Final-2019-ICC-Report_EMBARGOED-UNTIL-9.3.19.pdf
354. https://www.breakfreefromplastic.org/globalbrandauditreport2020/
355. https://plastichotspotting.lifecycleinitiative.org/pilots/
[163] https://www.newplasticseconomy.org/#:~:text=In%20a%20new%20plastics%20economy%2C%20plastic%20never%20becomes%20waste%20or%20pollution.&text=Eliminate%20all%20problematic%20and%20unnecessary,reusable%2C%20recyclable%2C%20or%20compostable.
357. https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings
358. https://gefmarineplastics.org/publications/addressing-marine-plastics-a-roadmap-to-a-circular-economy

improved labor an health conditions, empowering women throughout the value chain, and dramatically cutting down on ocean pollution and reducing projected plastic-related greenhouse gas and hazardous chemical emissions.[166,167]

Figure 4. The circular economy value chain



300 Moving toward a circular economy approach in the food and beverage industry necessitates enhancing the efficiency of the food and packaging system for the reduction and greater re-use of packaging across the food system; upgrading recycling infrastructure for packaging waste; and developing and/or adopting business models that promote the re-use and recycling of food packaging. This approach will require systemic change in the way producers, processors, retailers, distributors and consumers operate, and will necessitate a high level of cross-collaborative engagement through the development of circular partnerships.[168] Consumer education on the household use of plastics linked to food will also be required toward shifting mindsets and behaviors toward food waste linked to plastics.

301 Women are expected to play a particularly strong role in addressing plastic pollution given their prevalence throughout the plastic value chain. Women are often the major decision-makers regarding household consumption, are a high portion of social entrepreneurs and are also prevalent in the waste management industry as waste pickers.[169,170] Consequently, women can be the engines of the circular economy on all levels from households and communities to businesses and politics.

358. https://www.thegef.org/sites/default/files/publications/PLASTICS%20for%20posting.pdf
359. https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings
360. Rolle, R.S. 2021. Packaging-linked Food Loss and Waste across the Agri-Food Value Chain: Moving toward circular and sustainable systems. Forthcoming publication.
361. https://www.forbes.com/sites/bridgetbrennan/2015/01/21/top-10-things-everyone-should-know-about-women-consumers/?sh=4bef67366a8b
362. https://learn.tearfund.org/-/media/learn/resources/reports/2019-tearfund-consortium-no-time-to-waste-en.pdf

301 Through the proposed program, the GEF will catalyze circular economy approaches to reduce plastic production, consumption and waste. Packaging, particularly single-use related to the food and beverage sector, will be the priority for the Plastic IP since it is the main source of plastic waste in developing countries. As plastic pollution efforts tend to focus on waste collection, recycling and clean-ups, the GEF will prioritize actions early in the plastic value chain, i.e. production and consumption. By aligning with existing the waste management efforts, the full value chain will be addressed. Consequently, this program will support initiatives that:

eliminate the production and use of problematic and unnecessary plastic products (e.g. single use plastic packaging) and phase out plastic products containing hazardous chemicals;

design for circularity through increased reusability, recyclability and composability of products;

innovate better reuse, repair, remanufacturing and recycling business models, including service as product;

reengineer products toward materials that are made from recycled materials, are recyclable and are ocean-safe if they leak into the ocean while ensuring the ecological impacts are considered (see the European EU criteria[171]);
circulate products by shifting consumer behavior and by fostering markets for recycled non-toxic material; and,

create cross-cutting enabling conditions by strengthening collaboration and coordination along the plastic value chain, creating harmonized visions, fostering knowledge sharing, establishing national baselines and global standards, and increasing investment in innovative solutions.

Objectives, Key Interventions, and Selection Criteria

360. The objective of this IP is to catalyze circular economy approaches to reduce plastic production, consumption, and waste. This IP will invest in national and city-level initiatives; however, given the global nature of the value chain and given that many countries are only beginning to tackle plastic pollution, limited global-level investments will be pursued as well. Innovation will be encouraged and monitoring throughout the program with a clearly articulated level of risk as recommended by the IEO.[172]

363. https://ec.europa.eu/info/research-and-innovation/strategy/support-policy-making/scientific-support-eu-policies/group-chief-scientific-advisors/biodegradability-plastics-open-environment_en

364. https://www.thegef.org/sites/default/files/council-meeting documents/ EN_ GEF.E_ C60_ 02_GEF_ Support_ to _Innovation.pdf

Global Investments

364. The global investments will focus on:

Sharing best practices (e.g. plastic alternatives, reuse and refill programs) and lessons learned (e.g. how businesses have adopted plastic-free practices, how policies catalyzed change) among the cities, including through regional centers of excellence with emphasis on fostering South-South learning and knowledge sharing as recommended by the IEO;[173,174]

Establishing guidance on what constitutes "circular products and services" and international benchmarks and standards to foster reuse, extended life and recyclability of traded plastic products;

Providing monitoring and evaluation guidance to governments and businesses to evaluate progress along the value chain toward achieving circular solutions to reduce plastic pollution as well as to assess GHG emissions, hazardous chemicals and ecosystem impacts and guidance on green accounting to incorporate plastic footprints into decision-making;

Advising global corporations how to achieve their circular goals, connecting these corporations with circular innovations (e.g. ocean-friendly packaging) and connecting them with national initiatives to ensure their products are designed for circularity in the recipient importing countries;

Establishing transparent tracking mechanisms for the global trade (import of consumer goods, export of waste) of plastic products from production to consumption to waste to foster reuse, recyclability and composability at end of life; and,

Raising public and stakeholder awareness of the circular economy concept, promoting circular solutions actions, and fostering a culture of circularity by infusing circular concepts and solutions into mainstream media and high-profile outreach campaigns.

National and City Investments

303 Investments in city initiatives within the context of national initiatives will depend on, and help strengthen collaborative, public-private partnerships that encompass stakeholders throughout the plastic value chain and set a common vision with ambitious targets.

[173] Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, Washington, DC: GEF IEO, 2021.

[174] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C59_04_evaluation_of_KM_GEF_2020.pdf

365. Given the significant role of women in consumption, waste and circular enterprises, their engagement will be prioritized. At the same time, the IP will work toward connecting the informal sector of often marginalized waste-pickers with the formal sector with attention to labor and health conditions.

366. Building on these collaborations, investments will support national and city action plans, including actions targeting governments, businesses and the public. This program will help foster several national and city government roles:

Creating the enabling policy environment for circular solutions by establishing regulations and incentives that circular economy principles for the plastic industry.

Building circular infrastructure and retrofitting existing infrastructure for greater circularity;

Establishing public procurement policies that support circular systems to help drive market demand, test products and services and de-risk scaling-up; and,

Raising awareness on the need for, and economic opportunity associated with, circular solutions within government agencies that engage in the food and beverage industry, such as city planning, tourism, and health departments.

367. Policy coherence across government agencies will be a priority to ensure plastic pollution reducing measures are not negated by contradictory policies. Ensuring policy coherence will require a thorough review of government policies and strong interagency communication, collaboration and negotiation.

368. Building on these governments strategies, particularly the regulations and incentives, the program will foster circularity within the private sector, specifically throughout the food and beverage industry by:

Encouraging the production and use of alternative, ocean-safe materials that are devoid of hazardous chemicals, particularly POPs, promoting the use of recycled materials, and promoting safe, material standards that foster circularity for the food and beverage industry;

Innovating circular product designs that are reusable, refillable, modular or recyclable and fostering ecolabeling to clarify sustainability for consumers;

Catalyzing business models that extend the life of products through repair, shared systems, resale, and service as product (e.g. buying lighting instead of light bulbs);

Incentivizing companies that create circular systems (e.g. reusable food container systems for food delivery);

- Promoting recycling technologies and initiatives that change the type of plastics that enters the economy and the environment to ensure that they are not hazardous, including devoid of POPs, and can be reused and recycled;
- Helping circular SMEs innovators bridge to commercialization through innovation prizes, incubators, accelerators and other mechanisms; and
- Promoting extended producer responsibility schemes by companies as well as their adoption of circular solutions;

368. Finally, this program will foster a cultural paradigm shift by consumers, particularly youth, toward a circular economy that will help galvanize political and private sector action by:

- Ensuring plastic reducing solutions (e.g. reusable to-go coffee cups) are accessible and affordable to the public; and
- Developing transparent, harmonized systems, standards and ecolabeling so the public can easily discern which products and services are sustainable and, through collective action, drive market demand for circular products and services.

369. Selection of countries, including cities, will be based on the state of plastic pollution, including high and escalating levels of production, consumption and/or disposal. The ecological and socioeconomic impacts will be considered as well as the extent to which the public and private sectors have committed to tackle plastic pollution, such as through a common vision and national or city action plans. Countries positioned and committed to serve as centers of excellence to share best practices and to play catalytic roles in their regions will also be prioritized. The Plastic IP will coordinate with the Sustainable Cities IP given the mutual interests in sustainable production, consumption and waste and the focus on the urban environment.

Existing Platforms and Potential Partners

307 The program will benefit from, and partner with, the wealth of global initiatives and alliances that have emerged to tackle plastic pollution. In terms of national and city action plans, the program will continue the GEF-7 alignment with the Global Plastic Action Partnership (GPAP) through country-level investments. The Plastic IP will also align country investments with the New Plastic Economy led by the Ellen MacArthur Foundation and UNEP and with the Alliance to End Plastic Waste on global corporate and country initiatives.

367. The program will also work with the Break Free from Plastics[175] movement to bring in CSOs to ensure national and city partnerships include community interests and at a global scale to help infuse circular thinking into mainstream media.

368. There are many other global, regional and national initiatives that will play a role in Plastic IP investments depending on needs. These initiatives include (among others) the International Resource Panel, One Planet Network, Urban Ocean, Trash Free Seas, Plastic Pollution Coalition, WBCSD, the Circular Economy Coalition of Latin America and the Caribbean, Prevent Waste Alliance, and the Global Alliance on Circular Economy and Resource Efficiency as well as work undertaken by GEF Agencies, including by UNEP Marine Litter & Consumption and Production, IUCN Close the Plastic Tap , WWF, UNIDO, UNDP, ADB, and WB.

Contributions of this Program to MEAs and Related Global Environmental Benefits

369. The program is unique in delivering global environmental benefits across nearly all the focal areas – Chemicals and Waste, International Waters, Climate Change Mitigation, and Biodiversity – and supporting several MEAs and SDGs. Reducing the production and disposal of plastics will reduce the emission of GHGs in support of the Paris Agreement and will reduce the emission of hazardous chemicals, including uPOPs, in support of the Stockholm Convention. Reducing plastics from entering rivers and the ocean will maintain the health of these ecosystems, including the threatened species affected by entanglement and ingestion, in support of the CBD. As plastic represents a transboundary pollutant in both riverine and marine systems, the program will contribute to the objective of the International Waters focal area via the reduction of transboundary pollution.

370. This program will also contribute to socioeconomic co-benefits, including diversified livelihoods and economic growth through the innovative, circular solutions, improved labor conditions for the informal sector, women empowerment and improved human health through potable water and uncontaminated food. Increased job opportunities are also expected from the business opportunities associated with zero waste solutions.[176]

Role of the private sector in supporting this program

311 Engagement of the private sector is a central tenant of this program as moving to a circular economy requires transforming business operations. These plans are targeted around

371. https://www.breakfreefromplastic.org/
372. https://zerowasteworld.org/zerowastejobs/

food and beverage related businesses based on the IEO guidance to narrow private sector focus.[177]

373. At the global scale, the IP will pursue establishing benchmarks and standards, advising businesses on moving toward circular practices through innovation, sharing best practices and raising awareness of circular economy opportunities and the business case for adopting circular practices. To achieve these objectives, the IP will closely partner with the World Economic Forum hosted Global Plastic Action Partnership, the Alliance to End Plastic Waste, whose members are predominantly corporations, and the New Plastic Economy, which is working with over 450 businesses and other organizations, such as WRAP, to meet the Global Commitment to 100% reusable, recyclable, and compostable products.

374. At the national and city levels, this program will foster circularity within the food and beverage industry by increasing awareness within the industry of circular solutions and making the business case for adoption, fostering circular SME innovators to get to market and scale through grants, loans, tax incentives, incubation, accelerators, prizes, and challenges; and, promoting extended producer responsibility schemes by companies as well as their adoption of circular solutions through grants, loans and tax incentives.

375. Such engagement at the national and city level will require collaborative, public-private partnerships that encompass stakeholders throughout the plastic value chain. Multi-stakeholder collaboration ensures the various parties (e.g. plastic producers, food and beverage suppliers, restaurants, grocery stores, governments, recyclers etc.) coordinate to ensure a functioning, circular system. Through such partnerships, businesses can work with policy-makers to establish policies that will catalyze change (e.g. requiring eateries to serve on reusable dishware) and to design infrastructure that will foster circular systems (e.g. collection systems for reusable food delivery containers).

375. Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, Washington, DC: GEF IEO, 2021.

Blue and Green Islands Integrated Program

Introduction

376. Nowhere is the interconnection between nature and people's livelihoods and well-being more obvious than in Small Island Developing States (SIDS). Although countries worldwide are faced with accelerating change and environmental challenges, for SIDS it tends to be more intense and rapidly felt because of their small physical scale, geographic isolation, remoteness from international markets, and small economies which rely on a limited resource base including unique biodiversity.[178] At the same time, many SIDS face a variety of socio-economic challenges: urban density, food and water insecurity, vulnerability to climate change, and high cost of energy. They are also heavily indebted with limited access to and options for financial mechanisms that can place nature at the center of their development. While there are many commonalities, SIDS are also not a homogenous group of countries, with each of the geographical sub-regions of the SIDS (the Caribbean, the Pacific, and the Atlantic, Indian Ocean and South China Sea (AIS)) having different challenges as well as variations in size, capacity, gross domestic product (GDP), and connectivity.

377. There are multiple drivers of ecosystem degradation affecting the SIDS, in particular in key economic sectors including tourism, food (both agriculture and fisheries), and growing urban development. These key sectors, which are the main contributors to GDP[179] in most SIDS, rely heavily on the use of natural resources and ecosystem services, often in an unsustainable manner.

378. Land resources in the SIDS are limited but vital. However, land use change and conversion[180] as well as unsustainable practices on productive landscapes for agriculture and forests is widespread[181] and has led to diminished soil health, loss of forests and vegetative cover, loss of wetlands, especially coastal and marine wetlands and loss of other key biodiversity, particularly in areas of high endemism. This puts the related ecosystem services[182] at risk. As well, island species make up 75% of globally recorded terrestrial vertebrate extinctions.[183] Land and forest degradation processes also further threaten livelihoods, well-

[131] CBD 2014, Island Biodiversity — Island Bright Spots in Conservation & Sustainability, Convention on Biological Diversity

[132] In the Seychelles, for example, ecotourism indirectly accounts for more than 50% of GDP (UN-OHRLLS 2017, Small Island Developing States in Numbers: Biodiversity & Oceans)

[133] Driven by agriculture and increased food demand, mining, illegal logging and urban development.

[134] For example, in Mauritius, the total annual cost of land degradation is estimated at USD 16 million – this is equal to 0.2% of the country's GDP. A considerable share of the costs of land degradation (37%) is due to the decline in ecosystem services (such as food security, water supply, etc.), which has a significant impact on the population of the country.

377. Provisioning (e.g. food and fuel for livelihoods), regulating (e.g. reducing greenhouse gas emissions, erosion control) and supporting (soil protection and habitat for biodiversity)

378. Tershy, B. R., Shen, K., Newton, K. M., Holmes, N. D. & Croll, D. A. The importance of islands for the protection of biological and linguistic diversity. Bioscience 1–6 (2015).

being, food and water security, and increase vulnerability to climate change of SIDS, for example by contributing to landslide risks during high-intensity rainfall events.

377. For the marine environment, the Exclusive Economic Zone (EEZ) is, on average, 28 times the country's land mass[184] in SIDS and supports many livelihoods reliant on fisheries, aquaculture, and tourism. Marine resources and ecosystems such as coral reefs and mangroves are also impacted by land-based sectors such as agriculture and urban development as well as marine activities such as illegal, unreported and unregulated (IUU) fishing. Unsustainable practices in these sectors have led to a variety of environmental problems including marine species loss, destruction of ecosystems, and increased land-based pollution in particular linked to pesticide run off in marine areas threatening ocean health, and the ecosystem services that these resources provide.

378. SIDS also suffer from water quality and quantity stress due to contamination by human and livestock waste, deforestation, chemical and other forms of pollution from industrial and agricultural activities. SIDS are particularly vulnerable to pesticide run-off, including POPs and Highly Hazardous Pesticides (HHPs), given the close proximity of freshwater sources and high biodiversity marine areas to agricultural production areas. Adequate freshwater is important for the continued growth of the tourism, agriculture and other sectors.[185]

379. High vulnerability to climate change compounds these challenges. SIDS are already facing the impacts of climate variability and will continue to face a range of challenges including frequent and extreme weather events, freshwater stress, changes in fish migratory patterns, sea level rise and related issues with salinization, flooding, permanent inundation, erosion and pressure on ecosystems, changes in precipitation patterns, and drought sensitivity.[186]

380. SIDS economies and livelihoods have been significantly affected by the global COVID pandemic, in particular in the tourism, agriculture and fisheries sectors. SIDS' GDP dropped by 6.9% compared to 4.8% in all other developing countries.[187] It is also important to recognize the varied gender dynamics amongst the SIDS regions, and how this may differentially affect societal resilience as well as influence institutional decision making, use of resources/ecosystems and access to benefits from these resources.

381. Challenges also exist in terms of environmental policies and governance, such as poor land use and marine integrated spatial planning and governance; policy incoherence; inadequate

380. UN-OHRLLS 2017, Small Island Developing States In Numbers: Biodiversity & Oceans

381. CBD 2014, Island Biodiversity — Island Bright Spots in Conservation & Sustainability, Convention on Biological Diversity

382. IPCC 2018, Special Report Global Warming of 1.5ºC

383. OECD. January 2021. COVID-19 pandemic: Towards a blue recovery in small island developing states. https://www.oecd-ilibrary.org/social-issues-migration-health/covid-19-pandemic-towards-a-blue-recovery-in-small-island-developing-states_241271b7-en

financial frameworks and financial mechanisms to apply Nature-based Solutions (to development and societal challenges); and poor or absent engagement of the private sector.

381. The Dasgupta review makes the case that the solution starts with understanding and accepting a simple truth: our economies are embedded within Nature, not external to it.[188] This is paramount in the SIDS context.

GEF-8 Integrated Program

383. SIDS have the opportunity to lead the world in demonstrating the transformational potential of incorporating the value of nature into decision-making and using innovative Nature-based Solutions (NbS)[189] to achieve development goals and address humanity's greatest challenges, such as food security and climate change mitigation and adaptation.

384. Nature-based Solutions are actions to address societal challenges through the protection, sustainable management and restoration of ecosystems, benefiting both biodiversity and human well-being, including the creation of livelihoods.[190]

385. Given the high degree of interconnectivity among marine and terrestrial ecosystems, economic sectors and livelihoods, the SIDS are uniquely positioned to pioneer a NbS approach. Simultaneously, the GEF is also uniquely equipped to support the Blue and Green Islands program, that provides the integrated approach needed to address these interconnected environmental challenges driven by key sectors—tourism, food (agriculture, fisheries) and urban development—which also impact each other. This approach responds directly to the recent SIDS Evaluation by the GEF IEO, which emphasizes the need for more integrated interventions.[191,192]

386. Previous GEF investments in SIDS, through initiatives such as the GEF-5 Ridge to Reef program in the Pacific, Integrating Water, Land and Ecosystems Management (IWECO) in the Caribbean, and the recent ISLANDS program have demonstrated the linkage between environmental health and human well-being. Building on this, a more comprehensive nature-

[314] Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)

[315] The recent SIDS Evaluation by the GEF's Independent Evaluation Office underscored the importance of supporting innovative approaches in the SIDS, even if there may be a higher risk involved. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

[316] Dasgupta 2020, Final Report of the Independent Review on the Economics of Biodiversity Dasgupta Review

[317] GEF/ME/C.57/02, Strategic Country Cluster Evaluation of The Small Island Developing States, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf.

[318] This also addresses emerging findings from the OPS-7 study on "Innovation in the GEF" that highlight the challenges of scale in the promotion, feasibility and piloting of innovation in smaller countries. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

based development model can lead to more sustainable and resilient outcomes for nature and people.

385. This program will encourage SIDS to fully integrate natural capital valuation into relevant economic sectors so that nature and its assets can support healthy societal growth that is durable.

Objectives, Key Interventions, and Selection Criteria

1 The objective of the Blue and Green Islands Integrated Program is to apply Nature-based Solutions in key ecosystems that support socio-economic development in SIDS countries. This will place nature at the center of human well-being and generate multiple global and local environmental and societal benefits.

2 Two key features of the program— *integration* and the *centrality of nature* —will be demonstrated by:

2. Addressing cross-cutting upstream challenges related to accounting and valuing of ecosystems, policy coherence, and domestic public and private sector resource mobilization, among other areas;

3. Addressing landscape level challenges related to 3 key sectors for the SIDS context (tourism, food-fisheries/agriculture, urban development).

3 Integration will be applied at different scales, including i) across the countries involved in the program (e.g, through sub-regional initiatives, both intra and inter); ii) at the national level (horizontally) across sectors; iii) vertically across different levels of governance, and iv) across groups of stakeholders including private sector, government, NGOs, and vulnerable groups including women and IPLCs, etc.

4 A global coordination function of the program will provide technical support, national level capacity building, learning, tools, guidance, and action on: enabling environment interventions such as natural capital accounting and valuing ecosystems; improvement of national financial frameworks and development of blended finance mechanisms and solutions for the public and private sector; coordinating and leveraging (as a block of countries) external funding opportunities for impact at scale across multiple benefits; meaningful engagement of private sector (both local and international) for innovative NbS specific to the SIDS context; and engagement with existing sub-regional governance platforms/bodies to help to embed Nature-

based Solutions in regional level institutional and policy frameworks. South-South learning, knowledge exchange, and collaboration will be a key aspect of the program.[193]

Interventions for enhancing the enabling environment

390. These interventions will benefit from support through the global program and will also require action in country.

391. *Natural Capital Accounting (NCA)*[194] *and Ecosystem Service Valuation* – This activity will be undertaken on key natural resources and ecosystems including, forests, coastal, marine, freshwater, etc. This activity could support: i) valuation under different frameworks related to ecosystems, agriculture/forests/fisheries, land, freshwater/marine environments to identify the links between an ecosystem and the economy in both physical and monetary terms and to identify trade-offs among different land uses; and ii) standardization of data and modelling approaches to embed natural capital accounting in national economic accounts.[195] Resilience and adaptation benefits will be included as part of assessments.

392. *Integrated and Comprehensive Planning* – Policy coherence through integrated and comprehensive planning will be needed and will require collaboration across relevant Ministries such as Finance/Economic Development/Planning, Agriculture, Environment, Urban/Housing, Tourism, and Trade. This intervention will utilize the data provided from the valuation of natural capital, to engage in integrated land use/coastal zone planning, to support conservation and sustainable use of critical ecosystems, sustainable management of marine and coastal ecosystems, and sustainable fisheries management and governance.[196] There could also be opportunities to facilitate integrated sectoral policies at the national and sub-regional level.

393. *Enhancing Financing Options from the Public and Local Private Sector* – Facilitating and supporting domestic resource mobilization in SIDS in support of NbS is a necessary enabling factor to achieving multiple and lasting benefits. Utilizing the information from NCA and valuation, and supporting the integrated planning, this intervention may include: strengthening of the relevant financial and lending policies to discourage investments that lead to

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This is line with the recent SIDS Evaluation by the GEF's Independent Evaluation Office, which recommended that regional programs should encourage a transfer of knowledge to the poorest SIDS through a South-South capacity-building approach.GEF/ME/C.57/02, *Strategic Country Cluster Evaluation of The Small Island Developing States*, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

NCA covers accounting for individual environmental assets or resources, both biotic and abiotic (such as water, minerals, energy, timber, fish), as well as accounting for ecosystem assets (e.g. forests; wetlands), biodiversity and ecosystem services. UN System of Environmental-Economic Accounting (SEEA)

Dasgupta 2020, Final Report of the Independent Review on the Economics of Biodiversity Dasgupta Review

Here the BGI IP can assist with implementation of the Port State Measures Agreement (PSMA) for those SIDS who have adopted the PSMA and/or capacity building towards adoption of the PSMA. To date 16 SIDS have adopted the PSMA. PSMA is particularly beneficial for fisheries management, which can move overexploited and collapsed fisheries to more sustainable levels.

degradation ecosystems, channeling public and private funding to activities that enhance natural assets and ecosystem services, testing incentive mechanisms such as payment for ecosystem services (linked to water, forests or other ecosystems), and developing blended finance mechanisms specific to the needs of the SIDS context.

Knowledge Management, Awareness and Collaborative Engagement[197] – The program will support opportunities to capture and utilize knowledge specific to the SIDS context in relation to NbS, NCA, and valuation, including within countries and within and across regions. Operational mechanisms such as multi-stakeholder platforms and dialogues will also be explored at the national, sub-regional, and inter-regional level for cross-learning and to crowd in international private sector engagement and additional financing for Nature-based Solutions targeting the tourism, food and urban sectors.

Interventions in country in implementing NbS in key economic sectors

In addition to the targeted, upstream activities, national activities will also be expected to implement landscape and seascape level innovative Nature-based Solutions tied to one or more of the key sectors. Innovation will be prioritized both in the type of activities undertaken and/or in the financial mechanisms used to make them possible.

Tourism – Tourism represents over 30% of export GDP in SIDS and 98% and 88% of export GDP in St Lucia and Palau respectively. It also contributes heavily to employment, generating 27% in Caribbean islands, 24% in Africa and Indian Ocean islands and 20% in the Pacific. Women comprise 54% of global tourism employment.[198] Countries choosing to work on this theme could undertake activities that support conservation and sustainable use of critical ecosystems; holistic sustainability planning and decision making for tourism development; marine and terrestrial protected areas management; engaging tourism enterprises in the care and restoration of nature; and coral reef insurance. The activities will deliver substantial benefits for terrestrial and marine protected areas and help to maintain the ecosystem services areas associated with these areas.

Food Sector (agriculture and fisheries) – Caribbean and Pacific SIDS import 60% of their food, with half importing more than 80%. Women make up 52% of the agricultural workforce but have less access to land, resources, and credit than men.[199] Countries may: receive technical support for small farmers and fishers to move towards more sustainable practices; engage in activities to maintain, improve and restore agro-ecosystems in support of food

The recent SIDS Evaluation by the GEF's Independent Evaluation Office emphasized the promotion of knowledge exchange among SIDS. GEF/ME/C.57/02, *Strategic Country Cluster Evaluation of The Small Island Developing States*, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

UNDP. 2020. https://www.undp.org/content/undp/en/home/blog/2020/how-can-small-islands-reimagine-tourism-for-a-green-recovery.html

FAO. 2019. FAO's Work with Small Island Developing States. http://www.fao.org/3/ca5170en/ca5170en.pdf

production and livelihoods; engage in restorative agriculture and integrated pest management to reduce agrochemical use; apply NbS to curb sources of land-based pollutants; building robust and sustainable supply chains and strengthen farmer and fisher organizations; and improve community -based fisheries management, commercial fisheries management, aquaculture and/or marine and terrestrial protected areas management. These activities will enhance people's well-being through improved nutrition, health, and livelihoods, as well as the protective and buffering services of healthier ecosystems.

Urban – Approximately 60 percent of SIDS populations live in urban areas.[200] Limited available land means that people are living at high densities even if population numbers do not appear to be large. Ecosystems supporting and impacted by urban activities include forests, mangroves, coral reefs. For example, poor wastewater management leads to poor coastal water quality, impacting high-biodiversity coral reefs. Countries choosing to work in this sector may focus on innovative Nature-based Solutions to wastewater management, water security, urban flooding, renewable energy, and/or solid waste management; and restoration of degraded productive landscapes in peri-urban and rural areas to improve the ecosystem services they provide in urban areas. The solutions may take place in ecosystems that support urban spaces such as forests and coastal areas and can deliver ecosystem service benefits as well as support resilience for highly vulnerable populations.

Inclusive and gender responsive approaches – Gender is embedded in all economic sectors addressed in this program. The program will include gender analyses to define the context specific gender dynamics linked to the sectors and include provisions to apply gender-responsive approaches. Projects should strive to include IPLCs particularly women and youth, such as through support for and strengthening systems of: territorial and natural resource management; traditional foods and agricultural practices; sustainable tourism related livelihoods and benefits sharing.

Given the potential adaptation benefits of the program, opportunities to collaborate with the GEF's adaptation funds (LDCF/SCCF) will also be explored.

All GEF-eligible SIDS may participate in the program, with each country applying upstream activities to address cross-cutting challenges and downstream activities specific to one or more of the sectors that are dominant in their specific contexts. Selection of countries will take into account the level of ecosystem degradation linked to the key sectors and the potential for multiple environment and societal benefits (biodiversity, land degradation, climate change mitigation, and adaptation and resilience, to support sustainable development and secure livelihoods). Countries will need to demonstrate strong political will across key ministries, have

[200] UN-Habitat. 2015. Urbanization and Climate Change in Small Island Developing States. https://sustainabledevelopment.un.org/content/documents/2169(UN-Habitat,%202015)%20SIDS_Urbanization.pdf

baselines upon which to build activities related to NCA, valuation and Nature-based Solutions, opportunities for private sector engagement and potential to leverage public and private sector funding. The program will strongly encourage participation from all SIDS sub-regions. Selection will also be based on innovation and potential to drive transformational change of proposed activities.

Existing Platforms and Potential Partners

The program will seek to engage and build on the work of existing bodies such as the Alliance of Small Island States (AOSIS) and support the implementation of global frameworks such as the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway.

Potential partners could include i) the existing funding mechanisms such as the Caribbean Biodiversity Fund, Micronesia Conservation Trust, Global Fund for Coral Reefs, International Climate Initiative (IKI) and multilateral and regional financial institutions which can provide opportunities to incorporate blended finance; ii) sub-regional governance partners such as CARICOM, OECS, SPREP, SPC, which would be useful to embed NbS approaches in regional level policy frameworks; iii) private sector partners such as AXA[201] to develop innovative NbS leverage finance and pilot PES mechanisms; iv) and global SIDS partners such as SIDSDOCK and other regional bodies such as the Caribbean Community Climate Change Centre to leverage and share knowledge.

Potential platforms and coalitions to collaborate with related to the private sector and finance, include the SIDS Global Business Network (SIDS-GBN), the Ocean Risk and Resilience Action Alliance (ORRAA), as well as those platforms which may not yet have a SIDS presence such as Taskforce on Nature-related Financial Disclosures. Platforms that may be useful in relation to policy coherence and accessing finance could also include trade related platforms given the link to the economic sectors of focus.

Contributions of this Program to MEAs and Related Global Environmental Benefits

The integrated nature of the program and the Nature-based Solutions approach will provide an avenue to support countries to meet their commitments and targets under all of the MEAs simultaneously. In the context of the 2030 targets and beyond, supporting a coalition of SIDS to set ambitious targets for 2030 will simultaneously cut across various GEF mandates and priorities.

This program will directly address Targets 1, 6, 7, 8, 9, 10, 13, 19, and 20 of the draft Global Biodiversity Framework (GBF) and will also yield benefits in addressing major threats to

[201] AXA XL is working with multiple science partners to develop a ground-breaking Coastal Risk Index (CRI) that integrates the protective benefits of coastal ecosystems into insurance risk models.

biodiversity. It will support the valuing of protected areas and natural ecosystems, increasing finance for protected areas, and mainstreaming biodiversity conservation in agriculture and fisheries. It will also seek to address causes of habitat degradation and other drivers of biodiversity loss. For instance, many of the lines of intervention will reduce land-based sources of pollution for coastal waters including sedimentation from poor agriculture, forestry, and land management practices (Target 6 in the GBF).

Globally, 250 million hectares are committed to restoration under the Nationally Determined Contributions (NDCs) to the UNFCCC.[202] With updated NDCs capturing both adaptation commitments and forest and land use commitments, the program can contribute to mitigation actions under the agriculture, forestry and other land use (AFOLU) sectors. The Program also contributes to Article 5 of the Paris Agreement on carbon sinks and REDD+[203] and Article 7.1 on climate adaptation.[204]

Under the UNCCD, as 23 SIDS have committed to voluntarily set LDN targets, the Blue and Green Islands Integrated Program can contribute to their commitments under the Convention and the UNCCD Strategy (2018-2030). The response hierarchy of the LDN – to avoid and reduce desertification and land degradation and to reverse degraded land – aligns well with the Nature-based Solutions approach, in particular the focus on restoration.

The program will also complement other GEF Integrated Programs on Food Systems, Ecosystem Restoration, Sustainable Cities, Clean and Healthy Ocean and the Net-Zero Accelerator Programs.

Role of the private sector in supporting this program

Engaging the private sector at the national, sub-regional and global level will be necessary for the success of this program. The private sector has a significant presence across all three economic sectors and can provide opportunities for developing financial mechanisms to deliver NbS as well as innovative solutions for the SIDS context. These may include IDB's Compete Caribbean or WRI's Land Accelerator initiative. The private sector will also be an essential partner in upstream activities to collaborate and provide inputs on strengthening of financial frameworks that integrate nature and at the downstream level for piloting of mechanisms such as PES and strengthening supply chains (including for high value products).

Sewell et.al, PBL Netherlands Environmental Assessment Agency 2020, Goals and Commitments for the Restoration Decade

Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases' and 'reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.'

'Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with the view to contributing to sustainable development and ensuring adequate adaptation response in the context of the temperature goal.'

The private sector plays a critical logistics role in SIDS which can be leveraged i) to support the aggregation of smallholder commodities (high value cash commodities such as vetiver and vanilla); and ii) to provide a more robust source of regional food and nutrition security that can reduce the need for emissions intensive and low nutrition imports. The global project will also work to engage larger private sector entities (such as cruise companies), who may be difficult to negotiate with as a single country.

The Blue and Green Islands program can also provide investment pathways (based on the Natural and Social Capital Protocols), which can both reduce the negative externalities of sectors such as tourism and build the resilience of the ecosystems that underpin these economic activities.

There is an opportunity to explore private sector support on knowledge aspects using innovations in digital technology. Digital interventions can be used for data collection and monitoring, decision support tools that optimize the outcome of investments that deliver GEBs, to monitor and track the progress of investments, and to capture and repackage knowledge that is generated by the projects.

Clean and Healthy Ocean Integrated Program

Introduction

A sustainably managed ocean is essential to ensure the economic, social and ecological services that it provides. The ocean is currently providing the world economy with values conservatively estimated at US$2.5 trillion each year to the world economy in market goods and services and many times that in non-market amenities.[205] Services provided by marine ecosystems include food security, climate stability, tourism opportunities, carbon sequestration and coastal protection. Therefore, we need the ocean to be thriving with balanced use, an abundance of fauna and flora in the coastal zones, ensuring that the ocean can continue to be the stabilizing factor for mankind's activities, while being the pivotal centerpiece that provides cultural identity, livelihoods and social structures to local communities, nations and regions.

In most coastal countries of the world the story is the same, near-shore ecosystems have been destroyed or their functionality severely impaired with the resultant loss of biodiversity and ecological goods and services, including fish habitat and wave attenuation. Coastal pollution has been the primary culprit, since municipal wastewater and agricultural run-off is released into the marine environment untreated, via leaching, freshwater river systems, or piped outlets. While access to appropriate sanitation is increasing globally, the collection and treatment rates are still extremely low. Untreated wastewater and agricultural run-off being poured straight into our shared ocean, leads directly to eutrophication. In coastal waters, oxygen declines are caused by increased levels of nitrogen, phosphorus and organic matter from agriculture and sewage, causing eutrophication. Oxygen is essential for life in the Ocean, but alarmingly, the levels of oxygen in the Ocean have been declining dramatically over the past 50 years, leading to more than 500 eutrophic/deadzones, covering an area roughly the size of the European Union.

It will not be possible to experience healthy resilient sustainable ocean-based economic development across the world, unless the issue of coastal pollution is addressed. Coastal waters are often a repository of a wide range of urban, agricultural, and industrial waste. Coastal pollution caused by land-based activities is one of the most serious threats to the world's coastal ecosystems, directly affecting human health and economic prosperity. Today, 44% of the world's population live within 150 km of a coastline, and two-thirds of the planet's largest cities are located in low-lying coastal areas. Assuming that the current pace of urbanization and demographic trends continue, the impact on coastal ecosystems will increase dramatically leading to more dead zones. On top of these trends, wastewater from agricultural and municipal sources is given nearly zero political attention, negatively impacting the amount of public investment being earmarked to treatment of these pollution sources. This means that today only ~1/5 of wastewater is treated and most of this only to a level that does not stem flows of

Hoegh-Guldberg, O. et al. 2015. Reviving the Ocean Economy: the case for action - 2015. WWF International, Gland, Switzerland., Geneva, 60 pp.

nitrogen, phosphorous, organic matter, pharmaceuticals, endocrine disruptors, vira and bacteria like *E.coli*, *Salmonella typhi* and SARS-CoV-2.

Considering the multiple economic, environmental, social, cultural, and societal benefits from investments in secondary or tertiary wastewater treatment,[206,207] the global community can simply not afford to not invest heavily in wastewater management and treatment. In return, a suite of benefits will be realized, some of which will have lasting impacts towards securing a healthy ecosystem and improving livelihoods for local communities. Among these are; long-term improved health benefits for fauna and humans by removing water-borne viruses, bacteria, endocrine disruptors, microplastic particles, nitrogen, phosphorous, pharmaceuticals and other chemical compounds; improved economic opportunities; increased societal well-being; reduction in water-borne viral and bacterial diseases, improved reef and ecosystem services, improved health of blue forests ecosystems (mangroves, salt marshes, seagrasses, kelp and seaweed forests and reefs) and the fauna within them.

Wastewater from agriculture and municipal settlements is a major threat to coastal ecosystem health and integrity. Excessive amounts of nitrogen, phosphorous and organic matter will lead to algae blooms and hypoxic zones, which will push living organisms out of the ecosystem and ultimately lead to dead zones. On top of these devastating effects, that leaves the coastal ecosystems fragile to climate induced impacts. Untreated wastewater brings viruses and bacteria to the coastal zones, such as E.coli and SARS-CoV-2.[208] In the midst of the global pandemic, the case for why wastewater treatment is essential, is clearer than ever before. If we want to get a handle on the current pandemic and avoid future similar devastating developments, wastewater treatment investments need to be part of the short- and long-term investment strategies. Currently, somewhere between 70-80% of the global wastewater is being transported untreated into the ocean, via rivers or directly discharged. Of the remaining 20-30% treated wastewater, most is only given primary treatment, that only removes large particles, and hence do not deal with nutrients, microplastics, pesticides or bacteria. Investing in wastewater infrastructure combined with Nbs to treat wastewater is in line with the global calls for building back greener/bluer, and will target a serious issue impacting ocean ecosystem and human health and well-being. The problem of ocean pollution starts on land but has detrimental effects on the opportunity for sustainable ocean-based economic development

Treatment of wastewater to at least secondary level, but preferably tertiary level, will have direct and clearly quantifiable effects on the corresponding marine coastal ecosystems that they are a part of. Investments in wastewater treatment, will not only benefit the global human

Costello, C., L. Cao, S. Gelcich et al. 2019. "The Future of Food from the Sea." Washington, DC: World Resources Institute. https://www.oceanpanel.org/blue-papers/future-food -sea; IEA and ETP. 2017. "International Energy Agency, Energy Technology Perspectives 2017." www.iea.org/etp2017

. Hoegh-Guldberg, O., et al. 2019. "The Ocean as a Solution to Climate Change: Five Opportunities for Action." Washington, DC: World Resources Institute. https://oceanpanel.org/sites/default/files/2019-10/HLP_Report_Ocean_Solution_Climate_Change_final.pdf

Tran et al 2021: SARS-CoV-2 coronavirus in water and wastewater: A critical review about presence and concern.

population, but also curb potential infection of marine species by SARS-CoV-2[209] and shellfish infection from *Salmonella typhi.*[210] Proper treatment of municipal and industrial wastewater will not only directly curb pollution and chemical waste, that has detrimental environmental effects to freshwater and ultimately marine ecosystems, but also break one of the pathways for bacteria and viruses to spread.

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Curbing land-based pollution entry into the ultimate sink, namely the world's ocean, will demand action across multiple sectors, for example between public and private sector actors to inform policy formulation and foster direct action that directly will limit agriculture, municipal pollution to the ocean ecosystem. Securing a healthy vibrant coastal ecosystem, will not be possible unless countries stop fertilizer incentive schemes, change cultivation methods to minimize run-off and ensure proper treatment of municipal sewerage before discharging it to receiving waters. Pollution of the ocean has a devastating impact on local and distant ocean ecosystems and the ocean's resilience to curb with increasing human activity and climate induced changes.

Building back to a bluer, greener and healthier world post-pandemic, there is no doubt that investing in both grey and green infrastructure, to target flows of point and non-point pollution from land-based activities, will be the investment that will directly benefit human health and support healthy vibrant blue ecosystems.

The multitude of point and non-point sources of pollution, being carried by tides and currents into neighboring countries' EEZ, indeed makes this a transboundary issue, which is complex to manage. The GEF recognizes that efforts targeted at prevention, reduction, and control of coastal pollution caused by land-based activities are crucial to maintaining the ecological, social, and economic well-being of countries situated along the coasts of the world's Large Marine Ecosystems (LMEs).[211] The linkages between LMEs and river basins have long been realized, among others through the concept of Source to Sea interlinkages, as explored by GEF STAP.[212]

To ensure a strong anchoring and the most optimal foundation for successful implementation of the program, it will be imperative that the investments recognize the importance of inclusion of all the human capital that exists locally, nationally and regionally. This approach recognizes the important roles women play in generating and sustaining change.

Mathavarajaha et al 2021: Pandemic danger to the deep: The risk of marine mammals contracting SARS-CoV-2 from wastewater

WHO 2021: Typhoid Fever https://www.who.int/ith/diseases/typhoidfever/en/

Sherman K, 1991: The Large Marine Ecosystem Concept: Research and Management Strategy for Living Marine Resources. Ecological Applications Vol. 1, No. 4 (Nov., 1991), pp. 350-360

GEF STAP 2016: a conceptual framework for governing and managing key flows in a source-to-sea continiuum - A summary and policy recommendations for the GEF Partnership. 1GEF/STAP/C.50/Inf.05/Rev.01

Women play a prominent role in the productive use and management water and marine resources. Therefore, gender issues and mainstreaming of gender considerations into all processes and investments will be required.

Objectives, Key Interventions, and Selection Criteria

The Integrated Program will be supporting healthy blue economic development by curbing coastal pollution from agricultural, industrial and municipal sources through infrastructure investments combined with Nature-based Solutions. By limiting inflow of untreated wastewater into the coastal zone, the coastal ecosystem will become richer in biodiversity, which will lead to expansion of the local livelihood opportunities, as coastal ecosystem integrity and resilience increases. The potential of deploying NbS for wastewater treatment will provide entry points for local anchoring, engagement and economic opportunities. In order to ensure local uptake, it is important that local stakeholders and community leaders feel a responsibility for the success of the investments. That will only happen if the impacts of successful implementation and management is perceived as directly contributing to local healthy blue economies.

Addressing this global challenge through an IP will deliver a range of impacts that single investments would not be able to achieve. Among these are:

A concerted effort on industrial, municipal and agricultural runoff into the coastal zone, will renew the global attention to the topic. There has, over the last years, been a tendency to merely associate coastal pollution with plastic debris, that is a more visible problem. It is essential that the local, national and global discourse get to include the less visible marine pollution sources, if we are to secure local economic opportunities and human health.

Inform and incentivize national coordinated policy formulation process that will link policy reforms with needed financing and implementation on the ground.

Integration at different scales, including regionally between countries, nationally through inter ministerial committees, public and private entities as well as through communities of practice on specific technical or innovative approaches.

Leveraging of substantial infrastructure funding and technical skills. By addressing this issue through an IP, the IP will stimulate and inform investment portfolios nationally as well as with IFIs. Previous investment portfolios in GEF that has targeted agricultural and municipal pollution, has been able to generate substantial co-financing. It is believed that this IP will generate considerable co-financing too.

The IP will support a global coordination function that will strengthen the national, regional and global resource base. This will be done through facilitating knowledge management and sharing lessons learned between national and global stakeholders.

Furthermore, the global coordination efforts will also include development of "how to" guides, that will focus either on policy formulation or on different technical solutions as well as ecosystem health indicators to be able to measure the impact of the interventions and tabulate these at program level.

Stopping inflow from the agricultural and municipal sectors into the ocean, should be done through a combination of upstream infrastructure investments and adjustments to management practices in both sectors, combined with policy formulation to support these measures. One of the central pathways towards succeeding in anchoring larger structural investments to local livelihood can be realized by supporting a range of different Nature-based Solutions. Such approaches offer long-term economic savings for local and national authorities compared to relying strictly on grey infrastructure and important entry points for supporting local sustainable ocean-based economic development in the coastal zone. Further, if managed and cleaned properly, wastewater from the agricultural and municipal sector can be reused directly for irrigation, aquifer recharging etc.

Below are a few examples on possible interventions that may be considered under this IP. Please note this list is not exhaustive, but merely included to provide some indication of what the IP may entail:

Funding Nature-based Solutions to be combined with new or existing grey wastewater infrastructure for secondary or tertiary treatment of industrial, municipal effluents and agricultural non-point/point run off;

Funding of low-cost, innovative Nature-based Solutions in coastal areas. Large-scale wastewater treatment systems may not be an appropriate option for treating agricultural and urban wastewater;

Testing of innovative nutrient recycling tools and modalities;

Catalyze deployment of decentralized NbS wastewater treatment systems, such as constructed wetlands, activated sludge systems, sand and other filter systems;

Ensure coastal pollution efforts are coordinated between municipalities and between countries, to avoid efforts being diluted by lack of action of others;

Incentivize management strategies such as implementing riparian buffers to curb nutrient pollution from agricultural sources;

Development of innovative solutions to curb different sources of wastewater; and,

Inform policy formulation to support implementation of Nbs wastewater treatment solutions, through collection, management and use of data on water quality to be able to track pollutants and their origination

A major barrier to improved wastewater management is the low levels of public political attention and therefore public investment. As a natural effect of the current pandemic, the need

for improved wastewater management globally is crystal clear. Utilizing the renewed attention this IP will bring, to direct investments in flexible, functional wastewater treatment systems, will lead to transformational environmental status changes. These changes will benefit human and ocean health, and lead to positive shifts in the health and sustainability of rivers, landscapes, aquifers and thereby ensuring that infection of potable water sources will be minimized too. This approach will facilitate political coordination and planning, and foster joint efforts of collaboration between the environmental health agencies.

The proposed integrated program will link directly to the International Waters Focal area, where the IP investments will be supported through activities in both Objective 1 and Objective Furthermore, this program will have clear linkages to investments, BD, LD, CC and C&W Focal areas. The increased focus on reforms and investments addressing wastewater issues will directly and indirectly deliver towards C&W targets. Further, the IP will also have clear connections with following Integrated Programs; Food Systems, Sustainable Cities, Circular Solutions to Plastic Pollution, Blue and Green Islands, Elimination of Hazardous Chemicals from Supply Chains, and Ecosystem Restoration.

Existing Platforms and Potential Partners

The Clean and Healthy Ocean Integrated Program will offer a unique entry point for the GEF and its partners to leverage substantial financing from IFIs, pension funds and private banking operations. On top of these financial actors, there are a number of NGO, CSO, and private sector able to support knowledge generation through its investments. A substantially financed IP, like this one, will be essential in raising the importance of proper wastewater treatment in the global discourse. Finally, there may be good opportunities for partnering and leveraging lessons learned through the Global Wastewater Initiative (GW²I), The International Water Association (IWA) and Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA), Horizon 2020 and the partners around the Sustainable Blue Economy Finance Principles.

Contributions of this Program to MEAs and Related Global Environmental Benefits

All global and regional MEAs and many NDCs note the importance of a healthy and vibrant ocean ecosystem to ensure a healthy planet that will support humanity. Regional economic commissions, global and regional investment banks have dedicated large funding envelopes to address the devastating impact of wastewater and agricultural run-off into the ocean, due to the recognized impact on social, economic and cultural development opportunities in society. This IP will directly be aligning with and delivering towards the draft Post-2020 Global Biodiversity Framework target of reducing nutrients lost to the environment by at least half.

Curbing wastewater flow to the ocean, by cleaning it, will directly deliver against two GEF core indicators linked to the CBD and UNFCCC respectively, namely core indicator 5 and

Cleaning wastewater and thereby curbing inflow into the marine habitat will lead to “Area of marine habitat under improved practices to benefit biodiversity (million hectares; excluding protected areas)”. However, it will be difficult to estimate a direct quantifiable number of HAs, that will have improved practices. The real impact will rather be measured through the sub-indicators 1) Number of Large Marine Ecosystems with reduced pollution and hypoxia and 2) Amount of Marine Litter Avoided. Further, untreated wastewater has a clear identified.

It is well-known that there is a direct connection between untreated wastewater and CO2 release. Therefore, cleaning wastewater from agriculture, municipal and industry sources will directly cut the amount of released CH4 and N2O, which ultimately will deliver against Core Indicator 6 “Greenhouse Gas Emissions Mitigated (million metric tons of CO2e)”. Again here a clear quantifiable target is very hard to set from the onset of the IP, as the composition and amount of wastewater will be essential to know in order to estimate the actual numeric impact. Finally, the IP may deliver against CW core targets, but again, this can only be established for each specific investment, when the composition of the wastewater is known.

Role of the Private Sector in Supporting this Program

The Clean and Healthy Ocean Integrated Program will offer multiple entry points for private sector actors, from financial institutions on testing new financial tools, over knowledge and solutions providers, to SMEs and large conglomerates for testing and deploying new technologies and innovations:

Development and deployment of new financial tools and products to stimulate private sector banking and pension funds to invest in grey and green pollution reduction facilities. Wastewater is a resource and hence there are economic value associated with treating it through tariffs as well as selling some of the by-products at the end of the treatment process. Therefore, the suite of investments under this IP, will offer an outstanding opportunity to showcase, at scale, different financial tools and products being utilized to support curbing pollution to the ocean ecosystem. The IP would among others draw on lessons from GEF investments such as the CREW and CREW+ and blue and green bonds modalities that currently are being developed and deployed globally;

Stimulate innovation and technology development through e.g. moonshots and other innovation platforms among technology and solution providers from SMEs and large conglomerates; and,

Through leveraging organizations like The International Water Association (IWA), Coalition for Private Investment in Conservation (CPIC), World Business Council for Sustainable Development and the CEO Water Mandate the IP will stimulate wastewater and agricultural runoff sector development, that directly will open engagement opportunities for private sector investors and service providers.

Net-Zero Accelerator Integrated Program

Introduction

According to the IPCC, holding the global temperature increase to 1.5°C above pre-industrial levels will require a 45% carbon dioxide emissions reduction by 2030, compared to 2010 levels, and reaching net-zero emissions globally by 2050.[213] Even this, will only grant us a 50% chance to achieve that goal, and deeper efforts would be needed for higher certainty.

To put the global community on the path to carbon neutrality by 2050, we urgently need to embark on a *race to zero* emissions. This will require raising the ambition of medium-term national policies and long-term deep decarbonization plans across sectors. At a global level, in the power sector, this will mean increasing the penetration of renewable energy six times by 2030 and phasing out unabated coal five times faster than it is currently happening.[214] In the built environment, all actors will need to step up decarbonization actions by a factor a five for the sector to align with net-zero targets by 2050.[215] The rate of adoption of electric vehicles will need to increase twelve times compared to current global sales rates by 2030.[216] Tree cover gains will need to increase five times while deforestation will have to come to a complete halt by 2030.[217] Significant regeneration of organic content in soils will be necessary for agriculture productivity to keep up with rapid population growth and it will need to be coupled with substantial changes in dietary and consumption patterns.

The latest data, however, shows that we are still far from being on the right track.[218] Taken together current national policies and commitments are only enough to limit global average temperature increase to 3°C by 2100, while the 1.5°C threshold would be reached as soon as 2040.[219] The Initial NDC Synthesis Report highlighted that while the majority of countries have increased the ambition of their emission reduction pledges, the combined impact of NDCs submitted up to the end of 2020 would only result in a 1% reduction by 2030, over 2010 emission levels.[220]

WRI (2020), State of Climate Action: Assessing Progress toward 2030 and 2050.

United Nations Environment Programme (2020). 2020 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. Nairobi.

WRI (2020), State of Climate Action: Assessing Progress toward 2030 and 2050.

ibidem

United Nations Environment Programme (2020). Emissions Gap Report 2020. Nairobi

United Nations Environment Programme (2021). Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies. Nairobi.

UNFCCC (2021), Initial NDC Synthesis Report. Bonn.

The transition to net-zero is technically feasible and can bring substantial economic and development opportunities.[221,222] Carbon neutrality efforts offer significant opportunities for shaping healthy environments and can contribute substantially to the post-pandemic economic recovery by supporting the alignment of domestic stimulus packages and international climate finance flows to the principles of the *build back greener* agenda. In the short-term, economic recovery measures will likely focus on job creation and stimulating the economy, which if properly aligned with deep decarbonization efforts, can lead to job creation and economic gains, while supporting greater stability in the long-term through the proper consideration of future climate change and transition-related risks.

However, the financial resources needed to support Paris-aligned decarbonization efforts are very significant. The World Bank estimates the additional investment needed to support the implementation of the commitments under current NDCs exceeds US$ 1 trillion,[223] while achieving net-zero targets by 2050 is likely to require much more than that, with estimates reaching US$ 50 trillion.[224] The IPCC estimated that investments in the energy supply side will need to average US$ 1.6 to 3.8 trillion per year to 2050, while halting all new investments in unabated coal by 2030.[225]

Current volumes of climate mitigation finance flows averaged US$ 336 billion in 2017 and 2018.[226] By comparison, according to an OECD-IEA analysis of 77 economies, government support for the production and consumption of fossil fuels amounted to US$ 478 billion in 2019. To maximize effectiveness of international climate finance flows, ensuring policy coherence, by aligning domestic regulatory frameworks and fiscal spending with long-term climate and development goals, will be crucial.

Without an alignment of financial flows, countries will not be able to leverage the resources necessary to support deep decarbonization efforts and will risk higher levels of spending in the future as a result of stranded assets and economic losses from worsening climate change impacts. Further, the global community will not be able to make the necessary progress

IDB and DDPLAC (2019). Getting to Net-Zero Emissions: Lessons from Latin America and the Caribbean. Inter-American Development Bank, Washington D.C

For a description of the implications relative to the sourcing and management of technology-critical materials and elements which will be needed to implement net-zero roadmaps, please refer to a recent STAP paper: Ali, S. and Katima, J. 2020. Technology Critical Elements and their Relevance to the Global Environment Facility. A STAP Background Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.

World Bank Outlook 2050: Strategic Directions Note. Supporting Countries to Meet Long-term Goals of Decarbonization. World Bank, Washington, DC.
https://openknowledge.worldbank.org/bitstream/handle/10986/33958/149871.pdf?sequence=3&isAllowed=y

Morgan Stanley. 2019. “Decarbonization: The Race to Zero Emissions.” New York.
https://www.morganstanley.com/ideas/investing-indecarbonization.

IPCC, 2018: Global Warming of 1.5°C. IPCC Special Report

CPI, 2020. Updated View of the Global Landscape of Climate Finance 2019. Climate Policy Initiative, London.

to avoid the worst impacts of climate change, which will disproportionately impact the poorest and most vulnerable.

The GEF-8 Integrated Program

The Net-Zero Accelerator Integrated Program (NZA IP) will support countries to develop a clear and milestone-driven pathway to reach the Paris Agreement's carbon neutrality goal. The Program will leverage existing (and define new where needed) methodologies to support transformational changes towards carbon neutrality at a national level and will complement bottom-up processes with top-down support, contributing to an enhancement of the level of collective ambition of global climate efforts.

Considering the current ambition gap of national decarbonization plans highlighted by the UNFCCC's Initial NDC Synthesis Report, a concerted global effort is urgently needed to complement bottom-up processes with top-down support. Some countries with significant systems-based transformation and decarbonization potential in certain sectors may not prioritize action, or their action may not be informed by global best practices. The Net-Zero Accelerator Integrated Program (NZA IP) will provide support to raise NDC ambition under the Paris Agreement, leverage additional financing and move from planning to implementation.

While all eligible UNFCCC Parties will be able to access GEF Climate Change Focal Area resources through the STAR system, participation in the NZA IP will be prioritized for countries that show the highest level of political commitment towards economy-wide, Paris-aligned deep decarbonization objectives. The NZA IP will therefore complement the NDC bottom-up process with top-down actions that will generate practical lessons and valuable knowledge above and beyond those generated through Focal Area investments.

Specific objectives and interventions to be supported by the NZA IP are described below in detail, but all projects selected under the Program will have an integrated, whole-of-economy approach to leverage synergies and align sectoral policies relevant for deep decarbonization efforts. The integrated nature of this program will allow for the generation of outcomes under multiple GEF Focal Areas and for a more ambitious and impactful programming of resources.

Integration will take place at several levels. First, across sectors, as it will require a systems approach and the participation of all line ministries with a role to play for the decarbonization of the economy, including finance, environment, energy, transport, agriculture and forestry, industry, mining, housing/planning, tourism, etc.

Second, action will take place across different value chains, providing an opportunity for seeking synergies with other GEF focal areas as well, including land degradation, biodiversity, and chemicals and waste. For example, interventions along the value chain for electric mobility and renewable energy will have to include considerations relevant for the GEF Chemicals and

Waste and circular economy agendas (sustainable sourcing of critical minerals, use, re-use, recycling of resources, safe disposal of potentially hazardous waste, etc). Similarly, interventions aimed at enhancing carbon sinks through jurisdictional approaches and protecting high carbon ecosystems will seek to leverage more integration with the land degradation and biodiversity agendas.

Third, integration will be sought across levels of governance, between national government priorities and international commitments, between national government plans and those of city or local governments, as well as across actors central to climate action, from the public sector, to the private sector and civil society.

Objectives, Key Interventions, and Selection Criteria

The overarching objective of the NZA IP is to accelerate implementation of net-zero pathways in developing countries, pushing the ambition beyond that of existing NDCs and contributing to closing the emissions gap to meet the aspirational 1.5°C goal of the Paris Agreement.

National-Level Interventions

Specific objectives, depending on the country context and readiness, will include:

Establish functioning coordination platforms to enable cross ministerial dialogues to across sectors and actors for the adoption of net-zero commitments.

Support the preparation and adoption of long-term net-zero strategies (where not yet existing/adopted).

Based on the (new or existing) net-zero strategy, support the development of enforceable and goal-driven policy reform packages to meet net-zero targets by 2050.

Provide support to analyze technical and institutional capacity needs.

Fill information gaps on the socio-economic cost-benefits, trade-offs and co-benefits of deep decarbonization plans, including on the feasibility/fit of clean technologies and on options for addressing harmful subsidies.

Provide resources to develop net-zero-aligned pipelines of projects and finance pilot interventions.

Support the development of robust data systems to monitor progress towards net-zero targets.

Each national project will have a high-level component and one or more downstream components. The high-level component will include the provision of support for inter-sectorial coordination, development of LTSs (where missing), and activities needed to translate long-term

net-zero strategies into enforceable domestic policies at the national level. Such policies would have to consider short- and medium-term actions, synergies and tradeoffs, taking an economy-wide approach to decarbonizing development, minimizing the potential for stranded assets and allowing for a just transition for affected workers and communities, lifting market and regulatory barriers, and unlocking necessary investments. To allow for monitoring of the progress achieved, the Program will support the establishment of credible data collection systems, in coordination with other relevant initiatives, including the CBIT. A baseline assessment to be conducted early during the design of national child projects will allow the program to build on work already done and appropriately engage existing providers of knowledge and technical services (Figure 5).

Figure 5. Baseline screening and NZA IP entry points.



Where needed and appropriate, the Program will support cost-benefit analyses of implementation options of net-zero plans, in order to highlight the broad societal benefits of the systems transformation across emitting sectors. A clear understanding of the trade-offs and net socio-economic benefits linked to long-term deep decarbonization is crucial to generate support from economic and political stakeholders and ensure the sustainability of the adopted policy reform packages.

Policy coherence and elimination of subsidies to non-Paris aligned technologies or practices will be central to these efforts. This includes support for the econometric analyses of scenarios to reform fiscal spending and subsidies in the energy, transport, and agriculture sectors. In the context of the fiscal pressure and exacerbated debt constraints posed by COVID-19, unlocking of resources earmarked for unsustainable subsidies may generate fiscal space and allow for new strategic spending in climate-compatible development and just transition arrangements. Leapfrogging policies, technologies and business models that have long-term potential to constitute sustainable solutions will be supported. Transition technologies, policies or approaches that do not fit well with the systemic transformations needed for a net-zero world will not be considered.

Institutional reforms that may be supported include fiscal, budgetary, financial, regulatory, organizational and governance reforms. Specific examples may include addressing fossil fuel subsidies, taxing emissions, introducing carbon pricing measures, requiring disclosure of emissions data for publicly listed companies, setting up regulatory schemes to cut emissions,

adopting green government procurement programs, mandating all infrastructure and urban projects to take into account lowest emissions options, mandating building or factory permit applications to select lowest emissions alternatives including in construction materials, etc.

In addition to the high-level component, one or more downstream components will be directly supported in participating countries, depending on national circumstances, including potential interventions in the following priority areas:

Zero-carbon energy systems transformation: The Program will support pipeline interventions in the context of the energy sector carbon neutrality plan, which may include integrated resource planning analyses to realign the sector with net-zero targets and incorporate climate resilience considerations. Innovative interventions aimed at accelerating the penetration rate of renewable energy on the power grid will be supported, such as energy storage and grid modernization solutions, as well as energy demand-side management and smart metering. Possible interventions may also include further integration of energy-intensive sectors, such as industry, manufacturing or electrified transport with zero-carbon energy solutions. Interventions aimed at facilitating the decommissioning of fossil fuel power generation assets will be also supported, where feasible. Finally, the program will support social dialogue, analysis and adoption of specific policies to minimize and address negative social impacts from energy decarbonization policies and to ensure a just energy transition.

Zero-carbon built environments: The Program will support the development of standards and protocols to incentivize the development of zero-emission buildings as well as the adoption of specific deep decarbonization targets for the buildings sector. Capitalizing on the learning from the GEF-6 and GEF-7 collaboration with Sustainable Energy for All (SEforALL) on the energy efficiency accelerators, the Program will also support platforms to bring together private sector solution providers with urban and infrastructure planners to promote and develop ways to incentivize the use of carbon neutral construction materials with the view to start tackling embodied carbon. The program will also explore and finance solutions to develop self-supply energy generation options and energy-efficient district heating and cooling opportunities.

Zero-carbon mobility: In this sector, the Program will support the development and implementation of integrated zero-carbon mobility plans at national and local level, which may include comprehensive avoid/reduce, shift and improve approaches (A-S-I), strengthening of public transport infrastructure and further promoting transport electrification, including through green hydrogen options, and direct integration of renewable energy with charging infrastructure for electric vehicles. The Program will also support policy reforms aimed at addressing imports of used ICE vehicles and the fiscal impacts of the projected reduction in income from gasoline taxation on infrastructure financing. Social dialogue, analysis and adoption of specific policies to

address negative social impacts and re-skilling of workers to support new EV domestic industries will also be supported. Where relevant, leveraging its global coordination platform, the Program may also explore support for decarbonization efforts in the maritime and air transport sectors.

Zero-carbon industry: The Program will support interventions in the industry sector to support clean manufacturing of heavy and light commodities, shifting processes towards electricity/green hydrogen, substitution of zero carbon-intensive products, and incorporating a circular economy approach. This component will target a broad range of sectors including steel, cement, aluminum, metals and mining (including informal-mining) chemicals and plastics, and textile/apparel, providing an opportunity for integration with priorities in other GEF focal areas, particularly Chemicals and Waste. While each of these sectors have very different value chains and emission footprints, their deep decarbonization in countries where they represent a major sector of the economy will generally require demonstration and commercialization of breakthrough technologies, development of product standards, mandates and procurement commitments, increased disclosure and transparency across supply chains of embodied and operational emissions, and demand-side levers, as well as support for just transitions initiatives for workforces and communities.

Nature-based Solutions (NbS) to support net-zero targets: NbS can contribute significantly to reducing the atmospheric concentrations of carbon dioxide by enhancing natural carbon sinks in forests, productive landscapes, wetlands and coastal ecosystems. NZA IP support for NbS interventions will be necessary as any of the likely 2050 net-zero pathways rely, at least in part, on atmospheric carbon removals.[227] In this sector, the Program will support innovative interventions that encourage investments at scale in NbS such as by reorienting policies, subsidies and public investments towards conservation and maximization of carbon sinks, increasing awareness of the value of nature, mainstreaming NbS in national strategies and improving the enabling conditions that facilitate the participation of the private sector (including through market-based approaches and adequate pricing). The Program will also support preparation and implementation arrangements of REDD+ schemes where needed and appropriate, building on pre-existing efforts and prioritizing jurisdictional approaches. Such interventions will be designed to ensure their compatibility with biodiversity, water, food and health security, and will seek to further build policy coherence across these sectors.

Global Coordination and Knowledge

There is clear need to identify best practices and work with developing country champions as sector or system influencers and early adopters, setting global benchmarks and

IPCC, 2018: Global Warming of 1.5°C. IPCC Special Report

encouraging alignment by others. The global nature of the NZA Program will allow for methodologies, tools and lessons learned from national experiences to be captured and consolidated, contributing to the growing repository of global knowledge on how to design, plan and implement economy -wide carbon neutrality strategies. In addition, consolidated global lessons and tools will be downscaled within and beyond participating countries to promote South-South cross pollination and accelerate the pace of systemic change.

Specific South-South exchanges and learning experiences will be facilitated and supported by the Program, including through partnerships with national and international providers of technical services already operating in this space. This may include trainings for public officials on specific aspects of sectoral and cross-sectoral decarbonization strategies and the development of international "zero-carbon origin" certification schemes for carbon-intensive commodities such as cement, steel and aluminum, as well as for green hydrogen.

Selection Criteria

Selection criteria for national project proposals would include:

Commitment to long term deep decarbonization action consistent with the ultimate objectives of the Paris Agreement. Several aspects will be considered to assess this, including for instance whether the country has: (i) adopted an NDC that is aligned with a net-zero path to 2050; (ii) adopted a 2050 net-zero target or long-term strategy (outside the NDC); and/or (iii) made commitments or announced intention to adopt a net-zero target/LTS at highest levels of political representation.

Willingness to engage at the highest level of policy decision-making and direct participation in the project governance of multiple ministries relevant to long-term planning for carbon neutrality.

Potential of the proposal to engage with and mobilize private sector actors and investments at scale for the downstream components of each national project.

Commitment to ensure a broad national stakeholder consultation to ensure wide acceptance and sustainability of the proposed interventions including the impacts on women and girls.

Consideration of measures to promote behavioral change compatible with carbon neutrality goals, including on dietary and mobility habits, will also be encouraged.

Existing Platforms and Potential Partners

The growing awareness around the need to reach net-zero emissions by mid-century has sparked action and brought together actors from both the public and private sectors. Key initiatives and potential partners this program will aim to engage and coordinate with include:

The UN Race To Zero Campaign, whose additional commitments and announcements from COP 26 can strengthen and amplify success stories in GEF countries, and support the replication of successful experiences.[228]

The Deep Decarbonization Pathways Initiative (DDPi), funded with support from Germany, and the Institute for Sustainable Development and International Relations (IDDRI) who have developed methodologies which can be adapted to the extent possible to the local circumstances of participating countries.[229]

The World Bank's Climate Support Facility, which in December 2020 launched a Green Recovery Initiative (GRI), aimed at supporting countries advancing a low-carbon and climate-resilient recovery from COVID-19.

The Inter-American Development Bank (IDB), which has worked on the decarbonization strategy for Costa Rica and has also partnered with the DDPi on the decarbonization pathways for Latin America and the Caribbean (DDPLAC) project, co-financed by the Agence Française de Développement (AFD).[230]

The United Nation Development Programme (UNDP), which has experience in supporting the preparation of NDCs and LTSs through the "Climate Promise" initiative, and the "NDC Support Programme."

The International Renewable Energy Agency (IRENA), which hosts the Long-Term Scenario for Energy Transitions campaign that "aims to promote the wider adoption and improved use of long-term model-based energy scenarios to support and accelerate the energy transition among Clean Energy Ministerial (CEM) countries."

Additional key potential partners include the Coalition of Finance Ministers for Climate Action, the International Energy Agency (IEA), the NDC Partnership, the OECD's International Transport Forum (OECD-ITF), the Climate Policy Initiative (CPI), other Multilateral Development Banks, WRI, SE4All, and the Rocky Mountain Institute (RMI).

Contributions of this Program to MEAs and Related Global Environmental Benefits

UNFCCC: The NZA IP responds directly to the need to speed up the pace of decarbonization efforts and is directly linked to the ultimate goal of the Paris Agreement. The key areas of intervention proposed for this Program cumulatively represent the great majority of global emissions, including the energy, transportation and land use systems.

https://unfccc.int/climate-action/race-to-zero-campaign

Climate Works Australia (2020), Growth Through Transformation: an Investment Vision Guide for Climate and Development.

IDB and DDPLAC (2019). Getting to Net-Zero Emissions: Lessons from Latin America and the Caribbean. Inter-American Development Bank, Washington D.C

UNCBD and UNCCD: The NZA IP has significant potential to contribute to generate GEBs towards biodiversity and land degradation focal area targets as it will support activities aimed at preserving and enhancing carbon sinks in natural ecosystems, including forests and agroforestry systems, coastal areas with large carbon stocks such as mangrove forests.

Stockholm and Minamata Conventions: this Program will create opportunities to achieve multiple goals of the Stockholm Convention on persistent organic pollutants (POPs) and the Minamata Convention. Particular attention will be given to the sourcing, use and recycling of components of batteries used for chemical energy storage and ensuring they are managed on accordance with relevant Basel Convention guidelines for management of hazardous waste.

SDGs: The NZA IP is fully aligned with several SDGs, including: SDG13 on climate action and SGD7, which focuses on ensuring universal access to modern energy services, doubling the rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix. It is also well aligned with SDG11 on sustainable cities, SDG15 on life on land, and SDG12 responsible consumption and production.

Role of the private sector in supporting this program

At global level, the Program will leverage existing and establish new coordination arrangements for the private sector to provide practical inputs to the Program's long-term decarbonization toolkits. The toolkits will house examples of successful policies and actions being implemented worldwide to achieve deep decarbonization in first mover countries worldwide. At national level, participation of the private sector will be essential both as input providers in the preparation of national decarbonization plans and of the specific implementation policies, as well as providers of carbon neutrality solutions and finance. It is expected that the Program will also support countries in their engagement with private sector actors to estimate the potential of long term decarbonization policies to generate well-paying green jobs and to highlight and prioritize measure to minimize short-term unintended impacts on employment.

The Program will work closely with private sector coalitions and organizations to galvanize private sector engagement and further increase likelihood of adoption of private sector commitments to carbon neutrality. To do this, The Program will maintain close coordination with the World Economic Forum (WEF), the World Business Council for Sustainable Development (WBCSD), the Science Based Targets Initiative (SBTi), and the Carbon Disclosure Project (CDP), along with additional private sector partners.

Wildlife Conservation for Development Integrated Program

Introduction

The COVID-19 pandemic has had far reaching impacts on wildlife, wild places and the people who depend on these resources for their livelihoods. It has also highlighted the interconnectedness of people and nature via zoonotic disease spillover; shown us the vulnerability of economies and protected areas dependent on international tourism market; and made obvious the value of diversification, resilience and an integrated approach that takes into account the health of ecosystems, health of wildlife and well-being of people.

The pandemic is a symptom of the imbalance of humans' relationship with nature, that has also resulted in the species extinction crisis with more species now threatened with global extinction than ever before, driven by human actions. The Red List Index shows that there has been no reduction in the rate at which species are moving towards extinctions as a result of human impacts, including growing threats to species and the Key Biodiversity Areas and wider landscapes and seascapes they depend upon.[231]

A complex set of drivers including land/sea use changes, climate change, overexploitation of resources, pollution and invasive alien species are behind these declines. Although there are regional and sub-regional differences, the overexploitation of wildlife and destruction of habitat is driven by: illegal and unsustainable consumption and trade of wildlife and the underlying demand for wildlife and wildlife products; undervaluation of natural resources and perverse incentives; lack of viable economic alternatives; and poor natural resource governance at the local, national and global scales. Despite some recent policy progress, including the elevation of pangolins to CITES Appendix I, wildlife crime continues to be a lucrative global business, with high demand driving high prices, and with low risk of apprehension. Nearly 6,000 species of fauna and flora have been seized between 1999 and 2018, with nearly every country in the world playing a role in the illegal wildlife trade.[232]

Travel and other pandemic-related restrictions have led to the collapse of the nature-based tourism market with social, economic and ecological impacts. The tourism sector is a major source of employment, revenue and foreign exchange revenue and projected declines of 58% to 78% put at risk 100 to 120 million direct tourism jobs. In Africa over a third of all direct tourism in 2018 was attributable to wildlife. Loss of this tourism has resulted in mixed impacts

IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental. Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A.
Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany. 56 pages. And Sustainable Development Goals Report, UN 2019.

UNODC, World Wildlife Crime Report 2020: Trafficking in Protected Species.

with reported increases in wildlife crime but also some declines where lockdowns have reduced transportation.[233]

Although the loss of wildlife and habitat is persisting and worsening by most measures, the news is not all bad. A decade ago the illegal killing of African elephants and rhinos gained global public recognition as a crisis due to dramatic uptick in the poaching, international trafficking and consumption of ivory and rhino horn. Since then, there has been significant public and private investment in wildlife and habitat conservation (approximately USD 261 million of international donor funding per year in tackling illegal wildlife trade in Africa and Asia alone),[234] increased political will[235] and accountability, the advent of creative financing options applied to wildlife conservation,[236] a significant drop in rhino horn and ivory prices,[237] domestic bans on rhino horn and ivory trade, and an increasing understanding of the potential impacts of policy measures on wildlife consumption on livelihoods (including for IPLCs), food security and biodiversity[238, 239] and the need for nuanced, risk-based, context-specific actions.

Although we are still gauging what the pandemic shock has meant for key indicators of wildlife and landscapes, the GEF-6 & 7 investments through the Global Wildlife Program have been essential in these positive signs, buffering wildlife, ecosystems and the people they depend on from even graver impacts and preparing a greener recovery through collective action at the national, regional and global levels. The GEF-8 WCD IP will build on this strong foundation.

GEF-8 Integrated Program

The GEF-8 Wildlife Conservation for Development Integrated Program (WCD IP) will support countries to secure terrestrial and marine wildlife[240] populations and key landscapes through an integrated approach to transforming the drivers of species loss and ensure that countries and communities are benefiting from these natural assets (Figure 6). The IP will

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UNCTAD. (2020). COVID-19 and tourism. Assessing the economic consequences; World Tourism Organization. (2020). Impact assessment of the COVID-19 outbreak on international tourism. May 2020. Shaban, R.Z., Sotomayor-Castillo, C. F., Malik, J. and Li, C. (2020). Global commercial passenger airlines and travel health information regarding infection control and the prevention of infectious disease: What's in a website? *Travel Medicine and Infectious Disease 33*: 101528; Tatem, A. J., Hay, S. I. and Rogers, D. J. (2006). Global traffic and disease vector dispersal. *Proceedings of the National Academy of Sciences 103*: 6242–6247; European Commission. (2020). Spotlight on COVID-19 and Africa's protected area tourism. Spenceley, A. (2020). Presentation to GEF Task Force on post-COVID action. 1 September, 2020.

World Bank Analysis of International Funding to Tackle Illegal Wildlife Trade 2016.

London Conference on the Illegal Wildlife Trade (2014 and 2018) and London Declaration with follow-up summits in Kasane (2015) and Hanoi (2016) with coinciding high level-statements.

GEF support to Rhino and Wildlife bonds in GEF-5 and GEF-7.

UNODC, World Wildlife Crime Report 2020: Trafficking in Protected Species.

Possible negative consequences of a wildlife trade ban, Dilys Roe and Tien Ming Lee. Comment in Nature. 19 January 2021.

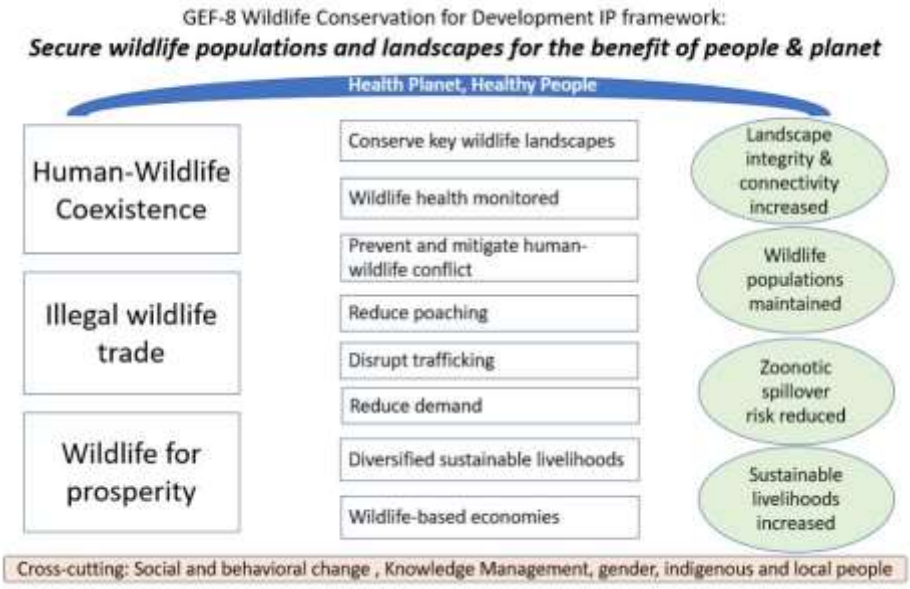
Booth et al., Investigating the risks of removing wild meat from global food systems, Current Biology (2021).

Includes marine, freshwater and terrestrial wildlife, excludes IUU fishing and timber. Note that sustainably harvested NTFPs can be included in Wildlife-based Economies and Sustainable Diversified Livelihoods activities.

support countries to generate benefits through wildlife and habitat conservation through the diversified, sustainable livelihoods while assisting the recovery and growth of nature-based tourism, and supporting wildlife based economies. Rather than taking a narrow species-based approach, the IP will combat the illegal and high-risk[241] consumption and trade by addressing key elements of the supply chain (poaching, trafficking and demand); and it will support strategies for the coexistence of human and wildlife populations through landscape -level conservation and by managing human-wildlife conflict, while incorporating a new focus on zoonotic spillover risk reduction by promoting control and proper regulation of wildlife trade and unsustainable wildlife exploitation for non-trade purposes.

Building on the significant progress made through the GWP in GEF-6 and GEF-7, the WCD IP will make important contributions by taking a Healthy Planet, Healthy People approach, considering the interconnectedness of ecosystem, wildlife and human health to deliver multiple benefits, by addressing multiple drivers of the loss of wildlife and wildlife habitat. These national actions will be supported by strategic actions, interdisciplinary partnerships and sound analytics and knowledge management at the global level with regional level coordination and engagement. This will result in increased ecological connectivity and integrity of wildlife landscapes; increased wildlife populations; reduced risk of zoonotic spillover; and increased sustainable benefits from wildlife and landscapes.

Figure 6. Components of the Integrated Program



Objectives, Key Interventions, and Selection Criteria

[241] High-risk from a zoonotic transmission perspective, could be legal or illegally traded wildlife species.

The objective of the WCD IP is to conserve wildlife and landscapes by transforming the drivers of species loss and ensuring that countries and communities are benefiting from these natural assets. Achieving this requires an approach with both global and national dimensions. A global reach is critical to success given the loss of wildlife in one place can be driven by forces with roots in international demand and illegal wildlife supply chains and global trafficking networks, and on the other hand strong incentives for wildlife conservation are often tied to international industries including tourism. Also, distinctly national and local level approaches and actions will benefit from a globally integrated program to support information exchange, capacity building and networking.

The IP will include targeted activities in areas that national projects have a challenging time addressing, such as: i) international trafficking and transboundary issues; ii) behavior change for reducing consumer demand for illegal or unsustainable wildlife (prioritizing high-zoonotic risk and nationally and internationally traded and consumed illegal wildlife); iii) support for One Health approaches to reducing zoonotic spillover risks; and iv) global and regional donor coordination and knowledge management, with emphasis in South-South collaboration. The three WCD IP components for national projects will work together and investments in each reinforce one another with support of a global platform and targeted regional coordination and engagement, taking into consideration compliance with international obligations.

The first component, *Human Wildlife Coexistence,* will support countries to conserve the extent, integrity and connectivity of key wildlife landscapes, including protected areas, land managed by IPLCs, and OECMs in those landscapes; deploy actions and policies to reduce zoonotic spillover from wildlife to humans; with complementary activities that avoid and mitigate human wildlife conflict, including sustainable measures to reduce habitat fragmentation and wildlife-livestock contact to further reduce zoonotic risk. Potential activities under this component include: protected area management; integrated landscape management and restoration of ecological connectivity; community-based management including efforts to increase security of local resource access, rights and land tenure; monitoring high-zoonotic risk wildlife and ecosystems; education and behavior change; actions to reduce high-risk wildlife encounters; Innovative agricultural (including livestock) approaches; wildlife damage insurance options; and measures to increase sustainability and decrease health risk of legal, local wildlife trade and consumption, including bushmeat.

The second component, combating *Illegal Wildlife Trade* (IWT) takes a supply-chain approach to curbing poaching, disrupting trafficking, and reducing demand for illegal, unsustainable and high zoonotic-risk wildlife within and between countries.[242] This builds

[242] Targeted grant set-aside will be available through the global platform to support behavior change approaches to reducing demand for trafficked wildlife, in addition to a mainstreamed approach to domestic.

directly on significant GWP advances in this area to more broadly address the threat that illegal wildlife trade poses to a wide range of species and to human health. Potential activities under this component include: i) site-based anti-poaching; ii) community-based-monitoring and engagement; iii) reform and enforcement of national wildlife-related laws and policies;[243] iv) mainstreaming wildlife into law enforcement and prosecution; v) information and intelligence and enforcement coordination within and between countries; vi) application of tools and technology; vii) cutting-edge analytics to help invest to reduce risks of emerging infectious diseases; viii) capacity building and technical assistance; and ix) social and behavior change communications.

The third component *Wildlife for Prosperity* strives to ensure that local communities and governments value, invest-in and benefit from wildlife and habitat conservation including the recovery of nature-based tourism, landscape restoration and diversification of sustainable livelihoods and private sector engagement for building sustainable wildlife based economies. Potential activities under this component include: i) diversified enterprise development; ii) job generation in sustainable livelihood activities, iii) public-private partnerships (enterprises, concessions, technology, etc); iv) nature-based tourism recovery; v) enabling policy environment including increasing and clarifying community and IPLC rights to manage and use resources; and vi) innovative financing and insurance products.

The WCD IP will support global transformation through a global platform, incorporating and building on GWP-6/7 Global Coordination grants to bolster, support and supplement national projects focused on Components 1-3. The global platform will provide: i) targeted support to national projects on behavioral and social science approaches; ii) engage and form interdisciplinary partnerships to support wildlife conservation and human health; iii) knowledge management and learning, including application of innovative and appropriate technology; iv) capacity building to increase technical capabilities and strengthen local institutions; v) critical analytics and natural capital assessments; vi) monitoring and evaluation for the entire program; and vii) fostering stronger interagency, intersectoral, and international collaboration including increasing transparency and data sharing.

WCD IP will consist of a set of national projects that will work across the IP components depending on the in-country conditions and national-priorities. The global platform will work at a global, regional or transnational level and include a set-aside grant window to support social and behavioral sciences approaches to demand reduction for internationally trafficked and high-risk species, noting that demand reduction behavior change efforts aimed at domestic markets should be mainstreamed through the approach of national projects as well.

[243] Including sanitary regulations for trade and consumption of wildlife products with direct wildlife conservation benefit.

The program will adopt a dual approach with a global project and country specific investments in target landscapes. It will build on the existing program governance structure of GEF-6 and GEF-7 with a clear value-added proposition to scale up impact in the GEF-8 period and beyond. The program will include the following criteria for financing:

Role of the country in wildlife supply chains for globally significant, and high zoonotic risk wildlife species;

Presence of high poaching risk at sites of global significance for biodiversity;

Increasing/emerging threat of illegal trade including shifting consumer demand;

Potential benefits for conservation and livelihoods from wildlife-based economies;

Potential to cooperate with other countries to address threats to wildlife, habitats and ecological connectivity;

Opportunity for strong multi-focal area, interventions producing multiple benefits while contributing to GEF focal area objectives; and

Testing and scaling innovations for wildlife management, human wildlife confilict, sustainable livelihoods, wildlife monitoring, enforcement, and zoonotic survellience etc.

The WCD IP investments will also emphasize the application of a gender-responsive approach covering the differential vulnerabilities and capacities of women and men, and gender differences and potential inequalities and opportunities for project impact, effectiveness and sustainability. Projects under WCD IP should include measures to improve the participation and decision-making of women in natural resource governance and target socio-economic benefits and services for women. Projects will also include gender analyses, using sex as part of the design and development of wildlife management interventions, as well as during monitoring and evaluation.

This IP will be transformational given it will be bolstering a strong set of economic incentives for wildlife conservation, landscape-level conservation and management approaches that benefit both wildlife and livelihoods. Also this IP will be taking a systems-approach to strengthen institutions and create enabling environments that are critical to address wildlife conservation and drivers of IWT and unsustainable wildlife taking and consumption across target landscapes, rather than taking a narrowly-focused species approach to the issue.

Existing Platforms and Potential Partners

The Wildlife Conservation for Development IP will engage with various global and regional platforms and alliances to strengthen collaboration between wildlife related actors to address multifaceted environmental, social, economic and public health challenges facing wildlife conservation and sustainable management. In addition, working across a variety of land

and resource rights regimes will mean engagement with IPLCs and institutions including indigenous associations, resource user groups, and conservancies, in addition to public and private sector entities. Under the GWP 6 and 7, the global coordination project has successfully established a coordination and knowledge platform (KP) that provides technical resources and enables the exchange of lessons learned to help project teams with the implementation of their activities on combating IWT and conserving wildlife and habitats and reducing demand.

The enormous global impacts of zoonotic disease pathogens (e.g Ebola, SARS, AIDS, SARS-CoV2) have propelled multi-stakeholder coalitions to expedite collaboration in order to fortify environmental services, biodiversity, and health. Although the zoonotic source of SARS-CoV-2 is still unknown, understanding potential links to wildlife is a key consideration. The pandemic is shining a spotlight on the illicit wildlife market and it represents an opportunity to engage with the Healthy Planet, Healthy People approach partners, including The World Health Organization (WHO), and others to build new and strengthen existing partnerships to reduce global and domestic consumption and trade of wildlife.

In addition, governments and local and international NGOs have created an extensive program working across Asia on behavior change initiatives. WCD IP collaboration will mainstream social and behavior change approaches for demand reduction and increase public understanding and visibility of the scale and impacts of illegal wildlife trade and unsustainable consumption on biodiversity, livelihoods, animal and human health, and links to organized crime.

WCD IP will also strengthen existing and build new coalitions such as the strong coordination with the International Consortium on Combating Wildlife Crime (ICCWC).[244] This collaborative effort of five inter-governmental organizations working to bring coordinated support to the national wildlife law enforcement agencies and to the sub-regional and regional networks that act in defense of natural resources. The partner agencies to ICCWC are the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, INTERPOL, the United Nations Office on Drugs and Crime (UNODC), the World Bank and the World Customs Organization (WCO).

Contributions of this Program to MEAs and Related Global Environmental Benefits

The WCD IP embodies an integrated approach to deliver global environment benefits across the GEF's focal areas and IPs, and MEAs in a more impactful and efficient manner. The program is structured to contribute directly to achieving the following action targets of the first draft of the *Global Biodiversity Framework*:

[244] https://cites.org/eng/prog/iccwc_new.php

Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict.

Target 5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.

Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities.

Although the GEF is not the financial mechanism for CITES nor the Convention on Migratory Species (CMS), and thus will not directly support countries' CITES nor CMS implementation activities, this program will make meaningful contributions to addressing the drivers of illegal wildlife trade and overexploitation of wildlife; and maintenance of ecological connectivity, and wildlife health.

The WCD IP will produce multiple GEBs for biodiversity, climate change mitigation and land degradation. Increasing integrity and connectivity of wildlife populations and landscapes and providing more diversified and resilient economies through generating value from wildlife and its habitats will reduce biodiversity loss and enhance human wellbeing. Alternative livelihoods can allow IPLCs to not only depend on agriculture but also on wildlife-based and other diversified sources of livelihood can help to reduce the stress of unsustainable agriculture practices, exploitation of resources from conservation areas and also contribute to reforestation/restoration goals.

The WCD IP will include activities aimed at preserving and enhancing carbon sinks in natural ecosystems, including habitat restoration and agroforestry, and also strengthening the climate-resilience of IPLCs and target areas. Further, the WCD IP will directly contribute to several other GEF IPs including: Ecosystem Restoration; Amazon, Congo and Critical Forest Biomes; Clean and Healthy Ocean; and Greening Transportation Infrastructure Development.

The WCD IP is fully aligned with several SDGs, including: SDG15 life on land, for which it provides direct solutions to protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss, and SGD13, which focuses on climate action. It is also well aligned with SDG3 on good health and well-being and SDG12 on life responsible

consumption and production, through the program's activities for reducing risks of zoonotic spillovers and stimulating behavior change to sustainably reduce wildlife consumption, respectively.

Role of the private sector in supporting this program

Private sector engagement is essential to achieve the innovation and transformational change in wildlife conservation and sustainable livelihoods. GEF financing will incentivize actions by national governments to promote the tourism sector to develop and expand nature-based tourism opportunities and wildlife-based value chains to generate sustainable livelihood opportunities that reduce conflicts between communities and wildlife. The private sector can also play an important role in protected area management models and habitat restoration.

The travel, restaurant and retail sectors will be engaged to address the trade and consumption of illegal wildlife and wildlife products. Technology and IT companies will be engaged to support the development of innovative solutions that help address IWT, monitor zoonotic diseases, influence demand reduction and consumption of wildlife and wildlife products. With the goal of developing more flexibility and fostering innovation, more emphasis will be put on innovation/tech/development grants/prizes that allow for private sector engagement at all levels including for remote patrolling and surveillance technology solutions.

WCD IP will also explore opportunities to engage new investor groups/asset classes to support innovative financial solutions and work with the financial sector to curb wildlife trafficking. For the development of small and medium-sized enterprises (SMEs) there is also the possibility of blended finance or outside sources of concessional finance, and grant funding for technical assistance. The private sector commitments to biodiversity, climate change mitigation and adaptation, land restoration, social equity and NbS frameworks represent further opportunities for channeling resources to target protected areas/landscapes and diversified livelihood activities. The GEF's participation in relevant multi-stakeholder platforms and finance initiatives will be used to capitalize on these opportunities.

Elimination of Hazardous Chemicals from Supply Chains Integrated Program

Introduction

Globally significant supply chains extend over national borders and have multiple environmental impacts across all focal areas of the GEF. The environmental damage and pollution from these supply chains have significant impacts on environmental and human health.[245]

Existing work to green these supply chains focus primarily on climate change and increasingly on biodiversity. There is however little evidence that significant progress is made on eliminating hazardous chemicals and materials, particularly those controlled by the Stockholm and Minamata Conventions and relevant to Strategic Approach to International Chemicals Management and the Montreal Protocol that would be critical to facilitating circularity.

There is growing evidence that the following supply chains contribute to significant environmental degradation caused using hazardous chemicals, emissions of greenhouse gases and destruction of biodiversity and land degradation: [246,247,248]

Construction –metals, timber, cement, paint, and additives.

Fashion –textiles (natural and synthetic), leather, metals, natural and synthetic accessories, cosmetics, and beauty products

Construction

Sustainable construction materials will be critical to building the cities of the future and there is need to have available alternative materials that do not use or contribute to hazardous chemical build up, increase deforestation, or increase land degradation.

The construction sector is a major contributor to the emissions of mercury from the production of cement, the production of polyvinyl chloride (PVC), and non-ferrous metals production. The UNEP 2018 Global Mercury Assessment[249] places the cement industry as the third largest source of mercury emissions after artisanal and small-scale gold mining and coal fired power plants.

UN Environment Programme (2020). Sustainability and Circularity in the Textile Value Chain - Global Stocktaking. Nairobi, Kenya.

Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development

Box 4.4, pg. 116, Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)

Kozlowski A, Bardecki M, Searcy C. Environmental Impacts in the Fashion Industry: A Lifecycle and Stakeholder Framework. Journal of Corporate Citizenship. 2012;(45):17-36

UN Environment, 2019, Global Mercury Assessment 2018, UN Environment Programme, Chemicals and Health Branch Geneva, Switzerland

The construction industry drives the PVC sector which is expected to grow to nearly 60 million metric tons in 2025.[250] The manufacture of PVC emits dioxins and the manufacture of its precursor, vinyl chloride monomer is done, in some countries using a mercury catalyst. PVC is difficult to recycle and is often burned as a means of disposal, which emits dioxins. The construction sector uses POPs such as brominated flame retardants and short chain chlorinated paraffins (SCCPs) as well as paints, solvents, metals, cement, and timber. PVC[251] are widely used in PVC tubes, pipes, fittings, plastic PVC profiles, cables, etc. The construction sector accounts for 39% of global greenhouse gas (GHG) emissions.[252]

Fashion

The United Nations Alliance for Sustainable Fashion estimates that the industry accounts for 8% to 10% of the world's greenhouse gas emissions and 20% of the world's industrial wastewater.[253]

According to the World Economic Forum, in 2014, on average, people bought 60% more garments than they did in 2000 and clothing production has roughly doubled since 2000.

UNEP 2020[254] notes that over 8,000 chemicals are used in the various textile manufacturing processes including chemicals controlled by the Stockholm Convention. 750 were found to be hazardous to human health. 440 substances were found to be environmentally hazardous.[255]

In the luxury sector, the demand for responsibly produced ASGM gold is increasing and more effort to phase out mercury in this sector is needed.

UNEP, 2016[256] notes women make up 70% of the 3 million people employed in garment factories in Bangladesh, and Mexico and Cambodia. Women's jobs are in the "bottom tier" of textile production systems exposing them to the highest risks of occupational injuries and exposure to hazardous chemicals (UNEP, 2016).[257] Furthermore, women are particularly susceptible to the health risks from hazardous chemicals used in the wet processing of textiles

Global PVC production volume 2018 & 2025, Published by Ian Tiseo, Jan 27, 2021

Polyvinyl Chloride (PVC): 2021 World Market Outlook and Forecast up to 2030

United Nations Environment Programme (2021). Catalyzing Science-based Policy action on Sustainable Consumption and Production – The value-chain approach & its application to food, construction, and textiles. Nairobi.

UN Alliance for Sustainable Fashion; Retrieved from https://unfashionalliance.org/

UN Environment Programme (2020). Sustainability and Circularity in the Textile Supply chain - Global Stocktaking. Nairobi, Kenya.

KEMI. 2014. Chemicals in Textiles. Risks to Human Health and the Environment.

UNEP. 2016. Global Gender and Environment Outlook.

UNEP. 2016. Global Gender and Environment Outlook.

(UNEP, 2016).[258] As a result, improvements in this sector will significantly reduce the harmful impacts of chemicals on women employed in this sector.

GEF-8 Integrated Program

Existing work in these supply chains largely focus on one issue at a time, such as energy efficiency in buildings, or water use in textile processing. This approach has resulted in improvements in those areas, however, actions are not holistic which can result in duplicating effort. This IP is aimed at creating a policy and regulatory framework that is harmonized along the supply chain and accelerate the greening of these supply chains rather than through any single focal area. Central to this IP is the notion of "materials as the convener".

For the fashion and construction sectors to become sustainable, circular approaches along with behavioral change of consumers and businesses combined with green and cleaner production will be required. To achieve this goal, eliminating hazardous chemicals and materials is critical to transforming these supply chains. The IP will also facilitate global coordination along these supply chains to ensure actions are coordinated.

Objectives, Key Interventions, and Selection Criteria

To have responsible fashion and construction there needs to be better design of the end products, access to suitable materials, and a well understood and defined supply chain. To accomplish this the program's objective is to prevent chemical pollution from the supply chains of fashion and construction, reduce greenhouse gas emissions, adopt more energy efficient technologies and practices, use Nature-based Solutions and contribute to biodiversity protection and conservation by influencing material choices and ensuring these materials are available and accessible. The program also seeks to create circular and closed loop supply chains in fashion and construction as follows:

Objective 1: Policy Coherence for the Management of Sustainable Supply Chains

The lack of transparency in the supply chains of materials is a major barrier for decision making. Supporting harmonized regulatory systems and environmental standards allow for more uniform management of supply chains to prevent release of hazardous chemicals at all stages of the life cycle. This allows regulatory certainty that facilitates private sector innovation within a stable regulatory environment leading to the creation of green business to business (B2B) partnerships. Actions include inter alia:

Mapping the supply chain to understand materials flows and points of contamination and reviewing effectiveness of existing legislation

[258] UNEP. 2016. Global Gender and Environment Outlook.

Harmonizing policy incentives to drive innovation across the supply chain and that support business to business partnerships and financial incentives.

Green industry standards/guidelines and certification schemes on products and materials that build upon existing industry standards.

Reporting of hazardous chemicals in products and materials in supply chains as well as GHG potential.

Block chain and other tools to ensure traceability and certification of materials used in fashion and construction.

Regenerative design of products and materials, which will facilitate removal of hazardous chemicals from supply chains of materials and products and facilitate more closed loop and circular supply chains.

Reverse logistics and supply chains to enable recovery of materials and products for reuse, thereby preventing them for building up in the environment.

Green procurement to facilitate elimination of products and materials that contain or can contribute to the emission or releases of hazardous chemicals and a buildup of material that contains hazardous chemicals.

Objective 2: Green by Design

Ensuring there is responsible sourcing of materials and products within supply chains will be critical. The following areas can be supported:

Green and sustainable chemistry, 3Rs (Reduce, Reuse and Recycle) circularity and Nature-based Solutions for redesign of materials and products used in the fashion industry.

Agriculture practices that do not use hazardous chemicals where possible.

Efficient materials recovery from fashion products, including fiber recovery and materials recovery from buildings and another built environment.

Designing out harmful materials including microplastics from supply chains.

The selection criteria for countries and supply chains to be relevant for this program will focus on:

Countries that can demonstrate the large global environmental benefits for at least the Stockholm or Minamata Conventions.

Supply chains that have the highest percentage of hazardous chemicals will be prioritized.

Projects must at a minimum have global environmental benefits for chemicals and waste MEAs and meet multiple global environmental benefits under other MEAs including CBD, UNFCCC and UNCCD.

Projects that can bring together the major private sector partners that are engaged in the supply chain or sub-supply chain.

Projects that use regenerative design, implement reverse logistics and green procurement as a base component to transform the supply chains.

Projects that can influence behavioral changes in consumer, private sector, and government to facilitate responsible sourcing of materials and products.

Existing Platforms and Potential Partners

The Elimination of Hazardous chemicals from Supply Chains IP will engage with various global and regional platforms initiatives and alliances to strengthen collaboration, cooperation, and coordination with them.

Fashion

In the Fashion sector the various platforms, initiatives and alliances can be grouped into four groups that align with the objective of green by design in this IP.

Better production and sourcing of materials – Several initiatives are ongoing in this area including the Better Cotton Initiative (BGI)[259] and Cotton 2040[260] are multi-stakeholder initiatives to increase the use of sustainable cotton internationally, bringing together international brands and retailers, sustainable cotton standards, existing industry initiatives and other stakeholders across the supply chain. Working with this group will facilitate access to best practices and lessons learned that can be further scaled through the work in the IP.

Product labels, certifications, benchmarks, pledges, and agreements – Certification and agreements plays an important role in creating transparency in the supply chain and facilitating responsible sourcing. Working with these platforms will allow for more broadly deploying the regulatory frameworks and policy environment to create harmonization across national jurisdictions so that traceability can be ensured from end to end. The Fashion Pact[261] and the

https://bettercotton.org/
http://cottonupguide.org
https://thefashionpact.org

Fashion Industry Charter for Climate Action[262] under the UNFCCC, work on climate change and biodiversity targets, while Bluesign[263] certifies textiles consumer products that are responsibly and sustainably manufactured include the use of chemicals.

Production of more sustainable materials –Existing work can be leveraged and further built and scaled across a wider range of geographies. The stakeholders engaged in this category work on reduction of chemicals, implementing clean and sustainable technology and increasing circularity. The Zero Discharge of Harmful Chemicals (ZDHC)[264] foundation, sets out a roadmap for eliminating hazardous chemicals from textiles. DyeCoo[265] is technology that provides waterless and chemical free textile processing and Repreve[266] which produces fibers for athletic and fashion apparel from recycled plastic bottles.

Platforms that are working specifically on sustainability in textiles - More well know platforms such as Clean by Design,[267] UN Alliance for Sustainable Fashion[268] and the Sustainable Apparel Coalition[269] will be necessary to leverage their large networks to identify both contributors and partners to the work in the IP.

Construction

For the construction sector the primary focus on sustainable building initiatives currently is based on climate change considerations.

Excellence in Design for Greater Efficiencies (EDGE)[270] which is an International Finance Corporation (IFC) certification program on green buildings. This can be further expanded to chemicals standards and hazard content of materials being used in buildings.

The World Green Building Council (WorldGBC)[271] is a global action network comprised of around 70 Green Building Councils globally that are working on transforming the building and construction sector. Working with these to expand to other countries and incorporate chemicals standards and hazard content of materials being used in buildings which allow for the switch to more circular building practices.

https://unfccc.int/climate- action/sectoral-engagement/global-climate- action-in-fashion/about-the-fashion-industry-charter-for-climate-action
https://www.bluesign.com/en
https://www.roadmaptozero.com/?locale=en
http://www.dyecoo.com/
https://repreve.com/
https://www.nrdc.org/resources/clean-design-apparel-manufacturing-and-pollution
https://unfashionalliance.org/
https://apparelcoalition.org/
https://edgebuildings.com/
https://www.worldgbc.org/

The Global Alliance for Buildings and Construction (Global ABC)[272], launched at the 21st Conference of Parties (COP21), is a voluntary partnership of national and local governments, inter-governmental organizations, businesses, associations, networks and think thanks committed to a common vision: A zero-emission, efficient and resilient buildings, and construction sector. The Global ABC network currently includes over 130 members, among which are 30 countries.

Contributions of this Program to MEAs and Related Global Environmental Benefits

Fashion – As stated above the fashion sector produces GHGs higher than the entire global transport sector and textiles alone by volume uses over 50% by weight in chemicals. In addition to this, the textiles sector alone contributes 8% of global GHG emissions, uses over 215 trillion liters of water and contributes 9% of microplastics released in the environments well as negative impacts on wastewater, biodiversity, and land use. Work in this sector is therefore expected to have GEBs for all MEAs and processes covered by the GEF.

Construction – This sector alone accounts for 39% of global GHG emissions and is driving the global PVC sector. The sector also has significant impacts on land, biodiversity loss, air, water, and land pollution. Work in this sector is therefore expected to have GEBs for all the MEAs and processes covered by the GEF.

Role of the private sector in supporting this program

As part of the overall strategy to sufficiently cover such a large and diverse industry, the IP will focus its private sector engagement through multi-stakeholder platforms that can address the concerns of the marketplace, investors and policy makers at the scale required to support systemic transformation. Such platforms include the GEF Gold initiative, the Sustainable Tire Industry Project, the renewable bioeconomy platforms of the WBCSD and the WEF, and GEF's own opportunities to catalyze or consolidate platforms to better address the marketplace opportunities for better chemicals and waste outcomes.

These supply chains will require engagement and participation by the private sector at all points along them including agriculture, textile mills, recycling, manufacturing, plastics, chemical industry, fashion brands. The private sector will need to be both an instrument of change and a beneficiary of change.

A detailed mapping of each supply chain will be required to identify the best entry points for GEF action and partnerships such as the Fashion PACT will help in this work. There will be opportunities to create new enterprises, including women led and owned businesses in each supply chain that adhere to a green/sustainable business model.

https://globalabc.org/).

Greening Transportation Infrastructure Development Integrated Program

Introduction

Infrastructure development is essential to meet humanity's social and economic needs, including ramping up a global energy transition to meet net zero targets. This is especially true in developing economies where millions of people continue to lack access to basic services like water, energy, transportation, and telecommunications. It has been estimated that $95 trillion in new infrastructure is needed by 2040 alone to meet demand—twice what existed in 2012.[273], [274] This much infrastructure development will have profound social and environmental consequences including biodiversity loss, deforestation and GHG emissions unless significant challenges in infrastructure planning and development are overcome.

Anticipated investments in transportation and energy sectors are expected to be particularly impactful. More than 25 million km of new roads are anticipated by 2050, 90% in developing countries.[275] New roads will drive further deforestation in the last remaining old-growth forests, increasing habitat fragmentation and loss of ecosystem connectivity while elevating risks for zoonotic disease spillover. Ninety-five percent of deforestation in the Amazon, for example, occurs within 5 km of a road.[276] Existing transportation infrastructure already has significant costs for people and wildlife with animal-vehicle collisions representing a leading source of mortality in many wildlife populations. Freshwater and coastal ecosystems fare no better, with hydropower dams already fragmenting 67% of long rivers. More than 3,700 dams are planned in the coming years and decades, reducing connectivity for aquatic species by as such as 40%. Already more than half of coastal wetlands have been lost as cities and infrastructure have expanded along coastlines.[277],[278],[279]

Oxford Economics. 2017. Global Infrastructure Outlook. Global Infrastructure Hub. https://www.oxfordeconomics.com/recent-releases/Global-Infrastructure-Outlook

Bhattacharya, A., Oppenheim, J. & Stern, N. 2015. Driving Sustainable Development through Better Infrastructure: Key Elements of a Transformation Program. Brookings Institution, The New Climate Economy and Grantham Research Institute, Washington, DC, USA.

Alamgir M., M.J. Campbell, S. Sloan, M. Goosem, G. R. Clements, M.I. Mahmoud, W. F. Laurance. 2017. Economic, Socio-Political and Environmental Risks of Road Development in the Tropics. Curr Biol. 27(20):R1130-R1140.

Barber, C.P., M. A. Cochrane, C. M. Souza, W. F. Laurance. 2014. Roads, deforestation, and the mitigating effect of protected areas in the Amazon. Biological Conservation 177: 203-209

Grill, G., B. Lehner, M. Thieme, B. Geenen, D. Tickner, F. Antonelli, S. Babu, P. Borrelli, L. Cheng, H. Crochetiere, H. Ehalt Macedo, R. Filgueiras, M. Goichot, J. Higgins, Z. Hogan, B. Lip, M. E. McClain, J. Meng, M. Mulligan, C. Nilsson, J. D. Olden, J. J. Opperman, P. Petry, C. Reidy Liermann, L. Sáenz, S. Salinas-Rodríguez, P. Schelle, R. J. P. Schmitt, J. Snider, F. Tan, K. Tockner, P. H. Valdujo, A. van Soesbergen, and C. Zarfl. 2019. Mapping the world's free-flowing rivers. Nature 569:215-221.

Barbarossa, V., R. Schmitt, Mark. Huijbregts, C. Zarfl, H. King, and A. Schipper. 2020. Impacts of current and future large dams on the geographic range connectivity of freshwater fish worldwide. Proceedings of the National Academy of Sciences Feb 2020, 117: 3648-3655.

Li, X., R. Bellerby, C. Craft, and S. Widney. 2018. Coastal wetland loss, consequences, and challenges for restoration. Anthr. Coasts 1, 1–15.

There are two important drivers of these impacts. First is the development of infrastructure based on an insufficiently holistic understanding of true investment risks and environmental costs and benefits. Recent definitions of 'sustainable' infrastructure have more clearly articulated a comprehensive approach across the full life cycle of a project to ensure economic and financial, social, environmental (including climate), and institutional sustainability.[280] In addition, private sector investors have shown an increasing interest in environment, social and governance (ESG) considerations. Yet consideration of the environmental factors in decision making remains uneven. Mitigating greenhouse gas emissions is getting increasing attention but nature: biodiversity, land degradation, water management and ecosystem services, remains the least integrated factor. One cited reason for this lag is that available key performance indicators are not readily translated into a quantifiable financial impact, leaving biodiversity and other impacts on the natural environment to be considered only during the latter due diligence stages of the process.[281]

Investors rely on environmental impact assessment and other institutional safeguards to try to limit environmental damage only, but these measures are applied too late. *Employed on a project-by-project basis, they preclude community consultation at land/seascape scale*s *upstream of detailed designs and financing arrangements, fail to consider systems-scale cumulative dynamics and impacts across sectors, make mitigation measures seem like costly add-ons, and do not promote nature gains.* Project-level design also rarely sufficiently considers well-researched forecasts of future infrastructure service needs based on socioeconomic trends or climate scenarios.

Second, decision makers are not realizing the full potential of nature-based infrastructure solutions. While ecosystem services are increasingly valued, their benefits are rarely incorporated into infrastructure sector plans because current cost-benefit analysis standards and practices do not sufficiently consider the true negative costs of built assets or the positive benefits of these solutions. Nature-based infrastructure solutions are fundamentally disadvantaged compared to built infrastructure in both policy and practice, rarely classified as a comparable or substitute solution for service delivery due to the lack of guidance and engineering know-how.

These two overarching challenges in current infrastructure development practice are resulting in negative impacts on wildlife, forests, land, and climate, regardless of project-level sustainability. Simply stated, without significant change in this status quo, additional infrastructure development investment in the coming decades will make meeting the goals of the UNFCCC, CBD, and UNCCD impossible. Given the breadth of activity that infrastructure encompasses and considering the very direct impact on biodiversity and climate change that

IDB. 2018. What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle.
Oliver Wyman and WWF. 2020. Incorporating Sustainability into Infrastructure.

transportation infrastructure will exert, the GEF will focus this new integrated program on the transportation infrastructure sector.

GEF-8 Integrated Program

This program will deliver Global Environmental Benefits by enabling countries to meet transportation infrastructure needs and the attendant economic and social benefits, critical to achieving the SDGs and Paris Agreement goals by 1) avoiding the placement of transportation infrastructure in globally important and particularly sensitive ecological areas, thus significantly reducing negative impacts to ecosystems from essential infrastructure development; 2) enabling countries to recognize ecological services that must be maintained to either serve infrastructure needs, such as free flowing rivers that enable multi-modal transport systems, or reduce risks to engineered infrastructure, such forested slopes that protect roads from landslides and erosion, and 3) striking a balance between investment in new transportation infrastructure and maintaining existing assets to meet sustainable infrastructure service delivery requirements.

The program will achieve this by improving planning, regulatory, financial, and institutional and management frameworks geared to the differential needs of countries and landscape specificities. Important criteria that will be considered as part of these frameworks include whole life costs, holistic investment, net-zero, resilience, flexibility, and multi-use design. These framework elements are essential for a well-operating transportation infrastructure industry and more importantly for embedding sustainability into infrastructure operations.

By redirecting the investment trajectory of some of the trillions of dollars aimed at transportation infrastructure development toward low and zero-carbon, efficient, resilient, and biodiversity-positive options, the Impact Program will mobilize a new source of funding for conservation. Funds supporting new infrastructure options can serve to protect and secure significant blocks of intact habitat by avoiding negative transportation infrastructure encroachment and securing natural infrastructure services.

Shifting transportation infrastructure investment in this manner will positively impact the environmental quality of long stretches of rivers, mitigate and sequester millions of tons of CO2, and improve the status of millions of hectares of protected areas in line with an individual country’s commitments to the CBD, UNFCCC, and SDGs. Key priority landscapes will be targeted for integrated planning approaches and investments to reduce habitat fragmentation caused by major transportation infrastructure development. The program’s innovative approach is to support investments in integrated transportation systems that incorporate both sustainable engineered components and the protection of ecological services that can serve either as infrastructure or to protect infrastructure against existing and future risks of climate change. Rather than seeing nature only as a due diligence issue, the program envisions nature as a significant and integral part of the infrastructure that countries need to achieve their development goals.

Objectives, Key Interventions, and Selection Criteria

The objective of the program is to enable countries to develop country level portfolios of integrated biodiversity-positive transportation infrastructure projects at national or land/seascape levels.[282] The program will enable countries to develop integrated approaches that identify and maintain critical ecosystem services that play a role in both meeting infrastructure needs and protecting or enhancing sustainably engineered transportation infrastructure. It is increasingly clear that more effective strategies will incorporate a combination of engineered and natural system management approaches.

With the accelerating pace of infrastructure investment, proven approaches to securing global environmental benefits while delivering infrastructure are needed. Efficiency benefits will accrue if multiple countries apply and share experience with such proven approaches. At the country and landscape/seascape scale, the program will simultaneously target three key areas:

Improve the policy enabling environment for decision-making and investing in the delivery of transportation infrastructure services through integrated biodiversity-positive and sustainably engineered approaches via:

Transparency and equity of participation requirements, including IPLCs, in planning and design under the principle of free, prior, informed consent.

Regulations requiring integrated planning for any/all infrastructure investments.

Procurement incentives to require incorporation of ecological services and to advantage sustainable, biodiversity-positive, transportation infrastructure solutions.

Strengthen integrated, multisectoral, and participatory upstream planning and design. The GEF will support countries to create and apply systems for multisectoral, stakeholder-based upstream planning to identify transportation infrastructure service needs at the national and sub-national landscape/seascape scale and over long-term horizons, along with priority areas of investment in nature to provide ecological services. Such information will be made available to sectoral ministries and project developers to establish a common understanding of key environmental parameters and drive down the costs of project-level analysis and risks of investing. Integrated assessments will cover:

[282] "Biodiversity positive" is defined as having a net positive impact on biodiversity. In biodiversity positive infrastructure projects, the negative impacts of the project are outweighed by the actions taken to avoid and reduce such impacts. Practical examples include, inter alia,: (i) avoiding placing infrastructure in critical ecosystems (ii) biodiversity restoration around the right of way of a road, (iii) maintaining flows / connectivity for fluvial transport; (iv) maintaining or enhancing wildlife crossings or other natural infrastructure to increase connectivity and facilitate the movement of animals.

Current and future climate change impacts and risks.

Spatial analysis and valuation of ecosystem services and biodiversity, including those delivering ecological services that could be threatened by transportation infrastructure or those that will be needed to secure the viability of future transportation infrastructure.

Socioeconomic development needs and priorities based on population growth, energy transition needs and other relevant long-term socio-economic trends.

Necessary technical design solutions to support delivery of nature and biodiversity-positive transportation infrastructure, including, for example, linear infrastructure adaptations that maintain ecosystem connectivity.

Enhance financing and de-risking mechanisms for delivery of biodiversity-positive and sustainably engineered approaches to providing transportation infrastructure services. Building conservation considerations into infrastructure service delivery represents a massive and often unrecognized opportunity, but it requires considerable coordination among governments, companies, public and private financial institutions, and local stakeholders. The program will support the development of approaches to the allocation of infrastructure financing to complement existing infrastructure project preparation and project delivery vehicles and facilitate biodiversity-positive infrastructure investments by:

Enhancing the development and standardization of biodiversity targets for transportation infrastructure.

De-risking investment opportunities through the provision of catalytic first loss capital for early stage project development (e.g. pre-feasibility, feasibility studies).

At the global level, a platform will be created for information exchange and learning across participating countries. This will provide a means for optimizing the contributions of each project and associated partners, based on knowledge and experience gained. Coordination and reporting at the program level will also be handled through the platform. The program will compliment and explore synergies with other GEF programs that may not have the capacities and capabilities to address these challenges. Potential areas to be addressed through the knowledge management elements of the platform include the following, based on the experience and demand of participating countries:

Assessing and promoting the true environmental costs of traditional transportation infrastructure and the value of integrated, multi-sectoral sustainable transportation infrastructure planning and development, including solutions that secure and do not degrade ecological services provided by nature.

Learning around the design of sustainable transportation infrastructure that is biodiversity-positive.

Shared understanding of innovative approaches to facilitating the financing of sustainable infrastructure.

To maximize global environmental benefits, the program will focus on built transportation infrastructure likely to create the greatest harm—or nature-based infrastructure solutions with the greatest potential benefit—in areas of high biodiversity and potential for greenhouse gas emission reductions and/or contributions to climate resilience, and threat of land degradation, based on the latest global science. Priority infrastructure investments for attention under the program will include roads, rail, and ports. Interest is expected from countries that have:

Desire and political will to apply the approach.

Large-scale transportation infrastructure investment aspirations in the sub-sectors of greatest impact.

Intact habitats providing high biodiversity and/or climate benefits.

Existing Platforms and Potential Partners

In the past two years key policy decisions by international platforms have sent powerful signals to the infrastructure community and provided incentives for catalyzing enabling environments for more sustainable infrastructure around the world.[283] Even though COVID-19 economic recovery plans may surface poorly designed infrastructure projects in response to stimulus demands, the recent G20 agreement on Quality Infrastructure Investment (QII) Principles and the European Union Taxonomy may put a brake on highly unsustainable options. Public and private sector investors are heeding these calls for the integration of environmental considerations, including ecosystems, biodiversity, and climate change mitigation and adaptation, in all infrastructure investments to meet national and international environmental goals.

Several platforms are emerging to help facilitate alignment across the infrastructure sector and expand attention to nature-based infrastructure solutions, including Finance to

Two leading platforms are: 1) Climate Finance Leadership Initiative **(**CFLI) convenes leading investment and insurance companies to mobilize and scale private capital for climate solutions. The CFLI, in partnership with the Association of European Development Finance Institutions and the Global Infrastructure Facility is developing guidance on strengthening investment conditions for private climate finance in emerging markets, particularly in clean energy, sustainable urban transport, climate-smart water and waste, green buildings, and sustainable land use; and 2) Finance to Accelerate the Sustainable Transition – Infrastructure (FAST-Infra). FAST-Infra is a finance industry led, multi-stakeholder platform (also consisting of MDBs, academic and non-governmental organizations) charged with transforming sustainable infrastructure and scaling up private investment in sustainable infrastructure in emerging and developing countries.

Accelerate the Sustainable Transition – Infrastructure (FAST-Infra), a private finance-led platform to facilitate sustainable infrastructure investing in developing and emerging markets, and the G20's Global Infrastructure Hub, supporting global sustainable infrastructure investing. They and others are in the process of honing the accountability frameworks needed to enable investors to demonstrate nature-positive and Paris Agreement-aligned outcomes. Coalitions such as the UNEP-hosted Sustainable Infrastructure Partnership (SIP), launched in 2018 with GEF funding, are supporting knowledge sharing and research to help clarify the actions needed to enable integrated approaches. The Coalition for Climate-Resilient Investment (CCRI) has brought together private companies, governments, inter -governmental bodies, and investment managers overseeing more than $10 trillion in assets to help ensure that infrastructure investments properly assess physical risks to existing and new infrastructure from climate change impacts. Likewise, Friends of Ecosystem Based Adaptation (FEBA) is a collective of 80+ organizations and agencies working jointly to share learning and knowledge to improve implementation of EbA and Nature-based Solutions.

However, while beginning to enhance sustainability in a range of infrastructure sectors or in relation to certain technical fields, these platforms do not address the entirety of the collective action failures outlined above. The GEF partnership is uniquely positioned to leverage the expertise within those GEF agencies with capabilities in this arena and to conduct comprehensive policy and investment program dialogues with GEF-eligible countries on infrastructure broadly, with a particular focus in GEF-8 on transportation infrastructure.

Contributions of this Program to MEAs and Related Global Environmental Benefits

This program will help deliver Global Environmental Benefits by a) avoiding or reducing negative impacts to ecosystems from transportation infrastructure development, and b) incentivizing conservation of healthy ecosystems by creating enabling conditions for biodiversity-positive transportation infrastructure solutions to be mainstreamed into national infrastructure portfolios.[284] Key contributions to generating Global Environmental Benefits will include:

Biodiversity conservation through conservation of key habitats, maintenance of ecological connectivity, and reduction of negative impacts, including wildlife mortality from transportation infrastructure installations.

Nature-based planning would avoid placing built infrastructure in areas critical for maintaining biodiversity, and where avoidance is not entirely possible, ensure that critical habitats and ecosystem connectivity are maintained.

Inter-American Development bank and Acclimatise. 2020. Increasing Infrastructure Resilience with Nature-based Solutions (NbS): A 12-step technical guidance document for project developers. Inter-American Development Bank, Washington, DC, USA.

Reducing loss and degradation of forests, wetlands, deltas, rivers and other ecosystems caused by poor planning and siting of infrastructure.

Poorly planned infrastructure can drive environmental degradation through changes in land, ocean and water use and expansion into pristine habitats – contributing to declines in the health and well-being of humans, wildlife populations (including migratory species), and ecosystems. Roads are the principal cause of global terrestrial ecosystems fragmentation.[285]

Reducing GHG emissions linked to land degradation and deforestation and unsustainable building materials and practices.

Existing infrastructure is associated with 60% of global greenhouse gas (GHG) emissions.[286] Eight percent of global greenhouse gas emissions are caused by the production of cement alone, a key input in construction.[287] By alleviating deforestation and land degradation, better planned built infrastructure will reduce associated GHG emissions, while also reducing the demand for built infrastructure and associated building materials.

The program will contribute to helping countries meet their commitments under multilateral environment agreements in a variety of ways, including:

Achieving five of the 21 action targets (1, 8, 11, 14 and 15) set under the post-2020 Global Biodiversity Framework of the Convention of Biological Diversity;

Contributing to agreed actions toward achieving land degradation neutrality under the UN Convention to Combat Desertification;[288] and

Meeting UN Framework Convention on Climate Change ambitions for climate mitigation and adaptation expressed through Nationally Determined Contributions to the Paris Agreement.

Role of the Private Sector in Supporting this Program

Infrastructure investments for provision of public services generally follow from a government-led process that produces an associated plan, program, or policy. While financing is mostly public, such infrastructure investments are increasingly implemented through public-private partnerships. The role of private sector financing for infrastructure is expanding, as such

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Ibisch, P.L., Monika T. Hoffmann, Stefan Kreft, Guy Pe'er, Vassiliki Kati, Lisa Biber-Freudenberger, Dominick A. DellaSala, Mariana M. Vale, Peter R. Hobson, Nuria Selva. 2016. A global map of roadless areas and their conservation status. Science 354, no. 6318: 1423–2.

The Global Commission on the Economy and Climate. 2016. The sustainable infrastructure imperative: financing for better growth and development: key messages and executive summary, page 4. New Climate Economy.

WWF Germany. 2019. Climate protection in the concrete and cement industry: Background and possible courses of action.

United Nations Convention to Combat Desertification. Achieving Land Degradation Neutrality. https://www.unccd.int/actions/achieving-land-degradation-neutrality, accessed February 24, 2021.

investments are increasingly seen by asset managers as a defined asset class alongside traditional fixed income investments.

There is specific private investor interest in supporting “sustainable infrastructure”, as evidenced, for example, by the recent rapid growth of green bonds as an emerging financing instrument. Rising demand for sustainable investments means that private capital may be attracted to infrastructure investments that meet sustainability criteria, especially if these are coupled with government incentives such as access to environmental data, preferential financing terms for pro-nature and pro-climate infrastructure designs, or other enabling conditions.

Environmental bonds adhere to recognized norms, such as the Green Bond Principles or the Climate Bonds Initiative, but these do not require upstream multi-sectoral, stakeholder-based planning conducted at the stage when the overall aims of infrastructure investment plans, programs or policies are set. When applied properly to infrastructure design above the project level, such planning can identify opportunities to avoid or reverse biodiversity loss, land degradation, greenhouse gas emissions, or threats to human welfare from changes in environmental quality or reduced climate resiliency. Both governments and the private sector can ensure that infrastructure investments do not undermine the global environmental benefits provided by healthy ecosystems and can enhance them by drawing upon the services they provide as cost-effective alternatives to traditional built infrastructure.

DELIVERY PATHWAYS OF INTEGRATED PROGRAMS TO BLUE AND GREEN RECOVERY

As noted in the introduction, significant opportunities and pathways exist for the GEF to support and enhance investments that are being made by governments worldwide to stimulate economic recovery in the post-COVID world. The Integrated Programs offer a rich set of entry points for governments to match critical environmental conservation and restoration with urgently needed economic activity.

All GEF focal areas lend themselves to investments that can boost the blue and green recovery. In the Biodiversity focal area, investments in ecosystem restoration and sustainable tourism development and support, for example, the GEF can demonstrate the multiple economic benefits of these investments while focusing on protecting and restoring globally important biodiversity.

The Climate Change focal area strategy will contribute to the blue and green recovery agenda by supporting measures aimed at stimulating the economy that simultaneously accelerate the decarbonization of economies, consistent with the goals of the Paris Agreement. In the short-to medium-term these measures may focus on job creation and economic stimulus, which can be supported by the objectives in the strategy, including the promotion of renewable energy, zero-carbon mobility, energy efficient built environment and industry, innovation and deployment of zero-emissions technologies, fiscal reforms of fossil fuel subsidies, and Nature-based Solutions.

As per the UNCCD, land is the key to building back better: avoiding future degradation, reducing current degradation and reversing harm from the past can accelerate the progress on all SDGs in the face of both the COVID-19 pandemic and climate change. Efforts to avoid, reduce and reverse land degradation are necessary to sustain a healthy planet and to deliver opportunities and essential benefits in particular for women, youth and the rural poor.

The current pandemic has made it clear for all levels of society how important a role freshwater security and access to healthy marine ecosystems and the resources within is for cultural and societal cohesion, economic opportunities and human health. Post-pandemic International Waters investments are an opportunity to “build back better” by ensuring that green and Nature-based Solutions are better integrated into development plans and implementation. The sustainability of these ecosystems is essential to reach global goals far beyond SDG 6 and

Therefore, we need to ensure that our actions catalyze strong resilient transboundary marine and freshwater ecosystems that will contribute to long-term human well-being and ability to recover faster from disasters, climate change impacts, and other disruptions of sustainable development, growth and human prosperity.

As part of the work of the Chemicals and Waste focal area, creation of jobs in green chemicals and alternatives, creation and/or adaptation of businesses to manage chemicals and

materials at the end of life and in safe recovery of materials will contribute to a green recovery. By shifting to low or non-chemicals systems, the pollution of land and water can begin to decline which will in part, over time, facilitate the increased resilience of ecosystems and species and the improved productivity of humans by a reduction of the disease burden caused by chemicals pollution.

The Integrated Programs in particular are well suited to deliver in multiple areas of recovery in a more efficient and impactful manner. These include efforts to protect and restore natural systems and their ecological functionality while also limiting forest fragmentation and in particular in high-risk areas based on what we know of potential future pandemics. Focusing investment in production landscapes and land use practices within them can also decrease the risk of human/nature conflicts. The GEF can also promote circular solutions to reduce unsustainable resource extraction and environmental degradation. And the GEF can promote low carbon solutions for climate mitigation that maximize the delivery of socio-economic co-benefits, such as job creation and reduction of public spending for the purchase of polluting fuels or technologies.

By investing in these options and approaches for a green and blue recovery, the IPs will directly support transformation of the key systems toward a healthy and resilient planet.

The following table summarizes the numerous areas where the IPs can contribute significantly to the blue and green recovery and hopefully lead to a healthier future for nature and people.

Table 1. Supporting a Green and Blue Recovery through the Integrated Programs

GEF-8 Integrated Programs	Options and Approaches
Food Systems	• Sustainable and nature-positive production • Renewable Energy and Energy Efficiency technologies • Circularity in and shorter supply chains engage more local stakeholders • Food loss / waste management improved • Internalizing environmental costs of production including positive incentives • Shifting diets and reduced risks of zoonotic spillovers and further hardship on people
Sustainable Cities	• Urban biodiversity and Nature-based Solutions • Supply chain and waste management • Renewable Energy and Energy Efficiency technologies (Public transport and e-mobility)

	• Management of hazardous chemicals and waste • Green Spaces and quality of life
Amazon, Congo, and Critical Forest Biomes	• Protection of biodiversity and carbon stocks • Deforestation-free commodities • Avoiding deforestation from energy infrastructure • Securing tree-based and forest ecosystem services and the creation of positive incentives • Local livelihoods linked to nature-based economy • Reducing risks of zoonotic spillovers
Wildlife Conservation for Development	• Reducing wildlife overexploitation, illegal trade and habitat loss • Reducing dependency on and consumption of wildlife • Preventing threats from energy infrastructure • Eliminating demand for wildlife • Wildlife-based economy and local livelihoods • Reducing risks of zoonotic spillovers
Clean and Healthy Ocean	• Protection of marine and freshwater ecosystems • Reducing impacts of agricultural point and non-point nutrient pollution • Renewable Energy and Energy Efficiency technologies • Reducing wastewater pollution and micro plastics • Reducing risks from pollutants, particularly viruses, bacteria and dead zone impacts
Ecosystem Restoration	• Forest landscape and ecosystem restoration work at the local level • Regenerative production practices • Renewable Energy and Energy Efficiency technologies • Innovative solutions for restoring degraded lands • Restoration for healthy and resilient ecosystems to support people
Blue and Green Islands	• Protection of terrestrial and marine ecosystems; Valuing nature • Sustainable production in agriculture and fisheries • Innovative Nature-based Renewable Energy and Energy Efficiency technologies • Nature-based Solutions for green and resilient cities • Local livelihoods linked to nature-based economy

	• Reducing water pollutants
Net-zero Accelerator	• Natural climate solutions • Renewable Energy and Energy Efficiency technologies in Transport, Buildings and Construction sector • Innovation and employment generator
Elimination of Hazardous Chemicals from Supply Chains	• Reduce or eliminate hazardous chemicals • Alternatives to hazardous agro-chemicals • Renewable Energy and Energy Efficiency technologies • Reducing exposure to hazardous chemicals and improving human health
Circular Solutions to Plastic Pollution	• Reducing pollution from plastic waste • Plastic alternatives in the food supply chain • Renewable Energy and Energy Efficiency technologies • Circularity and efficient waste management and innovative technologies • Reducing exposure to plastic pollutants
Greening Transportation Infrastructure Development	• Nature-based “infrastructure” solutions and local employment opportunities • Reducing impacts on critical production systems • Preventing threats from energy infrastructure development • Reducing threats from built infrastructure and decarbonization • Reducing exposure to risks of degradation • Cost-effective technology delivering multiple benefits

IV. FOCAL AREA STRATEGIES

Biodiversity Focal Area

Global Context of Biodiversity

The Convention on Biological Diversity (CBD) defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems."

Numerous analyses and studies over the last 15 years have advanced our understanding of biodiversity beyond its intrinsic value to recognize that biodiversity is a societal asset that makes significant contributions to advance economic development and human well-being.[289,290] The recently released Dasgupta Review reiterated with even greater clarity the dependency of our economy, livelihoods, and well-being on Nature.[291]

While our scientific understanding of biodiversity as a provider of goods (food, water, materials) and ecosystems services (climate regulation, pollination, disaster protection, etc.) to advance human well-being has grown more nuanced and comprehensive, our management of biodiversity has not been sufficient to ensure its long-term persistence as recent global studies on biodiversity loss have noted.[292,293] The recent IPBES report on biodiversity and ecosystem services solidified our understanding, first established by the Millennium Assessment in 2005, that the five main direct drivers of biodiversity loss and declines in nature remain: land/sea use change, direct exploitation, climate change, pollution and invasive alien species. Increasingly, the expansion of infrastructure is being recognized as one of the most critical direct drivers of land use change in the immediate future driving environmental degradation through changes in

Millennium Ecosystem Assessment 2005, Ecosystems and Human Well-being: Synthesis, Island Press, Washington DC; TEEB (2010) The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB.

IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany. 56 pages.

Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)

IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5 – Summary for Policy Makers. Montréal.

land, ocean and water use and expansion into pristine habitats – contributing to declines in the health and well-being of humans, ecosystems and wildlife populations.[294]

Unfortunately, the Global Biodiversity Outlook 5 (GBO 5) indicates that the global community is not responding with the scale and urgency required. The GBO 5 analyzed national reports on progress against all 20 of the Aichi Biodiversity Targets that were established to monitor implementation of the Strategic Plan for Biodiversity, 2011-2020. At the global level none of the 20 targets have been fully achieved, though six targets have been partially achieved (Targets 9, 11, 16, 17, 19 and 20).[295]

We are already feeling the consequences of biodiversity loss in numerous ways including as outlined in a recent IPBES workshop report on biodiversity and pandemics.[296] The same forces that are increasing zoonotic spillovers are the driving forces behind the loss of biodiversity on a global scale: increased changes in land use, the expansion and intensification of agriculture, the trade and consumption of wildlife, all of which have contributed to fragmentation of ecosystems and an increase in proximity between humans and wildlife, livestock and humans and thus with the pathogens they carry.

The First Draft of the Post 2020 Global Biodiversity Framework

The first draft of the Post 2020 Global Biodiversity Framework (GBF) has outlined a renewed approach to biodiversity conservation and sustainable use that emphasizes nature's benefits to human development.[297] The framework is based on a theory of change that proposes to bend the curve of biodiversity loss by 2030 and achieve the Convention's vision of "living in harmony with nature by 2050" the following actions are required: (a) put in place tools and solutions for implementation and mainstreaming, (b) reduce the threats to biodiversity, and (c) ensure that biodiversity is used sustainably in order to meet people's needs. These actions are to be supported by enabling conditions, and adequate means of implementation, including financial resources, capacity, and technology.

The First Draft includes a set of four goals and 21 Action targets. The four goals of the first draft of the GBF are:

The Global Commission on the Economy and Climate. 2018. Unlocking the inclusive growth story of the 21st Century: Accelerating climate action in urgent times: key findings and executive summary, page 2. New Climate Economy.

Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5.

IPBES (2020) Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Daszak, P., das Neves, C., Amuasi, J., Hayman, D., Kuiken, T., Roche, B., Zambrana-Torrelio, C., Buss, P., Dundarova, H., Feferholtz, Y., Foldvari, G., Igbinosa, E., Junglen, S., Liu, Q., Suzan, G., Uhart, M., Wannous, C., Woolaston, K., Mosig Reidl, P., O'Brien, K., Pascual, U., Stoett, P., Li, H., Ngo, H. T., IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4147317

First Draft of the Post-2020 Global Biodiversity Framework CBD/WG2020/3/3

Goal A: The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained.

Goal B: Nature's contributions to people are valued, maintained or enhanced through conservation and sustainable use supporting the global development agenda for the benefit of all.

Goal C: The benefits, from the utilization of genetic resources are shared fairly and equitably.

Goal D: The gap between available financial and other means of implementation, and those necessary to achieve the 2050 Vision, is closed.

The GBF recognizes that gender equality, women's empowerment, youth, and gender-responsive approaches and the full and effective participation of IPLCs are necessary elements for successful implementation of the framework. A new gender plan of action for the post-2020 period is also under development proposing three overarching goals in the current draft.[298] Finally, partnerships involving organizations at global, national, and local level will be required for successful implementation of the GBF. It also assumes that a whole-of government and society approach is required to achieve the 2030 draft goals and the 2050 Vision.

GEF-8 Biodiversity Focal Area Investments and Associated Programming

The GEF-8 biodiversity focal area investments and associated programming through other focal areas and integrated programs will support the implementation of the four goals and action targets of the Global Biodiversity Framework. The GEF-8 strategy responds to the objectives of the CBD and its Protocols and to GEF-relevant objectives of biodiversity-related conventions.[299]

The GEF-8 strategy is predicated on the following assumptions: 1) biodiversity is a shared societal asset that requires a management approach that is multi-sectoral and fully incorporates the fundamental importance of Nature to human well-being; and 2) any solution to

CBD/SBI/3/4/ADD2, Draft outline of a post-2020 gender plan of action (https://www.cbd.int/doc/c/1037/0c47/974ee71c8778acceb3813a95/sbi-03-04-add2-en.pdf)

The Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on the Conservation of Migratory Species of Wild Animals (CMS), Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Convention on Wetlands or Ramsar Convention), International Plant Protection Convention (IPPC), International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), and International Whaling Commission.

the biodiversity crisis requires the participation of all stakeholders in society most notably IPLCs, women, youth, as well as the private sector.

Gender can strongly influence people's relationship to nature, dependence upon it, and access to the benefits it provides. Gender roles affect economic, political, social, and ecological opportunities and constraints faced by both men and women. Recognizing women's roles as primary land and resource managers and differences in access to resources is central to the success of biodiversity policy. Gender considerations are not solely a women's issue; instead, this approach yields advantages for whole communities and benefit all people. For these reasons, all GEF biodiversity investments must incorporate gender dimensions to ensure maximum impact. GEF-8 gender-responsive approaches will seek to contribute to the goals that are eventually agreed in the post-2020 Gender Plan of Action.

The goal of the GEF-8 Biodiversity focal area strategy is *globally significant biodiversity conserved, sustainably used, and restored.*

To achieve this goal, the strategy will support the following three objectives:

To improve conservation, sustainable use, and restoration of natural ecosystems.

To effectively implement the Cartagena and Nagoya protocols.

To increase mobilization of domestic resources for biodiversity.

Objective 1. To improve conservation, sustainable use, and restoration of natural ecosystems (Goals A and B of the GBF)

Rationale

GEF-8 marks a shift in the GEF strategy from investing in landscape and seascape management through the two distinct strategic entry points of protected area management and biodiversity mainstreaming to an area-based investment strategy that has one entry point to support integrated landscape/seascape management approaches that use multiple tools and strategies to respond to the drivers of biodiversity loss within large landscape and seascape mosaics.[300] This strategic shift reflects the evolution of the GEF portfolio as countries are already blending protected area management, sustainable use, and biodiversity mainstreaming

[300] Integrated landscape management and landscape approaches have no universally agreed definition. For GEF, support to integrated landscape/seascape management refers to an investment strategy that provides tools for allocating and managing terrestrial and marine ecosystems to most effectively achieve GEF's mandate to deliver global biodiversity benefits while supporting important social, economic, and environmental co-benefits in areas where agriculture, fisheries, mining, forestry, etc. compete with biodiversity goals. This approach is fully consistent with the ecosystem approach long espoused by the CBD and the landscape approach discussed at SBSTTA 15 and within the recommended guiding principles for landscape level approaches (UNEP/CBD/SBSTTA/15/13)

approaches in the context of large-scale investments in landscape and seascape mosaics.[301] This more integrated and complimentary approach to protected areas management, sustainable use of biodiversity, and management of production landscapes/seascapes is likely to achieve more durable results in conservation, sustainable use, and restoration.

Protected areas are often found in mixed-use landscapes and seascapes (mosaics) where natural resources are intensively managed for satisfying human needs such as food, water, fuel, and wood. Protected area administrations are thus challenged to manage protected areas to achieve their conservation objectives while sectoral policy decisions, land/sea-use and management actions taken by the private sector and other actors outside protected area borders, can often work at cross-purposes to their conservation goals. In the most extreme cases, protected areas are downgraded, downsized, and degazetted.[302] By recognizing the bio-physical and socio-economic milieu that protected areas are part of, the strategy is seeking to turn a potential management problem into an opportunity to sustain protected areas for the long-term. Ideally, GEF investments will build upon existing social and institutional arrangements to ensure that conservation, production, and local benefit objectives are all met in a way that can be socially and economically sustained. As a management approach, the strategy will emphasize the interdependence of meeting the objectives of protected areas, other natural resource management strategies, and local economic development and depend on multi-stakeholder approaches, cross-ministry collaboration, and sectoral policy coherence.

Given that the GBF and the global community are positioning the biodiversity agenda towards better reflecting nature's benefits for people, the question of what biodiversity to protect and manage becomes critical within the context of GEF's mandate. Consistent with the GEF mandate to generate global environmental benefits, these landscapes and seascapes will contain globally important biodiversity. As is currently done, project proponents will demonstrate the global importance of the project's anticipated biodiversity benefits. Most of the time it will involve justifying the project`s contribution to the persistence of some biodiversity components - genes, species, or ecosystems - in relation to their worldwide extent or population size. Proponents will be invited to use criteria commonly used to identify areas for biodiversity

[301] In the context of the GEF-8 strategy, mosaics are defined as networks of protected areas and complementary landscapes/seascapes that include combinations of protected areas, OECMs, sustainable use areas, production landscapes and seascapes, and IPLC managed lands and waters. Landscapes include all the freshwater and aquatic biodiversity therein.

[302] Qin, S., Golden Kroner, R.E., Cook, C., Tesfaw, A.T., Braybrook, R., Rodriguez, C.M., Poelking, C. and Mascia, M.B. (2019), Protected area downgrading, downsizing, and degazettement as a threat to iconic protected areas. Conservation Biology, 33: 1275-1285.

conservation, but other well-justified criteria will be accepted with consideration for the specific project context and data availability.[303]

In addition, within these integrated approaches opportunities to restore areas to ensure the persistence of globally significant biodiversity will be supported. Recent research indicates that using multiple criteria to identify the areas to be restored is important for achieving multiple benefits for biodiversity and climate change mitigation and is also more cost-effective.[304] Furthermore, restoration gains are more durable if coupled with strategies for retaining natural ecosystems within landscape approaches that integrate conservation, restoration and improved use of agricultural lands.[305] Complementing GEF investments in the Ecosystem Restoration IP and the Amazon, Congo, and Critical Forest Biomes IP, the Biodiversity focal area strategy will fund cost-effective restoration activities that *improve the status of biodiversity* and are part of integrated landscape management approaches.

An integrated landscape/seascape management approach to support the persistence of biodiversity will by necessity include a broader array of stakeholders and intervention strategies than when GEF supports protected area management and biodiversity mainstreaming separately. This will also help foster a multi-sectoral approach across government ministries.

Embedded as a fundamental element in this new approach is the central role of IPLC managed lands and waters and their contribution to improved biodiversity conservation and sustainable use and critical socio-economic benefits at local and national levels. GEF will support the contribution and engagement of IPLCs within the context of these integrated approaches.

Project Support

The complementary strategies of protected area management and biodiversity mainstreaming that can be supported in an integrated landscape/seascape intervention are presented below.

Financial Sustainability, Effective Management, and Ecosystem Coverage of Protected Areas

GEF support will continue to focus on strengthening three elements of a sustainable protected area system: 1) effective protection of ecologically viable and climate-resilient

A recent review (Asaad et al. 2017) identified 8 commonly used criteria: (1) habitat rarity or uniqueness; (2) habitat fragility/sensitivity; (3) ecological integrity; (4) habitat representativity; (5) presence of species of conservation concern; (6) occurrence of restricted range species; (7) species richness; and (8) importance for life history stage. Asaad, I., Lundquist, C. J., Erdmann, M. V., & Costello, M. J. (2017). Ecological criteria to identify areas for biodiversity conservation. Biological Conservation, 213, 309-316.

Strassburg, B.B.N., Iribarrem, A., Beyer, H.L. et al. Global priority areas for ecosystem restoration. Nature 586, 724–729 (2020). https://doi.org/10.1038/s41586-020-2784-9

Ibid.

representative samples of the country's ecosystems and adequate coverage of threatened species at a sufficient scale to ensure their long term persistence; 2) sufficient and predictable financial resources available, including external funding, to support protected area management costs at the site and system-level; and 3) sustained individual and institutional capacity to manage protected areas such that they achieve their conservation objectives.[306]

The integrated landscape/seascape management approaches proposed under objective one envisions protected areas as a core land-use strategy that will continue to receive GEF support with an aim towards helping countries achieve target three of the GBF.[307] Consistent with the GEF-7 strategy, we will encourage that new protected areas established with GEF support be globally significant including as defined by the Key Biodiversity Area (KBA) standard. When KBA criteria are not met, proposals will be considered on a case by case basis. Notably, the GEF will support the protection of areas recognized by the CBD as ecologically or biologically significant marine areas (EBSAs),[308] focusing on areas within national jurisdictions.

GEF will continue to promote the empowerment, participation, and capacity building of IPLCs, especially women, in the design, implementation, and management of protected area projects including Indigenous and Community Conserved Areas.[309] GEF will also promote protected area co-management between government and IPLCs where such management models are appropriate and activities that support the recognition and realization of the rights of IPLCs to control and manage their lands and territories.

Biodiversity Mainstreaming in Priority Sectors[310]

GEF will continue to focus primarily on supporting the following suite of activities to advance biodiversity mainstreaming:

Spatial and land/sea-use planning to ensure that land, freshwater, and marine resource use is appropriately situated to optimize production without undermining or degrading biodiversity.

[306] A protected area system could include a national system, a sub-system of a national system, a municipal-level system, IPLC-managed areas, or a local level system or a combination of these.

Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. We recognize this target may change and the strategy will adjust accordingly in future drafts.

https://www.cbd.int/ebsa

Indigenous and Community Conserved Areas are natural sites, resources and species' habitats conserved in voluntary and self-directed ways by IPLCs.

The GEF defines biodiversity mainstreaming as: "the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally."

Improving and changing production practices to be more biodiversity-positive with a focus on sectors that have significant biodiversity impacts (agriculture, forestry, fisheries, tourism, extractive industries (gas, oil, and mining) and infrastructure development).[311]

Developing policy and regulatory frameworks that remove subsidies harmful to biodiversity and provide incentives for biodiversity-positive land and resource use that remains productive but that does not degrade biodiversity.

Natural Capital Assessment and Accounting (NCAA) exercises designed to respond to specific target decisions or policy questions. Recognizing that all countries have not yet developed the capacities to carry out NCAA at national scale, local applications with demonstrated practical relevance will be supported. This responds to many of the recommendations made by the IEO in its evaluation on *GEF's Support to Mainstreaming Biodiversity.*[312]

This element of GEF's mainstreaming work will also be supported by Objective 3 and the global program on domestic resource mobilization and we envision that elements of expenditure reviews and natural capital assessment and accounting will inform the development of policy and regulatory frameworks to be eventually supported by the GEF. This also responds directly to a recommendation of the IEO which proposes that GEF '*design mainstreaming interventions with a longer-term perspective and a resource envelope to ensure sustainability*".[313]

Prevention, Control and Management of Invasive Alien Species

GEF-8 will continue to focus support on addressing IAS in island ecosystems within the context of integrated landscape management supported under this objective. This focus is driven not only by programming demand, but by an ecological imperative: IAS are the primary cause of species extinctions on island ecosystems and if not controlled can degrade critical ecosystem services such as the provision of water.

GEF will support the implementation of comprehensive prevention, early detection, control, and management frameworks that emphasize a risk management approach by focusing on the highest risk invasion pathways. As with the entirety of objective one of the GEF-8 strategy, this comprehensive approach to IAS management will require a whole-of-government approach that cuts across numerous ministries and government responsibilities. In addition, collaboration with the private sector will be required to ensure sustained implementation of a

GEF support to agrobiodiversity conservation including the sustainable use of plant and animal genetic resources would continue under this element of biodiversity mainstreaming.

GEF/ME/C.55/inf. 02, Evaluation of GEF's Support to Mainstreaming Biodiversity, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C.55.inf_.02_Biodiversity_Mainstreaming_Evaluation_Synthesis_Report%20Nov_2018.pdf

Ibid.

pathways approach. Targeted eradication will be supported in specific circumstances where proven, low-cost, and effective eradication would result in the extermination of the IAS and the survival of globally significant species and/or ecosystems. While GEF will maintain a focus on island ecosystems and engage with island states to advance this agenda, projects will be supported from continental countries that address IAS management and control through a comprehensive pathways approach with a focus on ensuring the long term effectiveness and sustainability of any intervention.

Objective 2. To effectively implement the Cartagena and Nagoya protocols (Goals A, B and C of the GBF)

The Cartagena Protocol on Biosafety

Rationale

GEF's strategy to build capacity to implement the CPB prioritizes the implementation of activities that are identified in country stock-taking analyses and in the COP guidance to the GEF, in particular the key elements in the framework and action plan for capacity building for effective implementation of the CPB at the sixth COP serving as the Meeting of the Parties to the CPB (COP-MOP 6) and the Strategic Plan for Biosafety, 2011-2020 agreed at COP-MOP 6.

Currently, a draft implementation plan and a capacity-building action plan are contained in CBD/SBI/3/18 which was discussed at SBI 3 for submission to COP-15. The plans include a range of goals to be achieved under "Implementation Areas" and "Enabling Environment". GEF project support listed below will be updated to reflect the final agreement of the implementation and capacity-building action plan.

Project Support

The GEF will support the ratification of the Protocol by the countries that have not done so and support the implementation of National Biosafety Frameworks (NBFs). The aim of GEF investment is to build capacity to ensure that countries have functional NBFs and are in full compliance with the requirements of the Protocol and have mobilized adequate resources to support implementation of the Protocol. Parties will be supported to implement the provisions of the Protocol, including capacity-building related to risk assessment and risk management in the context of country-driven projects, and enhancing public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms. In addition, GEF will support the updating and revision of existing NBFs and compliance action plans to allow countries to adapt to the regulation and safe use of new biotechnologies and synthetic biology consistent with the provisions of the protocol.

The GEF will support thematic projects addressing some of the specific provisions of the Cartagena Protocol. The thematic projects will also address the integration of the Protocol into

the Convention as anticipated into the approach adopted in the GBF and the Post 2020 implementation plan and capacity building action plan. These projects should be developed at the regional or sub -regional level and built on a common set of targets and opportunities to implement the Protocol beyond the development and implementation of NBFs.

The GEF will also provide support for the ratification and implementation of the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the CPB. There will also be a specific focus on capacity building and regional cooperation to support the effective implementation of the supplementary Protocol.

The Nagoya Protocol on Access and Benefit Sharing

Rationale

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization provides a legal framework for the effective implementation of the third objective of the Convention on Biodiversity (CBD). The Protocol was adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting on 29 October 2010 in Nagoya, Japan, entered into force on 12 October 2014, and parties have ratified the Protocol to date. The successful implementation of ABS at the national level has the potential to make considerable contributions to biodiversity conservation and sustainable use.

Project Support

GEF will support national and regional implementation of the Nagoya Protocol and, if still required, targeted capacity building to facilitate ratification of the Protocol. As such, the GEF will support the following core activities to comply with the provisions of the Nagoya Protocol and promote its implementation:

Stocktaking and assessment. GEF will support gap analysis of ABS provisions in existing policies, laws and regulations, stakeholder identification, user rights and intellectual property rights, and assess institutional capacity including research organizations.

Development (or revision) and implementation of national ABS frameworks. This could include the policy, legal, and regulatory frameworks governing ABS, National Focal Point, Competent National Authority, checkpoints, institutional arrangements , administrative procedures for Free and Prior Informed Consent (FPIC) and Mutually Agreed Terms (MAT), monitoring of use of genetic resources and publishing information, including on applicable ABS procedures, to the ABS Clearing-House", and compliance and enforcement with legislation and cooperation on transboundary issues. GEF will continue financing capacity development to ensure that countries develop clear ABS requirements and permitting systems, including biocultural community protocols for

IPLCs, and ensure the relevant information (including biocultural community protocols) is made available on the ABS Clearing-House. GEF will also provide support to national coordination and data collection for reporting, e.g. on monetary and non-monetary benefits.

Development or revision of national laws and policies that promote scientific research and development and national investments on the use of genetic resources under national ABS frameworks. These include bioeconomy and scientific development policies that provide policy and economic incentives to foster scientific research and investments on genetic resources.

Capacity-building to add value to genetic resources for benefit-sharing, biodiversity conservation, and sustainable use. In countries with national ABS policies, the GEF will support capacity-building and training for domestic users of genetic resources to add value to genetic resources. This will include not only training on scientific research & development procedures but also biodiversity-friendly practices for value chains needed for industries that use genetic resources. Countries may consider institutional capacity-building to carry out research and development to add value to their own genetic resources and traditional knowledge associated with genetic resources. The GEF will also support efforts of IPLCs concerning their traditional knowledge associated to genetic resources including the cultivation of source species and marketing of products.

The GEF will also enhance national implementation of the Nagoya Protocol through regional collaboration. Regional collaboration will help build capacity of countries to add value to their own genetic resources and traditional knowledge associated with genetic resources and avoid duplication of regulatory mechanisms while encouraging intra-regional collaboration. Regional collaboration can also address the financial and human resource constraints faced by small or least developed countries through sharing regulatory and scientific resources.

As was employed in the GEF-7 strategy, in recognition of the importance of genetic resources for food and agriculture and in achieving food security worldwide, the GEF will consider projects for the mutually supportive implementation of the Nagoya Protocol and the International Treaty on Plant Genetic Resources for Food and Agriculture.

Objective 3. To increase mobilization of domestic resources for biodiversity (contribution to GOAL D of the GBF)

Rationale

According to the most comprehensive estimates to date, the global biodiversity funding gap between total annual capital flows toward global biodiversity conservation and the total amount of funds needed for conservation and sustainable use may be as high as $598–824 billion

per year by 2030.[314] While recognizing the role all societal actors have to play and that ODA is a major funding source for biodiversity in many countries, 73–82% of the $124–143 billion currently spent on biodiversity per year are derived from the domestic public sector. Current international public biodiversity finance ($3.9 to 9.3 billion per year)[315] represents 0.5-1.6% of the anticipated 2030 gap. While it is acknowledged that ODA will have to increase for a global biodiversity goal to be achieved, domestic resource mobilization (DRM) will continue to play a central role for biodiversity.

CBD COP 14 affirmed that resource mobilization would be an integral part of the post-2020 GBF.[316] Based on the first draft of the GBF, the framework has a dedicated Goal "The gap between available financial and other means of implementation, and those necessary to achieve the 2050 Vision, is closed. Three milestones are included for 2030, along with two action targets related to incentives harmful for biodiversity (target 18) and the increase of financial resources from all international and domestic sources (target 19).

The GEF is uniquely positioned to help interested countries in leveraging DRM work under the CBD to help reduce this funding gap and deliver on targets 18 and 19. The need to strengthen DRM indeed pervades the entire sustainable development agenda as recognized in the Addis Ababa Action Agenda, which includes a commitment to further strengthening the mobilization and effective use of domestic resources.

Project Support

GEF will support a global program on Domestic Resource Mobilization for Biodiversity to help countries create the enabling conditions, including baseline diagnostics, capacity, institutional arrangements, and planning required to mobilize resources at scale to implement the GBF. Embracing a broad definition of DRM, activities under objective three will support reduction or redirection of resources causing harm; generate additional financial and non-financial resources from all sources; enhance effectiveness and efficiency of use of resources and develop and implement DRM plans.

The objective is meant to set up a transformative process for biodiversity finance, in all participating countries. It should be carried out in in parallel to the revision of NBSAPs that may arise out of the agreement on the Global Biodiversity Framework. While focused on the GBF, it will aim at leveraging synergies in DRM to support implementation across MEAs.

Deutz, et al. 2020 Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability

OECD (2020) A Comprehensive Overview of Global Biodiversity Finance. https://www.oecd.org/environment/resources/biodiversity/report-a-comprehensive-overview-of-global-biodiversity-finance.pdf

Decision COP XIV/22

A key focus will be the establishment of the enabling conditions for countries to undertake harmful subsidy reform. GEF and BIOFIN's experiences have shown very limited uptake on the subsidy reform agenda, which suffers chiefly from a lack of political will rather than technical barriers. The program will thus help countries be equipped with the capacity, knowledge, and strategy to seize political opportunity windows whenever they arise, including through multi-lateral development bank's policy-based loans.

As countries seek to mobilize resources for biodiversity, GEF will also explore the opportunities that Conservation Trust Funds (CTF), Payment for Ecosystem Services (PES), and other financing mechanisms provide to facilitate mobilization of resources that can be invested in biodiversity conservation, sustainable use, and NbS. Versatile and durable, CTFs can play important roles as conduits and/or implementers of biodiversity offsets, compensation funds and other mechanisms for increasing funding opportunities for biodiversity.

The program will support three complementary components in each national-level country project: diagnostics and planning, early implementation, and capacity building and institutional set-up for implementation and monitoring. A global knowledge platform will be supported to provide methodological support, exchange lessons, codify learning, and foster south-south exchanges amongst all participating countries.

The three components include:

Diagnostics and planning (funded by the biodiversity set aside):

a policy and institutional review analyzing the root causes of biodiversity loss. A specific effort will be dedicated to the identification and costing of harmful subsidies. This activity would include a capacity needs assessment.

an expenditure review assessing spending related to the biodiversity, across all sectors (e.g., energy, transport, infrastructure, agriculture, agriculture, forestry, fisheries, extractive industries).

an assessment of the financial needs to implement the GBF.

the development and adoption of national DRM plans that set out a coherent and comprehensive national approach to DRM for biodiversity, including a mix of priority finance solutions.

All these steps should be carried out with a lead role by the Ministry of Finance, while involving also key stakeholders, such as ministries and private sector actors from the aforementioned sectors involved in the biodiversity expenditure review, specific to each country situation. To facilitate uptake by the government and credibility by the finance ministries, the

diagnostics and planning will be based on an agreed conceptual framework, e.g. integrated within the national statistical system or budgeting framework. Countries that are most advanced in Natural Capital Accounting and Assessment approaches will be encouraged and supported to use such a framework, including the UN System of Environmental-Economic Accounting (SEEA), to develop their diagnostics, inform their planning and monitor its implementation.

Early implementation (funded through each country's STAR)

While full implementation of national DRM plans would be out of the scope of the program, it is foreseen that early implementation will be supported, including the prototyping and piloting of priority measures or mechanisms identified in the DRM plans.

Countries will be encouraged to use the many possibilities offered in GEF-8 to implement their DRM priorities in full, such as through biodiversity mainstreaming interventions to reduce or redirect financial flows harmful to biodiversity, or the development of PES, ABS, offset schemes or other relevant financing mechanisms to generate new resources.

Capacity building and institutional set-up for implementation and monitoring (funded through each country's STAR)

National project investments will support the development of capacity and expertise of staff responsible for DRM implementation, monitoring and reporting (e.g. green budget tagging) to increase transparency and accountability on environmental spending, including biodiversity spending (e.g. Green Budgeting Statement accompanying the budgets). Projects will also help establish national-level platforms to foster a whole-of-government approach and multi-stakeholder coordination to support implementation.

The program will be supported by a global knowledge platform, funded by the biodiversity set aside, that will support program-level knowledge management to expand the global knowledge base, from technical aspects to barriers to implementation and ways to overcome them. It will most notably promote peer-to-peer learning.

National projects focused on the development of DRM plans (or updates of existing plans) to support GBF implementation would be entirely funded through the biodiversity focal area set-aside. Implementation of these plans would be funded by the STAR.

Potential partners include a) UNDP's Biodiversity Finance Initiative (BIOFIN); b) Natural Capital Assessment and Accounting initiatives, including the UN SEEA; c) The Capitals Coalition; d) the Natural Capital Project; and e) OECD. The program will seek to leverage synergies with UNCCD and UNFCC as appropriate.

Focal Area Set Aside

Several priority activities that will be supported through the focal area set-aside are described below.

Enabling Activities

Support will be quickly and efficiently provided to all GEF-eligible countries at the start of GEF-8 to revise their NBSAP(consistent with forthcoming COP guidance) with a view to align them with the GBF and to ensure that national policies are also aligned with the GBF. Support will be provided to produce the National Report to the CBD as well as national reporting obligations under the Cartagena Protocol and Nagoya Protocol identified during upcoming COPs and COP-MOPs**.**

Inclusive Conservation Initiative

Approximately 25% of the Earth's surface and ocean areas are managed by indigenous peoples and local communities (IPLCs), but it is estimated these areas hold 80% of the Earth's biodiversity. Most of the world's forests are found on communal lands[317] and in many places community forestry and management has been shown to be more effective than national parks in reducing deforestation.[318,319] Approximately 40 percent of land listed by governments as under conservation is managed by IPLCs,[320] which means better engagement and empowerment of IPLCs is critical to reaching targets on the effective management of protected areas[321] and associated SDGs.

The vital role of IPLCs is underlined in the landmark IPBES report,[322] which recognized, inter alia, that IPLCs are often better placed than scientists to provide detailed information on local biodiversity, environmental change and management practices, and are important contributors to the governance of biodiversity from local to global levels. IPLCs are also among the most threatened on Earth by the impacts of climate change and global development and are often highly dependent on biodiversity and ecosystem services.

Rights and Resources Initiative Annual Review 2015-2016. Closing the Gap: Strategies and scale needed to secure rights and save forests.

Ricketts et al. 2010. Indigenous Lands, Protected Areas, and Slowing Climate Change. PLOS.

Oldekop et al. 2019. Reductions in deforestation and poverty from decentralized forest management in Nepal. Nature Sustainability.

Garnett et al. 2018. A spatial overview of the global importance of Indigenous lands for conservation. Nature Sustainability.

Dasgupta 2020, Final Report of the Independent Review on the Economics of Biodiversity Dasgupta Review

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (2019) Summary of Policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

IPLC land stewardship is also key in preventing climate change. IPLCs occupy areas that hold at least 24 percent (54,546 MtC) of the total carbon stored aboveground in tropical forests. Working with IPLCs on land management is also a cost-effective strategy to mitigating climate change.[323] Yet, only 21 countries included clear commitments to implement land and resource tenure initiatives related to IPLCs in their Nationally Determined Contributions.

IPLCs have been stewards of vital biodiversity and carbon stocks for generations, but the larger forces of development are often undermining their ability to continue to do so. Over 2.5 billion people around the world depend on collectively held land for their livelihoods. A global review conducted by WRI showed how discrepancies in the processes and resources required to formalize land rights between companies and communities provides significant advantages to companies seeking extractive or productive rights over community claims.[324]

In GEF-7, the GEF supported a pilot Inclusive Conservation Initiative to provide support directly to IPLCs to conserve biodiversity, deliver other global environmental benefits, and provide development benefits. When a Call for Expressions of Interest was put out in March 2020, more than 400 expressions of interest were received. However, there were only resources to support nine expressions of interest. The GEF-7 Inclusive Conservation Initiative will support IPLC stewardship of over 9 million hectares in areas of high biodiversity importance and the mitigation of 141 million tons of CO_2 equivalent.

Given the great potential to generate biodiversity and other global environment benefits through supporting IPLCs and a strong demand for this support, the GEF-8 strategy will provide additional resources for the ICI. The GEF's Independent Evaluation Office,[325] STAP,[326] and the GEF's Indigenous Peoples' Advisory Group have all made recommendations that larger volumes of GEF resources be made available for IPLCs to enable them to continue to realize their role as stewards of the global environment.

While the Inclusive Conservation Initiative will work in a diversity of geographies and contexts, the aim of the ICI will be to support a limited number of initiatives in different parts of the world to enable impact commensurate with the scale of the problem they are currently facing as their territories become progressively encroached by unsustainable activities. In contrast with existing small grants initiatives, such as GEF's SGP which continues to be one of the main points of entry for IPLCs, the ICI approach seeks more in-depth and substantial investments in a limited set of locations to scale-up impact. In this way, the ICI is meant to be additional and

Ding et al 2016. Climate Benefits, Tenure Costs: The Economic Case For Securing Indigenous Land Rights in the Amazon. WRI.

Notess et al. 2018. The Scramble for Land Rights: Reducing inequity between communities and companies. World Resources Institute.

GEF IEO. Evaluation of GEF Engagement with Indigenous Peoples (April 2018)

GEF STAP. Local commons for global benefits: indigenous and community-based management of wild species, forests and drylands (May 2019)

complementary to the support for IPLC activities in the rest of the GEF portfolio. The ICI will continue to recognize the challenges faced by IPLC women and the vital role they play in the management of natural resources in all projects and ensure that this recognition is reflected in project designs.

The lack of recognition and secure land rights for IPLCs is a major driver of environmental degradation. Without secure land rights, land users are encouraged to adopt unsustainable management practices that generate short term profits but damage long term productivity and lead to degradation of the land and biodiversity. At the same time, weak land rights and underpowered landholders create the conditions that allow illegal and/or corrupt land conversion for agriculture, logging, mining, and land grabbing. Therefore, in GEF-8 there will be an expanded focus on addressing issues related to land tenure and natural resource rights and access.

The Inclusive Conservation Initiative will continue to support global knowledge management and exchange building upon the work done in GEF-7. The ICI will leverage the GEF's convening ability to collect and disseminate knowledge and demonstrate how supporting IPLCs is effective for protecting the global environment and realizing the SDGs.

Other Global Programs

The focal area set aside will also support the Global Program on Resource Mobilization described under objective three and the development of DRM/national biodiversity finance plans. We will also consider funding work to support countries on establishing policy coherence across different sectors to better deliver sound environmental practices, as well as narrow the financial gap for nature.

Contributions of Other Focal Areas and Integrated Programs to Biodiversity Outcomes and the Global Biodiversity Framework[327]

The GEF-8 biodiversity focal area strategy investments and associated programming strategies build on the integrated approaches to achieve biodiversity conservation and sustainable use outcomes implemented since GEF-6. Achieving the goal and objectives of the biodiversity focal area strategy requires a wide array of actions and while all are necessary none will be enough on their own. GEF's associated programming investments that are channeled through other focal areas and Integrated Programs (IPs) will help achieve the focal area strategy goal and objectives while specifically supporting Goals A and B of the Global Biodiversity Framework. These include:

[327] Please see Annex 1 for a detailed summary of the contributions that the GEF biodiversity focal area, other focal areas, and the integrated programs will make to achieving the action targets of the Post-2020 Global Biodiversity Framework.

The Ecosystem Restoration Integrated Program: support to restoration of ecosystems including in production landscapes and seascapes.

The International Waters Focal Area, Blue and Green Islands Integrated Program, and Clean and Healthy Ocean Integrated Program: support to sustainable management of fisheries and marine protected areas.

The Climate Change-Mitigation Focal Area and the Food Systems Integrated Program: support to land-based climate change mitigation.

The Chemicals and Waste Focal Area: support to targeted actions to reduce pollution.

The Food System Integrated Program: support to the sustainable production of food.

The Amazon, Congo, and Critical Forest Biomes Integrated Program: support to the conservation and sustainable management of critical forest biomes.

The Wildlife Conservation for Development Integrated Program: support to conservation and sustainable use of wildlife.

The Greening Transportation Infrastructure Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, and the Clean and Healthy Ocean Integrated Program: support to the maintenance of connectivity and ecosystem integrity including in production landscapes and seascapes.

Role of the Private Sector in supporting Biodiversity Outcomes

The private sector is an important factor and stakeholder in the success of GEF's biodiversity strategy. When an individual, collective, or company's development activities across a wide array of sectors affect biodiversity negatively, the business faces potentially significant regulatory, financial, operational, and reputational risks. GEF provides support to governments to develop policies and regulatory framework to ensure that companies and developers take responsibility for such impacts and avoid or mitigate them. GEF also provides capacity building and technical training to help enterprises improve production practices to totally avoid causing negative impacts on biodiversity. Anticipating, avoiding, mitigating, and compensating for adverse impacts on the project site and/or from the footprint of the business are the first steps in what is referred to as the "mitigation hierarchy". The ability of GEF's investments to influence the actions of the private sector will be critical for delivering on the strategy's biodiversity outcomes and will be essential to achieve the scale of change required to achieve the goals of the Global Biodiversity Framework.

In recent years, we have witnessed a marked shift in the emphasis and prioritization that the private sector has placed on biodiversity. A growing level of awareness in the business

community of their dependencies on natural capital as well as their impacts, the widely viewed findings of the 2019 IPBES Global Assessment Report,[328] the Dasgupta review recommendations, and the WEF Global Risks Report have all contributed to elevating biodiversity from a general concern among business leaders to a major factor in business planning, investing and resource allocation.

In response to these reports the business and investment community has launched a raft of new initiatives to raise the level of accountability among private sector actors including sectoral guides for natural capital accounting, the Taskforce for Climate-related Financial Disclosure and reporting protocols such as CDP.

In the lead up to CBD COP 15, and as part of the UN Decade of Restoration, several new business and multi-stakeholder platforms have been formed with the goal of raising business ambition and galvanizing commitments to biodiversity. These include Business for Nature's (BfN) and One Planet for Business and Biodiversity in which the GEF has played an active role. The period of GEF-8 now opens a critical window for private sector engagement in the GEF Partnership to ensure that associated private sector goals and targets are aligned with the GBF.

IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany.

Climate Change Focal Area

Global Context of Climate Change

Climate change is an urgent and growing threat to human and natural systems. Since the Paris Agreement was adopted in 2015, governments and non-state actors have mobilized to implement it through stronger and more ambitious climate action. However, recent assessments indicate that existing commitments and development pathways are insufficient to meet the long-term temperature goals of the Paris Agreement.[329]

The IPCC Special Report on 1.5°C of global warming assesses that human activities have already caused approximately 1.0°C of global warming above pre-industrial levels, and GHG emissions and atmospheric concentrations continue to increase, interrupted only briefly by the pandemic-induced recession. This is already leading to climate change impacts that threaten countries' development, economic growth and stability, and will lead to long-term changes in the climate system. The same IPCC report has assessed the differences in climate-related risks associated with a 1.5°C and a 2.0°C of global warming to be robust with respect to climate and weather extremes.[330]

In order to limit global warming to 1.5°C above pre-industrial levels, global net anthropogenic carbon dioxide (CO_2) emissions will have to decline by 45% from 2010 levels by 2030 and reach net zero by mid-century, compared to a reduction of 25% by 2030 and reaching net zero by around 2070 to meet the 2°C goal.[331] This will require rapid and profound transitions in energy, land, urban, and industrial systems.

The urgency for rapid decarbonization to avoid the worst impacts of climate change, supported by the Paris Agreement's cycle of ambition, is leading to a growing momentum to establish net-zero commitments and Long-Term Strategies (LTSs). More than 110 countries, representing 65% of global CO_2 emissions and more than 70% of the world economy, have pledged carbon neutrality by 2050.[332] These are further supported by the new or updated NDCs communicated ahead of COP 26, showing that countries have set clear targets for climate action.

The enhanced transparency framework for action and support of the Paris Agreement and the First Global Stocktake will be key to assess collective progress and build confidence that global efforts to address climate change are advancing with the speed, scale, and impact necessary. Already, the Initial NDC Synthesis Report prepared by the UNFCCC Secretariat, which considered about 40% of Parties to the Paris Agreement and 30% of global GHG emissions in 2017, shows that while countries have increased individual levels of ambition to reduce emissions,

United Nations Environment Programme (2020). Emissions Gap Report 2020. Nairobi.
IPCC, 2018: Global Warming of 1.5°C. IPCC Special Report
IPCC, 2018: Global Warming of 1.5°C. IPCC Special Report
"The race to zero emissions, and why the world depends on it". UN. https://news.un.org/en/story/2020/12/1078612

the combined impact is far from the emission reduction ranges necessary to meet the Paris Agreement goals.[333]

The focus must now be on scaled up and coherent implementation of climate mitigation action that minimizes tradeoffs and risks, and maximizes synergies with other government priorities, including post-pandemic recovery measures, and benefits for the people and the planet.

Conference of the Parties (COP) Guidance to the GEF

The Paris Agreement and associated COP decision affirmed the role of the GEF as part of the Financial Mechanism of the Convention. Article 9 of the Paris Agreement stated that the Financial Mechanism of the Convention, and the GEF as one of its operating entities, shall serve as the Financial Mechanism of Paris Agreement. Further, Article 13 establishes an enhanced transparency framework for action and support. The COP urged and requested the GEF to make arrangements to support the establishment and operation of a Capacity-building Initiative for Transparency (CBIT) during GEF-6 and future replenishment cycles.

The GEF-8 Climate Change strategy is structured to support climate action in developing countries in line with the GEF's role as an operating entity of the Financial Mechanism of the UNFCCC and responding to COP guidance. The GEF-8 period (2022-2026) is demarcated by the ambition mechanism of the Paris Agreement, with the communication of LTSs and of new or updated NDCs prior to the start of GEF-8, the First Global Stocktake that will take place in 2023, and the communication of the next round of NDCs towards the end of GEF-8.

Due to the postponement of COP 26 from 2020 to 2021 as a result of the COVID-19 pandemic, the most recent guidance was provided at COP 25 in Madrid, Spain in 2019. This included guidance from the Conference of the Parties as the meeting of the Parties to the Paris Agreement (CMA).

The COP welcomed the approval of several new policies and guidelines on gender equality, monitoring and evaluation, improved fiduciary standards, and anti-money laundering and counterterrorism finance. The COP invited the GEF to continue its efforts to minimize the time for project approval and disbursement of funds. On technology transfer, the COP encouraged the GEF to promote the use of technology needs assessments (TNAs) to facilitate the financing and implementation of prioritized technology actions. On transparency, the COP requested the GEF to adequately support developing country Parties in preparing their first and subsequent biennial transparency reports (BTRs), and to support the operation of the CBIT as a priority reporting-related need.

UNFCCC. Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA). 2021. Nationally determined contributions under the Paris Agreement. Synthesis report by the secretariat. UNFCCC/PA/CMA/2021/2. Available at: https://unfccc.int/documents/268571

Under the Koronivia Joint Work on Agriculture, while no guidance has been provided, the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA) have invited the operating entities to continue to contribute to the work under the Koronivia road map, which includes the evaluation of a set of identified interventions and areas contributing to climate change mitigation and adaptation.

At COP 25, Parties agreed to a five-year enhanced Lima work program on gender and its gender action plan, which sets out objectives and activities under five priority areas that aim to advance knowledge and understanding of gender-responsive climate action and its coherent mainstreaming in the implementation of the Convention. As an operating entity of the Financial Mechanism, the GEF has a role in providing financial and technical support for promoting the strengthening of gender integration into climate policies, plans, strategies and action, as appropriate, including good practices to facilitate access to climate finance for grassroots women's organizations and IPLCs.

Guidance from COP 24 in 2018 included reflections on the seventh replenishment. COP welcomed the seventh replenishment of the GEF, but recognized with concern the decrease in allocation to the climate change focal area, including the STAR, compared with its sixth replenishment. The COP also acknowledged the increased integration of climate change priorities into other focal areas and the impact programs, as well as the increased focus on innovation and enhanced synergies with other focal areas, while highlighting the importance of enhancing country ownership in the impact programs.

The GEF in the climate finance landscape.

In the context of the evolving climate finance space, the GEF strategically invest in close coordination with the other major climate funds, with the view to enhance complementarity and maximize synergies. A recent review of the project portfolios of GEF, GCF, AP and CIFs found that the GEF, unsurprisingly, as the oldest mechanism, has implemented or ongoing projects in most of the geographies where other funds are now active. The convergence of funding on specific geographies is a precondition of, and indicates a large potential for, synergies.[334]

As also highlighted by a recent study by the Multilateral Organization Performance Assessment Network (MOPAN),[335] the GEF's comparative advantage can be articulated around four key aspects. First, the GEF provides climate finance almost entirely through predictable, non-reimbursable, grant funding. This is particularly important for the most fragile and vulnerable countries, including SIDSs and LDCs.

CIF and GCF, 2020, Synergies Between Climate Finance Mechanisms. Available at: https://www.greenclimate.fund/sites/default/files/document/synergies-climate-finance.pdf

MOPAN, 2021, Lessons in Multilateral Effectiveness: Pulling together – The multilateral response to climate change, *Publication forthcoming*.

Second, related to the previous point, funding provided by the GEF is in most cases received without implications for the recipient countries' ability to borrow as sovereign guarantees from the host Government which are normally required for loans, aren't generally requested for grants. This is particularly important in the post-COVID context for developing countries with already limited fiscal space.

Third, unique amongst climate funds, the GEF allocates climate, biodiversity and land degradation funds through the System for Transparent Allocation of Resources (STAR). The STAR ensures that all recipient countries will receive funds to implement NDCs according to national circumstances and to enable them to meet Convention's obligations. The upfront earmarking of funds provides clarity, predictability, and transparency on resources availability and allow recipient countries and GEF Agencies to take early decisions on project prioritization. Investments made through the biodiversity and land degradation focal areas deliver strong climate mitigation and adaptation co-benefits and greatly contribute to the achievement of the climate change mitigation core indicators targets.

Fourth, the GEF can and should take risks as indicated by the recent study on Innovation by the IEO.[336] Tolerating risks is key to the GEF's mission of promoting innovation and early-stage technologies and business models. Risk-appetite can support the identification of leapfrogging clean technologies, and it was central to some of the major market transformations the GEF has enabled over the last decades, such as the development of the wind power market in Uruguay and of concentrated solar power in Morocco.

Long Term Vision on Complementarity with the GCF

To respond to COP guidance on the issue of complementarity and recognizing similar mandates in the climate finance space, since 2018 the GEF and GCF have been collaborating on a Pilot Coordinated Engagement Initiative, to strengthen collaboration and maximize synergies between the operating entities of the financial mechanism of the Convention. Building on such efforts and to further define modalities for shared engagements, the GEF and the GCF defined a Long-Term Vision on Complementarity, Coherence, and Collaboration (LTV) which was submitted to and welcomed by the GEF Council in June 2021.[337]

The respective visions and missions of the GEF and GCF are partly shared and fully mutually reinforcing. The vision of the GCF is to promote the paradigm shift towards low-emission and climate-resilient development pathways in the context of sustainable development, while the GEF's mission is to safeguard the global environment by helping developing countries meet their commitments to multilateral environmental conventions and by creating and enhancing

See GEF/E/C.60/02

GEF, 2021, Long-Term Vision on Complementarity, Coherence, and Collaboration between the Green Climate Fund and the Global Environment Facility, Council Document GEF/C.60/08.

partnerships at national, regional and global scales based on the principle of sectoral integration and systemic approaches.

The LTV aims at enhancing the planning, implementation, and outcomes of GEF and GCF investments, providing a strategic direction for complementarity designed to inform future programming and prospective joint work. More specifically, the LTV will help both entities to jointly progress on coordinating support for major initiatives, facilitate national investment planning, inform each entity's investment and programming strategies, identify, share and apply lessons learned to facilitate the implementation of project and programs for partners, collaborate on development of methodologies and guidance to maximize climate impacts, develop a list of activities or programs each entity will prioritize and support the establishment of collaborating financing platforms.

GEF-8 Climate Change Focal Area Strategy and Associated Programming

The GEF-8 Climate Change focal area strategy aims to support developing countries to make transformational shifts towards net-zero GHG emissions and climate-resilient development pathways.

To achieve this goal, the strategy is organized around two pillars and six objectives:

Pillar I: Promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts

1.1. Accelerate the efficient use of energy and materials.

1.2. Enable the transition to decarbonized power systems.

1.3. Scale up zero-emission mobility of people and goods.

1.4. Promote Nature-based Solutions with high mitigation potential.

Pillar II: Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies

2.1. Support capacity-building needs for transparency under the Paris Agreement through the CBIT.

2.2. Support relevant Convention obligations and enabling activities.

Pillar I: Promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts

The GEF-8 climate change investments will focus on opportunities with a potential to trigger the transformation of key economic systems, including energy, transport, and land use.

Interventions will combine technologies, financial mechanisms, policy and regulatory support, and best practices that support country-driven strategies towards rapid reductions in GHG emissions to reach carbon neutrality by mid-century, while integrating climate change risks considerations and resilience measures.

All projects supported by the climate change focal area will be required to demonstrate alignment to national climate strategies and plans, including NDCs and LTSs, as well as to develop and demonstrate innovative approaches that are sustainable beyond the project implementation period. The GEF support will prioritize interventions for transformative policies, technological solutions, and private sector engagement that have clear potential for replication and scale up and are complementary to efforts of other financial mechanisms, such as the GCF. Climate change projects will continue to ensure meaningful gender mainstreaming and the inclusion of gender-responsive approaches and results, in line with the relevant policy, strategy and guidance.

An effective decarbonization of the energy system, which including transport represents nearly three quarters of the world's GHG emissions,[338] will need to include aggressive efficiency measures, massive expansion of renewable energy, electrification of end-use sectors, the replacement of fossil fuels with zero emission alternatives, such as green hydrogen, and a shift to low-carbon materials and circular economy approaches. In addition, significant progress is needed to achieve universal access to sustainable energy by 2030, as targeted by SDG7.

Agriculture, Forestry and Other Land Use (AFOLU) contribute about 23% of the anthropogenic GHG emissions including through loss and degradation of forests and other ecosystems,[339] and this share is even higher for the subset of countries eligible for GEF financing. However, the sector can contribute about one third of the cost-effective climate mitigation needed by 2030 to limit the global warming below 2°C,[340] while also generating significant climate adaptation benefits, combatting deforestation, desertification and land degradation, and enhancing biodiversity, food security, and prosperity for farmers.

This Pillar will be supported through five specific objectives, corresponding to key areas of intervention that have been identified as central to the systems transformation required to rapidly reduce GHG emissions over the next decade and achieve long-term carbon neutrality goals. These objectives are not mutually exclusive and single projects or programs may target multiple objectives where linkages and synergies exist. In addition, cross-cutting and/or upstream interventions may be funded through a combination of two or more of the relevant focal area objectives. Examples of projects that could be supported with this approach would include those

Climate Watch Historical GHG Emissions. 2020. Washington, DC: World Resources Institute. Available online at: https://www.climatewatchdata.org/ghg-emissions

IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (IPCC, 2019)

Griscom et al. (2017). Natural climate solutions. Proceedings of the National Academy of Sciences, 114(44), 11645. doi: https://doi.org/10.1073/pnas.1710465114

aimed at supporting fiscal policy and green finance interventions to align financial flows with climate goals, in line with Art 2.1c of the Paris Agreement, and interventions supporting clean technology and innovation across more than one focal area objectives."

Objective 1.1: Accelerate the efficient use of energy and materials

The built environment accounts for 38% of the global energy use and carbon emissions.[341] Alignment to the Paris Agreement goals necessitates all new buildings to be net-zero on operational emissions and to reduce embodied carbon by 40%-50% by 2030. By 2050, all new and existing assets will need to be net-zero for both operational and embodied emissions, across their entire lifecycle.[342] While countries have mentioned building efficiency in their NDCs, adequate decarbonization policies are lacking: more than two thirds of projected new buildings by 2050 are in countries that currently do not have building energy codes.

The GEF will support the adoption of a new generation of energy efficiency policies and green building codes that are in line with updated NDCs and LTSs. The GEF will continue to support financial and fiscal instruments, mechanisms and business models, including those promoting "energy as a service" approaches, that can scale up and aggregate demand for energy efficiency products and services. The GEF will also support roadmaps that propose an integrated approach to buildings, from materials, new building energy codes and performance, integration of renewable energy, and net-zero building standards and demonstrations, with an enhanced focus on public buildings and social housing. This support would also include necessary capacity development for monitoring and enforcement of policies and green building codes. Approaches to leverage land use jurisdictions and building permits to provide incentives to use Nature-based Solutions that reduce building energy needs (e.g. green facades and roofs) and urban heat will also be supported.

Cooling accounts for almost 20% of the global electricity demand today and is expected to grow to 37% by 2050 under business as usual scenarios.[343] In this area, the GEF will focus on the wide adoption and implementation of new energy efficiency performance standards, and look for synergies with other programs, including to maximize the climate benefits of actions to implement the Kigali Amendment of the Montreal Protocol. This may include grant schemes to subsidize the costs for early adopters and support for new technologies such as district cooling, super efficient

United Nations Environment Programme (2020). 2020 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. Nairobi

GlobalABC/IEA/UNEP (Global Alliance for Buildings and Construction, International Energy Agency, and the United Nations Environment Programme) (2020): GlobalABC Roadmap for Buildings and Construction: Towards a zero-emission,
efficient and resilient buildings and construction sector, IEA, Paris.

IEA, 2018, The Future of Cooling, Opportunities for Energy-Efficient Air Conditioning. Paris

cooling appliances, deployment of digitalization and energy management systems, and innovation in cold chains with linkages to food security, water, and health.

System decarbonization requires not only a reduction in energy use, but also adequate considerations to the sourcing and use of materials. This can be achieved by applying circular economy strategies such as recover, reduce, reuse, redesign, regenerate and remanufacturing. Boosting circular economy approaches may also result in a reduction in energy use per unit of output. Support in this area will be focused on the development of low-carbon material pathways, including support for certifications and standards (e.g. green cement, steel, etc.), demonstrations through green public procurement, and the development of new business models.

In the manufacturing sector, industrial energy supply has traditionally depended on subsidized heavy fuels, and many micro, small and medium sized industrial & manufacturing enterprises (industrial MSMEs) are still inefficient in the use of heat and energy (boilers, furnaces, motors, etc.). The GEF will support mitigation measures in this sector including sectoral medium-and long-term roadmaps, electrification of heat uses and wider adoption of digital technologies, harmonized benchmarks for low- and zero-carbon products and associated certification schemes, aggregating demand for low- and zero-carbon products, and technology transfer of new innovations in this space. The GEF may also consider supporting the demonstration of net-zero industrial parks or clusters through integrated zero-carbon technologies and application of circular economy practices.

Projects under this objective will take into account women's and men's differentiated knowledge of, access to, and use of energy-efficient technologies, as well as their attitudes towards the risks and benefits associated with adopting new technologies. Projects will also support the development of skills and training to promote women's participation in the development and deployment of energy efficient technologies and services and relevant decision-making processes.

Building on the successful experience working in collaboration with SE4All on the family of energy efficiency accelerators, the GEF may support a multi-country program under this objective focusing on the generation and dissemination of technical knowledge, standards and pilot investments for the development of zero-carbon buildings.

Objective 1.2: Enable the transition to decarbonized power systems

The clean energy market has seen rapid progress throughout the last decade. Significant technological advances and cost reductions have made renewable options cheaper than fossil fuel alternatives in most locations, even without financial incentives. However, the annual grow rate of renewables in the electricity generation mix would have to increase five-fold by 2030 and to triple

between 2030 and 2050 to meet the Paris Agreement goals.[344] At the same time, policies for the phase out of coal and other fossil fuels are urgently needed to avoid lock-in of emissions.

In light of the significant technology cost reduction gains over the last decade, the highest priority is increasing the pace of renewable energy growth and its integration to the grid, as well as the electrification of all end uses. The GEF will support long-term planning and modelling from a systems perspective and interventions aimed at aligning financial flows for energy generation with the goals of the Paris Agreement. Investments in this area will include smart-grids, demand-side management, energy storage, and grid modernization to enable the scaled-up integration of renewable energy, including flexibility and balancing needs of power systems, to bridge gaps in technical, policy and regulatory capacity. Opportunities to enhance the climate and economic resilience of communities through improved access to clean, reliable, affordable and climate resilient energy generation and distribution systems, especially in SIDS and LDCs, will also be pursued, including through multi-trust funds programming with LDCF and SCCF. The GEF may also provide early support for green hydrogen—produced with renewable electricity through electrolysis—as an additional option for energy storage and potential to help decarbonize hard-to-abate sectors.

Support may also include innovative policy and market-based measures to incentivize the early decommissioning of fossil fuel plants, accompanied by just transition strategies. In this context, interventions that integrate considerations on how to ensure that negative distributional impacts of the green transition are minimized will be given special attention.

Energy access will remain a priority for the GEF. Latest data from the UN shows that 759 million people still lack access to modern and reliable energy.[345] Access to energy is essential for the provision of basic services, such as water purification, health care, cooking, lighting, heating, mechanical services and transportation, amongst others. The COVID-19 pandemic is impacting significantly current and future progress on energy access, making basic electricity services unaffordable for up to 30 million people who had previously enjoyed access and further endangering the achievement of SDG7 by 2030.[346] The GEF will support decentralized clean and affordable energy solutions, focusing on micro- and mini- grid systems in rural and peri urban areas. Support will target streamlined regulatory processes, integrating productive uses to drive demand, and other measures to scale up financing. In this area, the GEF may support the development of local supply chains and the promotion of entrepreneurship for sustainable/zero-carbon energy. Opportunities to link energy access with other priority GEF areas such as energy efficiency, agriculture and cooling will also be pursued.

Lebling, K., Ge, M., Levin, K., Waite, R., Friedrich, J., Elliott, C., Chan, C., Ross, K., Stolle, F., & Harris, N. 2020. “State of Climate Action: Assessing Progress toward 2030 and 2050”. World Resources Institute, Washington, US.

IEA, IRENA, UNSD, World Bank, WHO. 2021. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC.

Ibidem.

Women play a critical role in the provision of energy in households, and are disproportionately affected by impacts on health, productivity, unpaid labor and employment burdens from a lack of access to affordable, reliable, sustainable and modern energy. Women are also underrepresented in the energy sector as workers and entrepreneurs, and face additional barriers including access to finance. Projects under this objective will aim to provide opportunities for training and skills development to promote the participation of women in technical and nontechnical roles in the sector, increase women's role in decision-making, and access to finance for energy access, as well as to produce positive health, economic and other development benefits.

Multi-country programs under this objective will be considered in three key areas considering their transformational potential: (i) a global platform to support market development for and pilot investments in green hydrogen, as a catalyst for decarbonization efforts in transport and other hard to abate sectors as well as an energy storage solution; (ii) building on the GEF-7 Africa Mini-Grids Program, the GEF will also look to expand its programmatic support for the energy access space, focusing on innovative de-risking mechanisms; (iii) given the pivotal role that energy storage will have to play in the energy transition, by increasing grid flexibility and addressing the balancing needs of power systems in developing countries, the GEF may consider a multi-country program to support policies and investments for the grid integration of battery storage.

Objective 1.3: Scale up zero-emission mobility of people and goods

For the transport sector to support the Paris Agreement's long-term temperature goals, a rapid and deep decarbonization of all transport modes towards zero-emissions is needed by 2050.[347] It is estimated that in road transport, 85% of the reductions will need to come from efficiency and electrification. The remaining 15% will have to come from behavioral changes, reduction of needs (e.g. telework) and distance of travels, modal shifts (more walking, cycling and mass transport) and land-use/urban planning (transport-oriented development).[348]

In many developing countries, key barriers prevent such transformations from taking place. Mass transit is still based largely on old and inefficient fleets, operated by small companies with very limited access to credit for efficiency upgrades and awareness and capacity to take advantage of new technologies. Electric drive vehicles (EVs), where available in local markets, still present higher upfront capital costs than traditional internal combustion engine (ICE) vehicles, and the lack of adequate charging infrastructure contributes to range anxiety. The unavailability of servicing networks, local expertise and lack of well-designed charge-rate structures represent additional barriers. Finally, in many GEF countries the import of secondhand ICE vehicles from

International Council on Clean Transportation, 2020. Vision 2050. Available at: https://theicct.org/sites/default/files/publications/ICCT_Vision2050_sept2020.pdf

UNFCCC. 2020. Executive Summary. Climate Action Pathway: Transport. Available at: https://unfccc.int/sites/default/files/resource/Climate%20Action%20Pathway%20Transport.%20Executive%20Summa ry.pdf

developed countries allows old, inefficient vehicles to remain on the road much longer than intended, locking in additional emissions.

Thus, the GEF will support integrated approaches to support the transition towards zero-emission mobility, including through avoid/reduce, shift and improve approaches (A-S-I), financing of supportive policies and local capacity building to further electrification, recycling of lithium ion batteries and other critical materials, integration of EV electricity demand with the electric grid and direct coupling with renewable energy deployment, and fiscal considerations related to revenues from fuel taxes. The GEF, where feasible and appropriate, will also support local manufacturing and market development and South-South cooperation.

The way transport is used by men and women is influenced by gender and social roles and norms and thus leads to differences in modes of transport, purposes for transport, and levels of access. Projects under this objective will ensure approaches, decision-making and policies are inclusive, gender-responsive, and responsive to these differences, and aim to promote women's participation in decision-making processes and transport services.

Building on the successful GEF-7 Global Program to Support the Shift to Electric Mobility, the GEF will consider additional investments to support developing countries which have not yet benefitted from programming towards the shift to electric mobility, as well as to further promote the integration of renewable energy sources with charging networks and advanced technologies such as Vehicle-to-Grid mechanisms (V2G). Innovative and scalable solutions to accelerate the decarbonization of the shipping and aviation sectors will also be considered.

Objective 1.4: Promote Nature-based Solutions with high mitigation potential

To achieve the 2050 goal of net zero emissions, the emissions from deforestation and ecosystem degradation will have to be reduced by 95%, nearly becoming a net sink, and the emissions from the agriculture sector and food systems by 25%.[349] The GEF will seek to support the most efficient investments to generate GHG mitigation benefits, in natural ecosystems and agriculture landscapes. The scope of proposed investments will support mitigation options in two priority areas: in high carbon ecosystems and in the agriculture sector, supporting actions as aligned as possible with the Koronivia process outcomes. The interventions supported by this objective are expected to generate significant co-benefits, notably in terms of climate adaptation and improved livelihoods for large numbers of farmers and rural communities, enhanced biodiversity and reduced land degradation.

Aligned with country climate strategies as stated in the NDC, the GEF will also support interventions in forest ecosystems with high mitigation potential, such as the intact forests that

[349] UNFCCC. 2020. Executive Summary. Climate Action Pathway: Land Use. Available at: https://unfccc.int/sites/default/files/resource/ExecSumm_LandUse.pdf

store twice more carbon than other forests.[350] In addition, wetlands, peatlands and coastal habitats such as mangroves, seagrass and marshes, are known to be important carbon sinks (primarily from sediments and soils) but at the same time, threatened by human activities and climate change. The GEF scope of interventions will also include the protection and restoration of these ecosystems. In the targeted areas, the activities supported will need to demonstrate a high potential in terms of reducing carbon loss and providing continued or enhanced natural CO_2 removal.

The Koronivia Joint Work on Agriculture launched by COP 23 identified issues related to agriculture which have a potential to contribute to the mitigation of climate change: improved soil carbon, improved nutrient use and manure management towards sustainable and resilient agricultural systems, and improved livestock management systems. Following the work and results of this ongoing process under UNFCCC, the GEF will support enabling frameworks, capacity development and investment activities with clear potential to result in cost-effective and high-impact climate mitigation outcomes in the agriculture sector.

This objective will also provide the possibility to support policy, institutional and regulatory reforms related to the AFOLU sector contributing to the implementation of NDCs under the Paris Agreement, including through carbon pricing and market-based measures that are consistent with the relevant elements of the Paris Agreement's Article 6. Interventions contributing to create appropriate national conditions for the sustainable implementation of REDD+ national strategies at scale will also be eligible.

Gender gaps in the access to and control of natural resources are further exacerbated by the impacts of climate change, which disproportionately affect the poor and most vulnerable, especially women. The design and implementation of projects under this objective will consider and respond to gender-specific differences in the access to resources, services, information and employment opportunities for the sustainable and productive use of natural resources, and in capacity for resilience to climate change. Projects will promote gender-responsive approaches and decision-making built on inclusive stakeholder consultations and aim to empower women in the implementation of Nature-based Solutions and in the promotion of sustainable income-generating opportunities.

Pillar II: Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies

The GEF continues to address the need for enabling conditions to mainstream climate change concerns into national planning and development agendas through its support for enabling activities, including Convention obligations and the CBIT, through sound data, analysis, and policy frameworks. As in prior GEF cycles, under the GEF-8 Climate Change focal area strategy

[350] Mawell et al. (2019). Degradation and forgone removals increase the carbon impact of intact forest loss by 626%. Science Advances.

countries will have access to resources intended for Convention obligations and CBIT support from set-asides that do not draw on country allocations. Country allocations will be available to deliver on other enabling activities. Activities under this pillar provide opportunities to recognize, build capacity, and develop actions that advance gender equality and women's empowerment in the preparation of climate change plans, strategies policies and reports.

Objective 2.1: Support capacity-building needs for transparency under the Paris Agreement through the CBIT

The GEF will continue to provide support for projects that build institutional and technical capacity to meet the provisions of the transparency framework of the Paris Agreement. The CBIT, as per paragraph 85 of the COP decision adopting the Paris Agreement, will aim:

To strengthen national institutions for transparency-related activities in line with national priorities;

To provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement;

To assist in the improvement of transparency over time.

The Paris Agreement in Article 13 establishes an enhanced transparency framework for action and support, with built-in flexibility which takes into account Parties' different capacities and builds upon collective experience. The transparency framework shall provide flexibility in the implementation of the provisions of Article 13 to those developing country Parties that need it in the light of their capacities. The purpose of the framework for support is to provide clarity on support provided and received by relevant individual Parties, and, to the extent possible, to provide a full overview of aggregate financial support provided, to inform the global stocktake. The purpose of the framework for action is to provide a clear understanding of climate change action, including on tracking progress towards achieving Parties' NCDs. The CBIT will support activities aligned with its aim at the national and regional/global levels building on the experience and results from CBIT projects supported in GEF-6 and GEF-7.

Objective 2.2 Support relevant Convention obligations and enabling activities

The CMA decided that Parties shall submit their first BTR and national inventory report, if submitted as a stand-alone report, in accordance with the adopted modalities, procedures and guidelines, at the latest by 31 December 2024 and that LDCs and SIDS may submit this information at their discretion.

All developing country Parties to the Paris Agreement are eligible to receive financing for the preparation of BTRs. Countries can access resources at full cost for the BTR preparations, including the national inventory report if submitted as a stand-alone report, from the climate

change focal area set-aside resources. If countries require additional resources, they can utilize resources from their respective STAR allocation.

Parties to the Paris Agreement may continue to report a separate national communication (NC) every four years, or may choose to submit a single BTR/NC report in the years a NC is submitted, following the modalities, procedures and guidelines for BTRs and include:

Supplemental chapters on research and systemic observation and on education, training and public awareness, in accordance with applicable guidelines in 17/CP.8 or 6/CP.25;

An additional chapter on adaptation for Parties that have not included this information in the BTR, in accordance with applicable guidelines in 17/CP.8 or 6/CP.25.[351]

UNFCCC Parties eligible for GEF support that are not Parties to the Paris Agreement will continue to have access to financing from set-aside resources for the preparation of NCs and Biennial Update Reports, according to guidance.

Following COP guidance, support for TNAs will be made available under this objective for small island developing states and least developed countries which have not yet undertaken one and wish to do so. Other countries may use their country allocations for the preparation of TNAs. The GEF will also continue to make financial support available for the preparation of NDCs, following COP guidance. Countries may use country allocations for these activities.

Focal Area Set Aside.

In addition to Objectives 2.1 and 2.2, the Focal Area set aside envelope will provide resources for global and regional programming for strategic areas with potential to generate global lessons and promote technology transfer. Global or regional programs that may be considered could include initiatives on: (i) zero-carbon built environments, (ii) development of green hydrogen technologies, (iii) support for the energy access, (iv) grid integration of battery storage, and (v) acceleration of electric mobility. Furthermore, to promote policy coherence, maximize incentives to low carbon technologies and minimize subsidies to carbon intensive ones, the focal area set aside will also provide support for carbon pricing schemes.

Carbon pricing schemes are part of the toolbox for decarbonizing economies. The term refers to systems that aim to assign or facilitate an explicit price to GHG emissions, expressed as a dollar value per ton of carbon dioxide equivalent. They can include carbon taxes, emissions trading systems (ETSs), carbon crediting/offset mechanisms, results-based finance, as well as internal carbon pricing in business organizations. To lead to cost-effective climate mitigation outcomes, these schemes require careful planning and design, development of capacities in

[351] The supplemental chapters referred to under (a) and (b) will be supported with GEF resources, in an amount equivalent to the difference between the suggested cost for a stand-alone BTR and a combined BTR/NC report.

regulatory authorities, establishment of registries and protocols for monitoring, reporting and verification.

Article 6 under the Paris Agreement provides guidance for UNFCCC Parties that voluntarily engage in cooperative approaches to achieve their NDCs' objectives to account for and report on their internationally transferred mitigation outcomes in a manner consistent with Article

Article 6.4 establishes a specific credit mechanism that can support this cooperation and NDC implementation and achievement. Many countries have indicated in their NDCs their interest or consideration for market-based mechanisms to reduce emissions. Several countries have implemented or are considering implementing carbon taxes and ETSs. However, out of the more than 60 carbon pricing schemes analyzed by the World Bank, only 16 were found to be in developing countries, of which 9 in China and 2 in Mexico.[352]

Further, growing investor and consumer awareness of climate action has also led to an increased interest in the private sector for carbon credits, both domestic and international, particularly to tackle emissions in hard-to-abate sectors. This presents an important opportunity for additional resource mobilization for climate action. The GEF will support countries that have articulated an interest in developing national or subnational policy packages and schemes for carbon pricing to support mitigation targets with the design, economic assessment, and implementation of such policy packages, and to build the capacity and readiness of countries for carbon markets and the relative accounting and transparency requirements. GEF support will consider, build on and look for synergies with existing programs and actors already supporting countries with the establishment of carbon pricing schemes, such as the World Bank's Partnership for Market Implementation (PMI).

Contributions of Integrated Programs to Climate Change Outcomes

Net Zero Accelerator

The NZA IP will significantly contribute to the generation of climate change mitigation outcomes by raising the level of ambition of climate mitigation plans and NDCs in participating countries to a level that aligns with the pathway needed to reach net zero emissions by 2050. It will support countries to prepare NDCs and LTSs that are consistent with a 1.5°C goal, translate them into short- and medium-term targets coupled with coherent and enforceable policies, and move swiftly from planning to implementation.

Food Systems

The Food Systems IP provides the opportunity to foster climate-smart agriculture and sustainable land management, while also increasing the prospects for food security for

World Bank. 2020. State and Trends of Carbon Pricing 2020. Washington, DC: World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/33809

smallholders and communities that are dependent on farming for their livelihoods. Restoring agricultural productivity while also reducing GHG emissions is key for countries to jointly meet their NDC and SDG goals. It will also foster a sustainable supply chain with regard to production, processing, and demand for key agricultural products that are vital to long-term emissions reductions from agriculture including through avoided deforestation of tropical forests.

Sustainable Cities

The Sustainable Cities IP will be critical to address both short-term and long-term climate change challenges in the rapidly growing urban sector. It targets urban interventions with significant climate change mitigation potential to help cities shift towards low-emission and resilient urban development in an integrated manner. Cities must be empowered to effectively support the implementation of NDCs and low-carbon development pathways.

Amazon, Congo, and Critical Forest Biomes

The GEF's historic SFM investments have already demonstrated the significant climate change benefits available through integrated approaches on forests. In GEF-8, this IP will foster low-carbon strategies focusing on intact forest landscapes, such as the Amazon and the Congo Basin. The targeted ecosystems, which are key carbon sinks with high capacity of carbon removal, are increasingly threatened, and are therefore critical to halting the release of GHG emissions through avoided deforestation and by enhancing carbon stocks above and below ground.

Circular Solutions to Plastic Pollution

The Circular Solutions to Plastic Pollution IP will tackle plastic production, consumption and waste, which will reduce carbon emissions since GHGs are emitted at every stage of the plastic lifecycle. The IP will work toward eliminating problematic and unnecessary plastics, promoting innovative solutions, and fostering circular systems. By using resources more efficiently, reducing waste, and following cradle-to-grave design principles, GHG emissions can be significantly reduced.

Ecosystem Restoration

Soils play a crucial role in global climate processes through their regulation of CO_2, nitrous oxide, and methane. At the global scale, soils and the biomass they hold are the major terrestrial reservoir of carbon and therefore have a major influence on the concentration of GHG in the atmosphere, making the restoration of ecosystems crucial to global climate change mitigation efforts. The Ecosystem Restoration IP will work to restore carbon stocks and reservoirs in a variety of ecosystem types, including peatlands, and will produce significant climate adaptation and livelihood co-benefits for farmers and rural communities.

Role of the private sector in supporting Climate Change Outcomes

Supportive policies and strategies are fundamental to catalyze innovation and technology transfer for mitigation options and to enhance private sector investment. Resources from the GEF play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and blended finance which foster private sector engagement for technology and innovation, and more importantly scaling up.

The private sector is be expected to play a key role in supporting the objectives of the Climate Change focal area strategy. In line with the GEF 2020 Private Sector Engagement Strategy,[353] the focal area strategy will prioritize interventions with potential to work strategically with multi-stakeholder platforms and will adopt a systematic approach to crowd in the private sector across the entire climate change portfolio. Key private sector actors will include SMEs, entrepreneurs, energy suppliers and distributors, vehicle manufacturers, industrial producers and manufacturers, farmers and producers, and financial institutions, among others.

The GEF IEO evaluation of GEF's engagement with micro, small and medium enterprises highlighted that successful partnerships with the MSME sector generally included three types or scales of private sector entities demonstrating that value chain engagements bring a wider spectrum of actors projects.[354] The evaluation also showed that innovation and scaling-up roles for the private sector were more common in the climate change focal area, and so targeted approaches that foster on-the-ground private sector activities from MSMEs should be developed.

The many net-zero commitments made by countries and private companies, provide an excellent opportunity to build alliances with the private sector and other non-state actors such as CSOs and cities, to deliver on their climate change ambitions. The Climate Change focal area will focus on translating these ambitions, including notably those from signatories of the UN campaign "Race to Zero," into real-economy emissions reductions. It will also connect the work of governments with the many voluntary and collaborative actions taken by cities, regions, businesses and investors through linkages to the Climate Champions Network as part of the UN-led Marrakesh Partnership. Multi-sectoral climate initiatives that align with the GEF-8 integration agenda will be supported to advance the achievement of the multiple key goals of the Rio Conventions through strengthened partnerships that bring together biodiversity and land degradation neutrality outcomes with climate change mitigation actions. Multi-stakeholder initiatives will be also supported to advance the shared objectives of the UNFCCC with the Minamata and Stockholm Conventions on chemicals, as there is growing recognition of the

GEF/C.59/07/Rev.01, GEF's Private Sector Engagement Strategy, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.59.07.Rev_.01_GEFs%20Private%20Sector%20Engagement%20Strategy_.pdf

The GEF IEO Evaluation of GEF Engagement with Micro, Small and Medium Enterprises 2021 https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_05_MSME_evaluation.pdf

interlinkages between climate change, hazardous chemicals and wastes.[355] The GEF Partnership can provide expertise, guidance, and strategic alignment to such platforms with climate change goals in GEF countries.

In addition, GEF investments in climate mitigation will look to engage and work with business committing to Science Based Targets (SBTi) and to provide pathways for private sector actors to align with deep decarbonization targets in key areas relevant for the transformation of energy, transport and land use systems. Focus will be given to supporting the private sector with key metrics and reporting frameworks, including on potential use of market instruments that are established under or consistent with the relevant elements of Article 6 of the Paris Agreement and voluntary carbon markets, to better account and offset for their direct and indirect supply chain emissions.

A strategic goal for the Climate Change focal area is to use these ambition frameworks and science-based multi-stakeholder platforms to reach all scales of business and support the upstream investment into value chains where abatement has historically been hard to achieve, such as in agricultural commodities, in textiles and fashion, and in the fossil-fuel dependent economies and geographies, including in SIDS and LDCs.

Targeted activities in these areas will be operationalized through the involvement of diverse private sector partners in project activities beyond a co-financing role and extend to technical assistance, knowledge and skills training in technologies or practices, awareness and education initiatives, and access to financing for interventions that generate global environmental benefits. The provision of incentives that account for differences in each target groups' needs, capacities, motivations, and barriers are crucial for creating a business case for private sector actors at all scales to participate in transformational climate change activities. Further work to create an enabling environment for the private sector should support the removal of logistical, administrative, and financial barriers to switching to new technologies and practices.

[355] UNEP, Secretariats of the Basel, Rotterdam, Stockholm Conventions, and the Minamata Convention on Mercury, Chemicals, Wastes and Climate Change. Interlinkages and potential for Coordinated Action, May 2021, https://www.unep.org/resources/report/chemicals-wastes-and-climate-change-interlinkages-and-potential-coordinated-action

Land Degradation Focal Area

Global Context of Land Degradation

Land degradation is a global challenge, which aggravates economic, social and environmental problems such as poverty, poor health, food insecurity, biodiversity loss, water scarcity, reduced resilience to climate change impacts, and forced migration. Land degradation negatively impacts 3.2 billion people especially rural communities, smallholder farmers, and the extremely poor and represents an economic loss of around 10% of annual global gross product.[356]

70% of the world's poorest people depend on agriculture for their livelihoods. At the same time, globally, 24% of the land is degrading and more than 1.5 billion people directly depend on these degraded lands.[357] Land degradation processes threaten the livelihoods, well-being, food, water and energy security and increase vulnerability of millions of people.

Agriculture and land use change is the dominant driver for land degradation and deforestation worldwide, caused by the unsustainable management or over-exploitation of resources, such as vegetation clearance, nutrient depletion, overgrazing, inappropriate irrigation, and excessive use of agrochemicals. Urban sprawl, pollution, mining, and quarrying are additional drivers.[358] Agricultural land use reverberates across local ecosystem functions and dynamics to the global level, such as land-atmospheric interactions,[359] and with cross-scale implications from local to global scales underlining the importance of land use, and land degradation, as a global driver of environmental degradation.

Pressures on the global land resource are still increasing mainly due to: (i) growing demand for food and agricultural commodities for an expanding and more affluent world population; (ii) competition for productive land for biofuel, urban expansion and other non-productive uses; (iii) decrease in productivity due to decline in soil health, lower nutrient status and organic matter; (iv) weakened resilience of agricultural production systems due to depleted biodiversity; and (v) natural factors such as increased climate variability and extreme weather events.

The IPBES Assessment Report on Land Degradation and Restoration, 2018
UNCCD Global Land Outlook Working Paper- Land Under Pressure Health Under Stress, 2019
UNCCD, Global Land Outlook Report, 2017.
Moore, J.C. The re-imagining of a framework for agricultural land use: A pathway for integrating agricultural practices into ecosystem services, planetary boundaries and sustainable development goals. Ambio, 2021.

With the current pandemic and against the background of degradation significantly altering ecological systems worldwide, the link between land conversion and agricultural and livestock intensification with the risk of emerging infectious disease is even more pronounced.[360]

Dryland areas are particularly vulnerable to desertification, land degradation and drought (DLDD) issues. They make up 41% of the Earth's surface, with populations in drylands projected to increase by 43 %—from 2.7 billion in 2010 to 4.0 billion in 2050.[361] Drylands face governance challenges such as low human resource capacity (e.g. low education attainment), low investment of public resources, weak penetration of government services, and insecure land tenure and resource rights in particular for vulnerable populations such as women, IPLCs and youth.

Climate change exacerbates land degradation processes and leads to variations in yields and income from agriculture, threatening the resilience of agro-ecosystems and stability of food production systems. Drought is one of the major drivers of global food and water insecurity, affecting agricultural production and access to food and water. Drought can, in extreme cases, force people to abandon their land, resorting to migration as a last livelihood strategy.[362] Every year, 12 million hectares of land become unproductive due to desertification and drought and the livelihoods of more than 1 billion people in some 100 countries are threatened by desertification.[363,364]

Women's input, knowledge and guidance are indispensable to any productive, sustainable efforts to avoid, reduce and reverse land degradation and mitigate the effects of drought. When women are empowered, entire families benefit, and these benefits often have an effect on future generations. However, gender inequality still plays a significant role in land-degradation related issues. Women farmers often have less access to land, decision making processes and leadership, credit, information, technology, and extension. Challenges remain in relation to the generation, availability, statistics and indicators of gender. In this context, the UNCCD Gender Action Plan[365] and the associated guidelines[366] represent a landmark opportunity to transform gender equality and human rights into action.

Conference of the Parties (COP) Decisions with relevance for the GEF

GEF's mandate to invest in global environmental benefits from production landscapes relates directly to its role as a financial mechanism of the UNCCD. The Land Degradation Focal

UNCCD Global Land Outlook Working Paper- Land Under Pressure Health Under Stress, 2019
The IPBES Assessment Report on Land Degradation and Restoration, 2018
UNCCD Science Policy Interface, Land Management and Drought, 2019
Ibid
IPPC report on Climate and Land, 2019
https://www.unccd.int/actions/gender-action-plan
https://www.unccd.int/publications/manual-gender-responsive-land-degradation-neutrality-transformative-projects-and

Area (LDFA) provides the opportunity for eligible countries to utilize GEF resources for implementing the Convention and the UNCCD Strategy (2018-2030),[367] which is a comprehensive global commitment to avoid and reduce desertification and land degradation and to restore the productivity of degraded land to achieve Land Degradation Neutrality (LDN), improve the livelihoods of more than 1.3 billion people, and mitigate the impacts of drought on vulnerable populations.

LDN is the overarching concept of the UNCCD, defined as "a state whereby the amount and quality of land resources necessary to support ecosystem function and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems".[368] LDN allows to set measurable targets for sustainable land management, promoting a response hierarchy of measures to avoid and to reduce degradation of land combined with measures to reverse past degradation. The IPBES Assessment Report on Land Degradation and Restoration embraced the LDN response hierarchy for the implementation of land-based interventions of Avoid > Reduce > Reverse land degradation, where prevention is viewed as better than the cure. The LDN concept encourages adoption of a broad range of measures to avoid or reduce land degradation through appropriate planning, regulation and sustainable land management practices, combined with actions to reverse past degradation, through land restoration and rehabilitation, to achieve a state of no net loss of healthy and productive land. As of August 2021, 127 countries have committed to set voluntary LDN targets.

The UN General Assembly has recently reaffirmed that achieving LDN has the potential to act as an accelerator and integrator for achieving the SDGs and respond to the overall objectives of the 2030 Agenda for Sustainable Development, and it has recognized that land-based solutions, as part of nature-based solutions, are promising options for sequestering carbon and enhancing the resilience of people and ecosystems affected by desertification, land degradation and drought, as well as the adverse effects of climate change. The IPCC has reported that policies promoting LDN can also enhance food security, human wellbeing and climate change adaptation and mitigation.[369] LDN also promotes synergies and improves policy coherence across sectors and at all levels, including the national agendas relating to the Paris Agreement and the post-2020 Global Biodiversity Framework.

The most recent UNCCD COP decisions with relevance for the GEF were made during COP 14 held in India in September 2019 and are summarized in table 2 below.

https://www.unccd.int/sites/default/files/relevant-links/2018-08/cop21add1_SF_EN.pdf
Cowie, A. et al. 2018. Land in balance: The scientific conceptual framework for Land Degradation Neutrality
See key messages B.1.3, B.4.4, C.1.1, C.1.3 in the IPCC 2019 Special Report on Climate Change and Land, 2019

Table 2. Convention Decisions with relevance for GEF-8 LDFA Investments

UNCCD decisions with relevance for GEF	Delivery through Integrated Programs and FA Investments
COP14 invites the GEF to continue its support for countries in programming GEF Land Degradation focal area resources to combat desertification/land degradation and drought and achieve their voluntary land degradation neutrality targets, including in the context of land degradation neutrality transformative projects and programs. COP14 invites the GEF, within its mandate, to support the implementation of relevant aspects of the national drought plans and other drought-related activities within the scope of the Convention. COP 14 Invites the GEF to continue supporting Parties to meet their reporting obligations under the Convention and encourages the GEF to provide adequate financial resources in a timely manner. COP14 Encourages the GEF to continue and further enhance the means to harness opportunities for leveraging integration among the Rio conventions and other relevant environmental agreements, as well as the 2030 Agenda for Sustainable Development.	**Integrated Programs:** Food Systems Ecosystem Restoration Amazon, Congo, and Critical Forest Biomes Net-zero Accelerator Blue and Green Islands **Land Degradation eligible investments** Sustainable Land Management (SLM), including drought-smart land management (D-SLM) Restoration of agro-ecosystems in production landscapes Address DLDD issues, emphasizing drought mitigation, particularly in drylands Improve the enabling policy and institutional framework for LDN UNCCD Enabling Activity Support

GEF-8 Land Degradation Focal Area Strategy and Associated Programming

The LDFA strategy in GEF-8 aligns with GEF's vision to achieve healthy and resilient ecosystems by addressing agro-ecosystems in production landscapes. The goal of the land degradation focal area is to avoid, reduce, and reverse land degradation, desertification and mitigate the effects of drought.

The LDFA strategy is fully in line with the UNCCD Strategic Framework 2018 – 2030 which has the vision "for a future that avoids, minimizes, and reverses desertification/land degradation and mitigates the effects of drought in affected areas at all levels and strive to

achieve a land degradation-neutral world consistent with the 2030 Agenda for Sustainable Development, within the scope of the Convention", by supporting all five Strategic Objectives.

The LDFA strategy supports the implementation of voluntary LDN targets that 127 countries have set. It will apply the LDN concept by following the response hierarchy to avoid, reduce, and reverse land degradation, desertification, and deforestation. The Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP) checklist[370] and the Operational Guidance for Country Support[371] will serve as general guidance for design and implementation of GEF Land Degradation focal area projects and programs in GEF-8.

GEF LDFA investments focus on addressing the drivers of land degradation in production landscapes where agricultural, forestry and rangeland management practices underpin the livelihoods of rural communities, smallholder farmers and pastoralists. It focuses on innovative interventions that can be scaled to maximize global benefits for the environment and simultaneously address the issues of local livelihoods. A specific emphasis in GEF-8 is placed on sustainable land management in drylands addressing, among other issues, drought-prone ecosystems and populations. GEF investments may also support the implementation of relevant aspects of national drought plans and other drought-related activities within GEF's mandate to generate global environmental benefits.

GEF will continue to apply a comprehensive landscape approach to address the broad multi-faceted nature of land degradation across the range of agro-ecological and climatic zones globally. The landscape approach is underpinned by integrated land use planning to maintain or increase land-based natural capital and to address the trade-off and conflicts between competing land uses, including tenure issues. The landscape approach promotes the connectivity and integrity of socio-ecological systems and maximizes the benefits for human well-being, which will be critical in efforts towards green recovery from the pandemic.

Building resilience of landscapes, people and the institutional systems to maintain or create healthy landscapes may need adaptive changes or radical transformational change to a completely different system. Understanding how to use resilience, adaptation or transformation to manage a system will enable systems to be more agile in dealing with shocks. LDFA investments support the design of projects and programs which can help to guide interlinked social and ecological systems into the future, informed by sound science, underpinned by a structured knowledge management process.

By adopting an integrated approach to natural resources management, the LDFA drives an agenda for multiple global environmental benefits, including those related to the conservation

[370] https://knowledge.unccd.int/sites/default/files/2018-09/LDN%20TPP%20checklist%20final%20draft%20040918.pdf

[371] https://www.unccd.int/publications/land-degradation-neutrality-transformative-projects-and-programmes-operational

and sustainable use of biodiversity, climate change mitigation and adaptation, and the sustainable use of transboundary watersheds. In this regard, joint programming with other GEF focal areas will be actively pursued, especially in integrated programs. This effort will also consider opportunities to develop dedicated LDFA programmatic initiatives where they are likely to trigger transformational changes in the natural resource management sectors, such as the Great Green Wall Initiative (GGWI) and regional programs in drylands to address DLDD issues.

The GEF-8 LDFA strategy mainstreams gender considerations by applying the recent guidance note developed by UNCCD (2019)[372] and following the recommendations of Collantes et al (2018)[373] to (i) enhance understanding, and to advance gender-responsive LDN plans and programs, and (ii) include gender considerations in LDN assessments. Programming will give attention to practical gender needs such as improving the conditions of women through secure tenure and access to resources, services and opportunities, and strategic gender interventions to foster women's participation and empowering women's representation in decision making bodies at all levels.

The LDFA strategy will contribute to its goal of avoiding, reducing, and reversing land degradation, desertification and mitigating the effects of drought with four broad objectives as follows:

Objective 1. Avoid and reduce land degradation through sustainable land management (SLM)

This objective promotes the wider application and scaling of SLM interventions that improve productivity and maintain or improve flow of agro-ecosystem services that underpin food production and livelihoods. SLM is broadly defined by the UN 1992 Rio Earth Summit as "the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions." GEF will provide support to a wide range of SLM practices such as:

Agroecological intensification and diversification and other regenerative agriculture practices that rely on natural ecological processes to enhance yields and reduced agrochemical inputs for the benefit of the environment. Increasing species diversity in agricultural farms contributes to improved soil quality and increased crop yields, and improved flow of ecosystem services (Kremen, 2020).[374]

Climate-smart agriculture (CSA) is an approach for transforming and reorienting agricultural systems to support food security responding to climate change trends in

https://www.unccd.int/publications/land-degradation-neutrality-interventions-foster-gender-equality

Collantes V et al. 2018. Moving towards a twin-agenda: Gender equality and land degradation Neutrality.

Kremen C., 2020. Ecological intensification and diversification approaches to maintain biodiversity, ecosystem services and food production in a changing world. https://doi.org/10.1042/etls20190205

rainfall and temperature patterns, to food market disruptions, and to the need for avoiding GHG emissions and sequestering carbon in agricultural land use systems (Lipper et al., 2015).[375] CSA also works towards increasing the adaptive capacity and resilience of farmers and improves resource use efficiency in agricultural production systems.

Drought-smart land management (D-SLM) characterizes land-based interventions for drought mitigation (i.e., against drought impacts and vulnerability). Such D-SLM interventions improve the capacity of soil to accept, retain, release and transmit water and increase plant water use efficiency. They can do so by increasing the water supply where it is needed by living organisms (e.g. crop root systems) or by reducing water demand through drought-resistant crop varieties (UNCCD/Science-Policy Interface, 2019).[376]

GEF eligible investment in those SLM types above will focus on: (i) agro-ecological methods and approaches including conservation agriculture, agroforestry, and agro-silvo-pastoral practices; (ii) improving rangeland management and sustainable pastoralism, regulating livestock grazing pressure through sustainable intensification and rotational grazing systems, increasing diversity of animal and grass species, and managing fire disturbance; (iii) strengthening community-based natural resource management, including legitimate tenure rights recognition and safeguards; (iv) integrated watershed management, including wetlands where SLM interventions can improve hydrological functions and services for agro-ecosystem productivity; and (v) implementing integrated pest management approaches to improve soil fertility and water management.

Investing in SLM to avoid and reduce land degradation in the wider landscape is an essential and cost-effective way to deliver multiple global environmental benefits related to agro-ecosystem functions such as: a) biodiversity conservation by reducing the conversion of natural habitats and safeguarding agro-biodiversity; b) improved soil health and reduced soil erosion, pollution risks and degradation of water resources to ensure sustainable flow for consumptive uses; c) reduced emission of greenhouse gasses by improving vegetation cover and accumulation of soil organic matter; and d) increasing sustainability and resilience of agro-ecosystem services. Investing in SLM also improves yields, and helps maximizing outputs and diversifying sources of income and livelihoods thus creating socio-economic benefits, including for nutrition and health.

Objective 2. Reverse land degradation through restoration of production landscapes

This objective will support countries to (i) restore agro-ecosystem services in production landscapes, and (ii) avoiding forest loss and degradation and avoiding the reduction of trees and

https://www.nature.com/articles/nclimate2437

UNCCD/Science-Policy Interface (2019). Land Management and Drought Mitigation. Science-Policy Brief No: 6. September 2019. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany

vegetative cover in production landscapes.[377] An increased emphasis on restoration is warranted as an important element in the LDN response hierarchy and was one of the key recommendations of the 2018 GEF IEO evaluation of the LDFA.

Restoration under this objective will focus on strengthening the resilience of landscapes and creating future options to adjust and further optimize ecosystem goods and services as societal needs change or new challenges arise.[378] It is assisting the recovery of landscapes that have been degraded, damaged, destroyed, or modified to an extent that the land and/or agro-ecosystem cannot fulfil its ecological functions and/or fully deliver food production services. Agro-ecosystem restoration and bringing degraded agricultural lands back into production will create socio-economic benefits and improve livelihoods of IPLCs. At the same time, and in order to achieve LDN at the landscape level, it will be important to complement restoration activities with the sustainable management of forest, rangeland and wetland resources, reducing the risk of degradation and the loss of vegetative cover, ecosystem services and biodiversity..

Restoration activities under this objective may include activities appropriate to local socio-ecological conditions to improve vegetative cover and its functionality, assisted natural regeneration of woodlands, planting of community woodlots, the establishment of shelterbelts, agro-forestry and agro-silvo-pastoral models, practices to enhance soil and water conservation, erosion control, and ground water recharge. In addition, deforestation and land degradation will be addressed as part of landscape restoration approaches through comprehensive land-use planning and protection measures and will ultimately lead to a net gain in forest and vegetation cover and the improvement of agro-ecosystem services such as provisioning (e.g. food and fuel for livelihoods), regulating (e.g. reducing greenhouse gas emissions, erosion control) and supporting (soil protection and habitat for biodiversity). Sustainable land and forest management of agro-ecosystem resources and trees will be mainly promoted through community-based management approaches.

Objective 3. Address desertification, land degradation, and drought (DLDD) issues, particularly in drylands

DLDD issues are especially prominent and, in many ways, specific to drylands. Land degradation processes are aggravating the effects of droughts and vice-versa. Avoiding, reducing and reversing land degradation is therefore an important mitigation measure for the effects of drought and can be addressed within the mandate of the GEF to create GEBs.

This LDFA objective aims at bringing degraded land back into production and has a focus on improving food security and livelihoods in selected areas at subnational and local scale. It is thus more narrow and specific compared to the scope of the Ecosystem Restoration Integrated Program.

See Global Partnership of Forest and Landscape Restoration (GPFLR) principles: https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration

This objective will specifically support countries in dryland geographies to build resilience to mitigate the effects of droughts and to prevent the aggravating effects of land degradation through (i) comprehensive land-use planning taking drought risks into account; (ii) the use of drought databases and tools such as the UNCCD drought toolbox; and (iii) the implementation of drought-smart land management (D-SLM), including croplands, rangelands, dryland forests, and mixed land-uses. The focus of GEF investments is on the entire range of land uses in the production landscape aimed at creating GEBs and building resilience in production landscapes. Based on the specific context of projects and programs cropland management, dryland forest management, or rangeland restoration and management may be the focus of the interventions.

GEF interventions will support integrated and participatory land-use planning at all levels to influence land-use patterns at the appropriate scale (jurisdiction or landscape). In dryland areas, where droughts aggravate land degradation processes by reduced water availability, they should be addressed as a priority in land-use plans. Proactive drought risk management is a more efficient way to reduce drought impacts on communities, economies and the environment. Data and information and participatory approach involving all stakeholders are needed to develop land use plans, identify and assess droughts risks, and define mitigation measure to be integrated in land-use and water use plans, including monitoring systems. GEF investments may also support the implementation of relevant aspects of national drought plans, within GEF's mandate, and will be coordinated with initiatives supporting climate change adaptation.

Good, effective and participatory land and water governance will be promoted through the Land Degradation focal area programming as an important enabling environment for drought mitigation and the adoption and scaling up of D-SLM and its associated technologies. Such an environment requires, inter alia, effective institutions combined with the empowerment of women (one of the majority groups among rural land and water users) and legal security (land tenure, water rights).

Objective 3 also provides an entry point for potential LDFA regional programs to address DLDD issues, based on country interest and demand, and availability of regional set-aside funding. In this context, joint programming and synergy with adaptation projects funded by the LDCF and other donors will be encouraged.

Objective 4. Improve the enabling policy and institutional framework for LDN

Under this objective the GEF will support countries to (i) improve policy coherence and financing systems, (ii) further develop the institutional and regulatory framework and build capacity, and (iii) provide support to UNCCD enabling activities to help countries to fulfil planning and reporting obligations.

A key outcome under this objective will be to incorporate LDN into the existing national planning frameworks to meaningfully involve local governments, local communities, indigenous peoples, and women. Comprehensive and multi-sectoral land use planning will reduce pressures on natural resources from competing land uses and enable the large-scale application of good management practices. This will also facilitate synergies in the implementation of the MEAs and with programming of all other GEF focal areas at the national level. In this context, promoting good governance and the resolution of land tenure issues[379] that are obstacles to LDN objectives will be important considerations.

National policy frameworks can be made more coherent through cross-sectoral integration with a focus on harmonized sector policies and coordination between different institutions involved in various aspects of integrated landscape management. This may include harmonized government resource allocations within and among sectors, and/or at national and subnational levels of government, as well as assessments of the efficiency and effectiveness of those allocations in the context of the environmental management priorities.

In parallel, catalyzing and better targeting of national financing streams to mobilize domestic and private sector funding, and to address harmful subsidies in the agriculture sector are essential to improve financing systems towards instruments and mechanisms that provide incentives for reducing the pressures and competition between land use systems. Activities may also include targeted support for the re-orientation of private/public domestic financing through banks, credit unions, and microfinance that supports small and medium enterprises. Support for local incubators, associations, smallholders and small-scale food processing and marketing enterprises through special lending and extension systems will be considered.

Building capacity at all levels will be facilitated through provision of actionable knowledge and by making decision support tools widely available. Activities will include lessons learning, knowledge exchange, south-south cooperation within countries and regions, the development of innovation, monitoring and information systems on impacts, trade-offs, cost-benefit analyses, and identifying incremental synergies.

GEF support will include financing for UNCCD enabling activities to support the implementation of the UNCCD strategy in accordance with countries' obligations to the convention. Support will focus on reporting obligations and formulation of national strategies and plans in line with current and upcoming COP decisions and the UNCCD strategy.

[379] Application of FAO's Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security will be encouraged.

Contributions of Integrated Programs to Land Degradation Outcomes

Food Systems

This Integrated Program provides the opportunity for an integrated approach to inter alia addressing land degradation challenges in production landscapes. The focus of the program on sustainable, regenerative and nature positive food productions systems (for globally important food crops, commercial commodities, and livestock) is in line with LDFA objective 1, and will help countries to implement and scale-out SLM and regenerative farming approaches to increase the prospects for food security for smallholders and communities avoiding deforestation from commercial commodities. It will link smallholder producers and pastoralists, and small-scale food and agro-processing enterprises to markets and sustainable supply chains, assist with crop and systems resilience, and create stable revenues with agricultural commodities. The Program will also rehabilitate and restore degraded lands thereby providing ecosystem benefits in production landscapes. It will target countries seeking to incorporate nature-positive production systems into their national land degradation strategies and targets, while also creating opportunities to catalyze systemic change and deliver benefits at national, subnational and global scales. In addressing the challenges of the enabling environment, the Program will pursue policy changes to shift financial flows away from perverse subsidies and nature-degrading investments toward nature positive investments such as payment for environmental services (PES).

Ecosystem Restoration

This Integrated Program will generate multiple environmental benefits, create jobs and secure livelihoods through the restoration of degraded ecosystems globally. It will make a significant contribution to achieving LDN and enhance efforts towards restoration under the LDFA with a broader scope on multiple benefits and at larger scale. The integrated program will link countries in regional clusters for upscaling their project-based efforts through accessing platforms, knowledge products, and best practices. For example, the Program may include GGWI countries wishing to invest in restoration at scale through an integrated and programmatic approach working across multiple sectors and crosscutting themes. Connecting LDFA project-based restoration activities with the large-scale ecosystem restoration program will contribute to a coherent approach and a common message under the UN Decade for Ecosystem Restoration.

Amazon, Congo, and Critical Forest Biomes

The Integrated Program conserves globally important forest biomes through a Nature-based Solutions approach for climate, biodiversity and people. The Program strategy aims to address land degradation, specifically deforestation and forest degradation in remaining primary tropical and subtropical forests by stopping agricultural encroachment and the logging frontier by promoting alternatives in these landscapes to create jobs and respond to the demand for food and livelihoods. These strategy calls for the engagement of multiple stakeholders at global, regional,

national, and local levels accompanied by promoting good governance, enhanced policies and financial frameworks, and management information systems to reconcile social, economic, and environmental objectives. The program is therefore an important contribution to achieving LDN globally and in line with the LDFA goal to avoid further land degradation and forest degradation.

Net-zero Accelerator

The Integrated Program will support Nature-based Solutions to help countries meet the net zero decarbonization goal by 2050. With a high ambition to reduce the GHG emissions and increase the carbon stocks in forests and productive landscapes, this Program will encourage investments at scale such as by reorienting policies, subsidies and public investments, increasing awareness of the value of nature, mainstreaming Nature-based Solutions in national strategies and improving the enabling conditions that facilitate the participation of the private sector. Complementary to LDFA efforts and with an integrated whole-of-economy approach, this program will support a wide range of SLM activities and restore degraded lands in productive landscapes and protect protects. The approach enabling a more favorable policy framework and business environment for SLM will support the objectives of the LDFA strategy. In the agriculture sector, important outputs will include improved soil carbon, soil health and soil fertility under grasslands and croplands; integrated systems, including water management, improved nutrient use and manure management towards sustainable and resilient agricultural systems, and improved livestock management systems.

Blue and Green Islands

Degradation of ecosystems tied to key economic sectors is evident in almost all landscapes in the 3 SIDS sub-regions (the Caribbean, the Pacific, and the Atlantic, Indian Ocean and South China Sea (AIS). Through the SIDS-Nature-based Solutions program, the tourism, urban and food sectors (agriculture and fisheries) will be targeted. The program will seek to address integrated upstream challenges linked to ecosystem degradation of agricultural lands and forests as well as implement downstream interventions to maintain, improve and restore the flow of agro-ecosystem services in support of food production and livelihoods. The program will therefore contribute to achieving the LDN targets in SIDS and it directly aligns the Land Degradation focal area objectives to avoid, reduce and reverse land degradation.

Role of the private sector in supporting Land Degradation Outcomes

The LDFA strategy will focus on three areas for private sector engagement: (i) farmer's and small-scale agribusiness enterprises access to credit, (ii) technical assistance and capacity building, and (iii) whole value chains for agricultural commodities (with a link to food systems).

Access to finance and markets for smallholders and small businesses in most land sectors is a big challenge. GEF will therefore promote engagement with Micro, Small, and Medium

Enterprises (MSMEs) and Microfinance institutions (MFIs) in LDFA projects and programs to expand services to underserved MSMEs and small holder farmers for sustainable agriculture and restorative practices. MFIs are the primary providers of private capital to MSMEs, farmers and low-income populations in many developing regions. At the same time, MFIs are highly exposed to loan default because their low-income clients are directly impacted by climate change and environmental degradation. As a result, most MFIs are highly motivated to reduce their exposure to environmental risk by developing and offering lending products that account for climate and environmental risks. Civil society, with close connections to small holders and MSMEs, can facilitate new public/private partnerships and channels for investment.

In this context, the LDN Fund is an innovative private sector fund, which is invest in profit-generating sustainable land management and restoration projects worldwide. The GEF Land Degradation focal area will continue to cooperate with the LDN Fund through the LDN Fund Technical Assistance Facility[380] to bring public and private funding to transformative projects.

Private sector engagement will also be explored for technical assistance and capacity building for farmers through farmer field schools and eco-models.

Value chain development for agricultural commodities will be promoted in cooperation with the Food Systems Integrated Program and will expand in LDFA projects and programs beyond globally important commodities to nationally and locally important commodities and products such as honey, olives, grapes, fruits, nuts, etc. and various species of livestock.

[380] https://www.idhsustainabletrade.com/landscapes/ldn-taf/

International Waters Focal Area

Global Context of International Waters

The health of our shared freshwater and marine ecosystems underpins social and economic aspirations at local, national and regional levels. The sustainability of these shared ecosystems is essential to support biodiversity and reach global goals far beyond SDG 6, 14 and

Hence, good governance of our shared ocean, river basins and their wider catchments is a foundation for building resilient systems that benefit the global environment and people. Therefore, we need to ensure that our actions catalyze strong resilient transboundary marine and freshwater rivers, lakes and aquifers, that will contribute to long-term human well-being and ability to recover faster from disasters, climate change impacts, and economic activities.[381]

Many ecosystems have benefited the slow-down in human activities due to the COVID Pandemic[382] and experience improved ecosystem functioning. However, this is not a uniform development. Within the sectors of freshwater and marine fisheries, some fisheries and geographies have seen positive effects, whereas others have experienced increased pressures caused by the current Pandemic.[383,384,385] The current pandemic has made it crystal clear that water is an essential resource that will enhance our ability to respond, recover and rebuild a post-COVID-19 world and provides an opportunity for us to rethink and reprioritize our interests, ambitions and resources.[386]

Healthy fisheries depend on smooth coordination between local resource users, policy makers and commodity supply and value chains. With only 6.2 % of assessed fish stocks being "underfished" the world is at a point where fish stocks require active management to maintain fishing activity at a sustainable level in the 59.6% of stocked fished at the maximally sustainably level and to promote the recovery of the 34.2% of stocks fished at biologically unsustainable levels. Sustainable fisheries management and aquaculture are vital to the 3.3 billion people, for which fish provide up to 20% of the animal protein of their daily diet. Wild capture freshwater

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Marian J. Neal (2020) COVID-19 and water resources management: reframing our priorities as a water sector, Water International, 45:5, 435-440, DOI:10.1080/02508060.2020.1773648

Rutz, C., Loretto, MC., Bates, A.E. *et al.* COVID-19 lockdown allows researchers to quantify the effects of human activity on wildlife. *Nat Ecol Evol 4*, 1156–1159 (2020). https://doi.org/10.1038/s41559-020-1237-z

COVID-19 pandemic impacts -on global inland fisheries Gretchen L. Stokes, Abigail J. Lynch, Benjamin S. Lowe, Simon Funge-Smith, John Valbo Jørgensen, Samuel J. Smidt Proceedings of the National Academy of Sciences Nov 2020, 117 (47) 29419-29421; DOI: 10.1073/pnas.2014016117

Nathan J. Bennett, Elena M. Finkbeiner, Natalie C. Ban, Dyhia Belhabib, Stacy D. Jupiter, John N. Kittinger, Sangeeta Mangubhai, Joeri Scholtens, David Gill & Patrick Christie (2020) The COVID-19 Pandemic, Small-Scale Fisheries and Coastal Fishing Communities, Coastal Management, 48:4, 336-347, DOI: 1080/08920753.2020.1766937

Bianca Haas, Ruth Davis, Harriet Harden-Davies and Quentin Hanich, 2020. Regional fisheries management: Virtual decision making in a pandemic - Information Paper for 17th meeting of the Western Central Pacific Fisheries Commission.

Marian J. Neal (2020) COVID-19 and water resources management: reframing our priorities as a water sector, Water International, 45:5, 435-440, DOI:10.1080/02508060.2020.1773648

fish account for 13% of the world's annual catch, totaling 12 million tonnes each year and are estimated to be worth over US$38 billion per year.[387] Further, improved management will be pivotal to efforts to restore and conserve fisheries habitats, such as river basins, lakes, deltas, wetlands, seagrass, mangroves and reefs, which are critical nursery and breeding habitats for many fish and crustacean species. Countries, therefore, need to step up national and regional actions safeguarding their marine and freshwater ecosystems to ensure continued growth, prosperity and unlock new economic opportunities. Simultaneous efforts on advancing sustainable aquaculture production and supply chains needs to be sped up. Wild caught stocks are under pressure and if marine and freshwater based protein is to support population growth and local economic opportunities, while allowing capture fisheries to recover, aquaculture holds a great potential that needs to be explored.

Run-off from agriculture, wastewater from industry and municipal sources leads to dead-zones in the worlds freshwater lakes, coastal areas and the shared ocean. Hypoxic coastal and ocean areas are more fragile and hence less likely to be able to cope with climate induced stress as well as other impacts from human activities. The COVID-19 crisis has added yet another strong incentive for treating wastewater, namely, to avoid re-infection from poorly treated effluents.[388] It is imperative that wastewater treatment is increased from the current ~20% if we are to ensure that rivers, lakes, coastal zones and ocean ecosystems can support environmental, economic and human needs.

During this pandemic, single-use plastic consumption has surged, which may lead to negative impacts on the biodiversity in the ocean and connected freshwater riverine ecosystems.[389,390,391] Tackling plastic pollution requires incentivizing a shift towards a circular economy approach through interventions across the entire plastic value chain including material engineering; product and process design; consumer use and behavior; and collection systems and recycling.[392,393] At a global scale, such a system change is predicted to stimulate cost savings for governments and private sector, support job creation, cut down on plastic ocean pollution and reducing projected plastic-related greenhouse gas and hazardous chemical emissions.[394,395]

WWF 2021: The World's Forgotten Fishes. WWF International pp1-48

Tran et al 2021: SARS-CoV-2 coronavirus in water and wastewater: A critical review about presence and concern.

https://www.economist.com/international/2020/06/22/covid-19-has-led-to-a-pandemic-of-plastic-pollution

https://www.forbes.com/sites/lauratenenbaum/2020/04/25/plastic-waste-during-the-time-of-covid-19/?sh=ed6e7e67e484

https://www.weforum.org/agenda/2020/05/plastic-pollution-waste-pandemic-covid19-coronavirus-recycling-sustainability/

[392]https://www.newplasticseconomy.org/#:~:text=In%20a%20new%20plastics%20economy%2C%20plastic%20never%20becomes%20waste%20or%20pollution.&text=Eliminate%20all%20problematic%20and%20unnecessary,reusable%2C%20recyclable%2C%20or%20compostable.

https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings

https://www.thegef.org/sites/default/files/publications/PLASTICS%20for%20posting.pdf

https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings

Habitat destruction of marine and coastal ecosystems from coastal development, including tourism, commercial and residential construction, roadways and other infrastructure, including aquaculture, are also having a significant impact on marine and coastal ecosystems, including mangroves, seagrass, beaches and coral reefs. These ecosystems have tremendous biodiversity and highly valuable ecosystem services, including carbon sequestration, shoreline storm protection and fisheries nursery areas. Therefore, it is important to inform political priority setting through Marine Spatial Plans and utilize these plans to operationalize political priorities.

The state of the ocean and its importance for enabling a sustainable development trajectory, has been enjoying an increased attention globally over the last years and most recently by the process spearheaded by the 14 heads of state that forms the High-Level Panel for a Sustainable Ocean Economy.[396] The ocean ecosystem is facing unparalleled stress from climate change, acidification, habitat loss, pollution, fishing, shipping, and a suite of land-based activities. The world's Large Marine Ecosystems alone represent USD 12 trillion annually in market and nonmarket ecosystem goods and services.[397] However, unless we change our management strategy in and around the ocean, it will not be able to continue to deliver biodiversity and food security, climate regulation, shoreline storm protection, carbon sequestration, recreational opportunities, economic opportunities and cultural cohesion for billions of people.

A whole 64% of the world's ocean surface is designated as Areas Beyond National Jurisdiction, which has few governance mechanisms.[398] Due to the vast area the ABNJ covers, the lack of international agreements and data to support real-time management and enforcement is indirectly supporting a long range of harmful activities that is continuing to impact the integrity of the ecosystem and the biodiversity within it. Some of the harmful activities include intensified fishing for highly migratory species, bottom trawling on seamounts, maritime transport, dumping and other stressors calling for the further consideration of the effectiveness of existing legal instruments and management systems. Extending the successful science-based LME approach into the ABNJ, may be a solution that will make it easier for countries to realize the importance of the ABNJ, while providing tools to improve resource management.[399] The most recent negotiations on an agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond

Ocean Panel, 2020: Transformations for a Sustainable Ocean Economy A Vision for Protection, Production and Prosperity

Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., et al. (1997). The value of the world's ecosystem services and natural capital. Nature, 387(15 May 1997), 253-260.

E.M. De Santo,*,Asgeirs dottir, A. Barros-Platiau, F. Biermann, J. Dryzeke,L.R. Gonçalves, R.E. Kimd, E. Mendenhall, R. Mitchell, E. Nymani, M. Scobie, K. Sunk,R. Tiller, D.G. Webster, O. Young, 2019: Protecting biodiversity in areas beyond national jurisdiction: An earth system governance perspective. Earth Observation Systems.

IOC-UNESCO and UNEP (2016). Open Ocean: Status and Trends, Summary for Policy Makers. United Nations Environment Programme (UNEP), Nairobi.

national jurisdiction, may assist in supporting priority setting, but most importantly raise political capacity to realize the values that the ABNJ is representing for the global community as well as national economies.

Freshwater ecosystems and especially transboundary river basins, lakes and aquifers has historically been and continues to be the pivotal point for development, the rise and fall of cultures, economic activities, societal and cultural cohesion. Predictability of available water resources and resilience to absorb climate change induced impacts diminish as water demand increases due to population growth, shifting diets and economic activities. It is estimated that current management approaches to freshwater in developing countries may have a much stronger effect on water stress than climate change, which may lead to more than 50% of the world's population living in regions with severe water stress within the next 30 years.[400]

Water is a precondition for human and ecosystem survival, underpins many economic activities and is fundamental to achieving most of the SDGs. Increasing scarcity in many regions of the world along with pollution threatens human health and economic development. International and transboundary cooperation over shared water resources provides a unique opportunity to inform political decision making and investment priority setting through a participatory approach involving both public and private sectors. Such regional frameworks will support a broader and longer-term vision on transboundary freshwater ecosystems, which in turn will be able to continue to provide essential ecosystem services. Building trust and agreeing on cooperative frameworks are particularly important, in fragile economies impacted by different forms of conflict, to keep communication open to support water sharing agreements, sectoral prioritization, and avoid deepening tensions between countries.

Healthy transboundary marine and freshwater ecosystems are prioritized in many INDCs and NBSAPs and will be essential in supporting delivering towards the CBD, UNFCCC and UNCCD targets. While the GEF is not the financial mechanism nor does it have any obligations to international conventions in relation to the transboundary mandate of International Waters, the GEF International Waters focal area investments will support actions to deliver against the UN Water Courses Convention and the UNECE Water Convention, the UN Convention on the Law of the Sea, the Ramsar Convention on Wetlands and to the CBD and the post-2020 Global Biodiversity Framework as well as the ongoing developments on a potential agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of Areas Beyond National Jurisdiction. Further, GEF investments will also assist countries in delivering towards a number of the SDGs, such as SDG 6 and 14. Finally, IWLEARN, the GEF funded cross-agency and multi-actor platform of knowledge

C. Adam Schlosser, Kenneth Strzepek, Xiang Gao, Charles Fant, Élodie Blanc, Sergey Paltsev, Henry Jacoby, John Reilly, Arthur Gueneau, 2014: The future of global water stress: An integrated assessment, in Earths Future, Volume 2, Issue 8, pp 341-361

exchange and capacity building, supports facilitating partnerships between a range of actors to stimulate conversation and capacity between, and beyond, GEF funded activities.

GEF-8 International Waters Focal Area Strategy and Associated Programming

The integrity of transboundary water ecosystems can only be achieved through cooperation across political borders and between sectors. The GEF through its International Waters focal area is supporting cooperation in shared marine and freshwater ecosystems, to achieve long term benefits. This will be achieved through the following three key objectives in GEF-8 International Waters strategy: 1) accelerate joint action to support Blue Economic Development; 2) advance management in the Areas Beyond National Jurisdiction (ABNJ), and 3) catalyze Environmental and Transboundary Water Security.

These objectives will be realized through investments to support regional priority setting and fact finding (TDAs) and national implementation of the regional ministerial endorsed cooperative investment frameworks (e.g. SAPs). Moreover, select global investments will be considered on a case by case basis, some potentially as programmatic approaches, if they advance the objectives of the International Waters focal area. The TDA/SAP process, as first described in the 1995 GEF Operational Strategy, consists of a Transboundary Diagnostic Analysis in which common fact finding, and scientific analysis identifies the shared threats in a given transboundary ecosystem. This process leads to the formulation of the Strategic Action Program, which is a politically endorsed document, that identifies the interventions needed to address the agreed threats in the region.

This approach recognizes the important role women play in generating and sustaining change. Women play a prominent role in the productive use and management of water and marine resources. Therefore, it is imperative that women are properly represented in the formulation and implementation of legal, regulatory and institutional frameworks. This has been the operating principle for the TDA/SAP process in previous replenishments and this will be continued in GEF-8. Further, since women in many countries support knowledge management and undertake training and teaching of the next generation, it is important to ensure women have access to up-to-date knowledge and training products, if we are to ensure that women and men together can set targets and work towards implementing these for a prosperous future for all. Therefore, gender issues and mainstreaming of gender considerations into all processes and investments will be prioritized.

Objective 1. Accelerate joint action to support Blue Economic Development

Oceans are fundamental to life on earth covering 71% of its surface and providing livelihoods, food security, climate regulation, essential habitats, shoreline storm protection, carbon sequestration, recreational opportunities, social and cultural cohesion. In order to support a multisectoral cooperative approach, the GEF will continue its successful application of

utilizing the Large Marine Ecosystem as the organizing principle for GEF investments. This will ensure that investments are not happening in a vacuum, but are coordinated with land-based activities, and between multiple sectors.

The GEF will assist countries in identifying sustainable public and private investments to accelerate joint action in support of Blue Economies. This will be done through funding of collective management of coastal and marine systems and implementation of the full range of integrated ocean policies, legal and institutional reforms. The GEF will catalyze regional processes, such as the Transboundary Diagnostic Analysis/Strategic Action Program (TDA/SAP) in order to build trust and set investment priorities, securing the health and resilience of the Large Marine Ecosystems. In GEF-8 the International Waters strategy will assist countries in addressing a suite of stressors such as overfishing, land-based sources of pollution, including acoustic pollution and biofouling of vessels, loss and damage of key coastal and marine ecosystem. The critical issue of land-based pollution will be addressed through the Clean and Healthy Ocean Integrated Program, where curbing of virus, bacteria, micro plastics and pollution from municipal wastewater and agricultural run-off will be in focus. Under the Objective 1, investments will be strengthening nations Blue Economy opportunities, through two areas of strategic action: 1) sustaining healthy blue ecosystems, and 2) advancing sustainable fisheries management.

Sustaining healthy blue ecosystems

The overall vision is to bring ocean ecosystems under balanced use, harboring an abundance of fauna and flora, and with resilient “blue forest ecosystems” (deltas, mangrove forests, seagrass meadows, saltwater marshes and corals). This vision will enable coastal ecosystems to absorb impacts from a changing climate and other anthropogenic and natural shocks, while being the pivotal centerpiece that provides cultural identity, decent livelihoods and social structures to local communities, nations and regions. The coastal and marine habitats can be restored through policy, improved management strategies, and more inclusive engagement of local users of the marine resources and deployment of different area-based management tools, including Marine Protected Areas (MPAs).

Building capacity to manage marine ecosystems will be critical. This can be achieved through the sharing of knowledge across regions to foster innovation and scaling up of successes. Building capacity and mainstreaming climate change considerations will be essential to local, national and regional marine ecosystem management actions, including advancement of cost effective and strategic coral reef protection, and the effective use of MPAs and other area-based effective conservation measure resources.

Marine spatial planning (MSP) is a critical tool to achieve Ecosystem Based Management via an integrated planning framework that moves away from sectoral management to address multiple objectives related to achieving economic and ecological sustainability and the need to

reduce resource conflicts in marine environments. These plans identify what spaces of the ocean are appropriate for different uses and activities, to advance economic and social development. MSP informs political decision making and ultimately support the overarching goal of having 100% of the ocean under sustainable management. Moreover, MSP presents the cornerstone of the national blue economy plans as they illustrate the socio-economic opportunities, constraints and linkages to ocean resources and inform political decision making. Blue economy plans will discuss cost of tradeoffs, outline the national EEZ and identify areas for economic development, protection as well lay out specific services that are central to local and national social and cultural cohesion.

Under this objective, we will support regional investments that:

Lead to cooperative legal and institutional frameworks built on TDAs/SAPs approach, towards addressing the multiple anthropogenic pressures, including, but not limited to climate, pollution and improved management related effects in the LMEs;

Contribute to the implementation of Strategic Action Programmes to support a healthy blue economic development by deployment of tools such as MSP, MPA, NBS and PES;

Foster collaboration among LMEs, Regional Seas Conventions and Regional Fisheries Management Organizations (RFMOs) to protect and restore these key habitats;

Create multi-state cooperation frameworks in transboundary deltas including an integrated source-to-sea approach;

Develop and update Marine Spatial Plans and Blue Economy/Sustainable Ocean Plans to inform policy decisions in the EEZ;

Establish and support marine protected areas of national and international importance, if identified in SAPs, and other area-based conservation measures in key biodiversity hotspots and coastal habitats through regional investments under LME SAPs;

Restore degraded key marine and coastal habitats through deployment of Nature-based Solutions and Payment for Ecosystems Services demonstrations;

Establish and support existing marine protected areas of national and international importance in key biodiversity hotspots and coastal habitats, as identified in LME SAPs;

Mainstream marine area-based management and spatial tools in regional entities, to delivering towards global targets;

Create multi-state cooperation frameworks in transboundary deltas including an integrated source-to-sea approach; and

Stimulate private sector engagement, through relevant industry sectoral roundtables and industry groups.

Advancing sustainable fisheries management.

Fish is an important source of protein for more than 3 billion of people. But according to FAO, global fish stocks are under tremendous pressure, which underscores the importance of moving to improved management of fisheries, not only the wild caught marine fisheries, but also wild freshwater species as well as fish produced via aquaculture. The sustainability of marine fisheries, which among other actions will mean curbing Illegal Unreported Unregulated (IUU) fisheries practices, and implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines) requires improved governance mechanisms to restore and conserve critical habitats to fisheries, coupled with deployment of a range of management tools and actions at all levels from small-scale, near-shore fisheries to large commercial fleets. The ratification and implementation of the Port State Measurement Agreement may be one of the global tools to support a shift towards more sustainably managed fisheries locally, nationally, regionally and globally.

Actions that enhance fish stocks to sustainable stock sizes, will require a major reduction in fishing efforts. To secure access to essential marine proteins for local and global markets, a substantial shift in management of wild stocks and aquaculture approaches is needed. Aquaculture will play a key role in meeting future food security demands and simultaneous relieve some of the pressure that wild caught stocks are experiencing. The challenge is to position nature at the core of the sector's delivery of jobs, affordable and low carbon footprint fish protein, and human health improvements, while minimizing impacts of wild capture fisheries.

Therefore, under this objective the GEF will support:

Formulation of (including updates to) Transboundary Diagnostic Analysis and Strategic Action Programmes.

Policy and regulatory reforms to end IUU, overfishing, limit by-catch and sustainably manage marine capture fisheries,

Advancement of adoption and implementation of the Port State Measurement Agreement

Strengthening and creating policy frameworks, including working with countries to eliminate harmful incentive structures,

Implementation of market mechanisms to support sustainable fisheries value chains,

Strengthening and creating policy frameworks, including working with countries to eliminate harmful incentive structures,

Standard setting for sustainable aquaculture to regulate fishmeal supply, enhance marine ecosystem health, livelihoods and improving food and nutrition security,

Advancement of spatial zoning instruments (marine spatial plans) to define the boundaries over which aquaculture sustainability should be assessed,

Development of sustainability indicators and monitoring systems in respect to the local ecological carrying capacities, taking into account observed and projected impacts of climate change, biodiversity loss, natural disasters, overfishing and pollution

Reliable data to inform policy and decision making, to inform ccapacity building, policy reform and piloting of innovation and best available tech,

De-risking innovation through incremental finance and piloting innovative technologies

Objective 2 Advance management in the Areas Beyond National Jurisdiction (ABNJ)

The Areas Beyond National Jurisdiction cover 64% of the ocean or 40% of the world's surface. The ABNJ is facing several threats, such as over-fishing of some iconic pelagic migratory species, ocean energy facilities, bottom trawling on seamounts, and pollution. There is an urgent need to support international agreements that will make it easier to manage this vast area of the planet, in a way that will ensure that resources are utilized in a sustainable manner. One of the central pillars to increase local, national, regional and global management capacity will access to knowledge and its proper use. Management of the "unknown" is nearly impossible, hence the need for data (potentially obtained through combining satellite data with vessel tracking data) and information is crucial in order to enable local authorities to take proper action. With regards to IUU fishing, these tools can support monitoring, control and enforcement through existing Regional Seas and IMO agreements, Regional Fisheries Management Organization's processes and implementation of the Port State Measurement Agreement (PSMA) fisheries management of catches from the open ocean and port's ability to apply and enforce the port state measurement agreement. Further, the ongoing negotiations on an agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of Areas Beyond National Jurisdiction have touched on the need to enhance national capacity and accession.

Ultimately, raising awareness of the ABNJ and the potential value that the ABNJ is representing for the global community as well as national economies, will be essential in a move towards improved management of the shared resources that the ABNJ represents.

Under objective 2 the GEF will support actions that:

Improve access to data and information to improve capacity to implement and enforce PSMA and thereby curb IUU.

Support national ratification, implementation and adoption of the Port State Management Agreement

Support regional/global efforts on Monitoring, Control and Surveillance of the ABNJ

Coordinate science-based management of ABNJ by extending LMEs management structures.

Advance global buy-in of industry standards and food safety protocols, as key drivers of ocean value chains

Replicate best practices and lessons learned from appropriate regional and sectoral organizations

Objective 3: Enhance water security in freshwater ecosystems

Water is a prerequisite for human, ecosystems survival and directly underpin economic sectoral activities. Transboundary freshwater ecosystems such as iconic river basins, lakes and aquifers are pivotal for development, the rise and fall of cultures, economic activities, and societal and cultural cohesion. Increasing issues related to availability of the needed quantity and quality of water in many regions of the world threatens human prosperity and economic development. Particularly important in this context is the ability to set up governance structures that jointly manage surface and groundwater resources. With a changing climate and poorly managed surface water bodies, communities and countries rely on groundwater extraction to ensure food, water, and ecosystem security.

Unfortunately, due to lack of data and knowledge of the connectivity between the water systems, the “hidden” groundwater resources are often thought of as “just there” or “ an “infinite resource”, which complicates management or in worst case scenarios will lead to deepening of the resource constraints already experienced. As indicated, access to data is a prerequisite for informing management and political decision making, especially for aquifer resources. Therefore, combining satellite information with management practices of water resources can lead to transformative changes in the way the shared water resources are managed while maximizing outputs simultaneously.

Security of water is essential for cities and towns, agricultural production, energy provision and delivery of a myriad of ecosystem services. Sudden water fluctuations, such as floods and droughts, increase the risk for destabilization of regions. Deploying a water stewardship approach, will ensure healthy transboundary water ecosystems, not only supporting sub-basins and local water needs, but supporting adequate water for provision of essential societal services. Traditional water infrastructure investments have been focusing on grey infrastructure, which is still prevailing in many countries and lending portfolios. However, due to impacts from a changing climate combined with other local, national and regional human induced stress, Nature-based Solutions coupled with infrastructure investments will be more sustainable and durable solutions.

Shared freshwater resources comprise a special case for cooperation with large potential spillover and global impacts. Transboundary river basins cover about 50% of the earth’s land

surface, therefore cooperation is essential to support water, food & non-food agricultural commodities, energy, and ecosystem security. Strengthened governance of transboundary water systems to manage freshwater connectivity across borders need to be aligned with multi-sectoral and stakeholder-based upstream basin planning. Transboundary priority setting and associated Strategic Action Programmes are vital in the process of identifying key issues that affect national water related stress and how to deal with these stressors through actions in multiple countries at the same time. However, ensuring transboundary environmental and water security starts by strengthening management capacity at the most local level, which among others include land degradation management strategies, climate change impacts, adaptation and generally increasing the land-based activities.

Therefore, under this objective, the GEF will support:

Formulation of, and updates to, Transboundary Diagnostic Analysis and Strategic Action Programmes.

Implementation of SAP priorities through regional and national actions.

Policy legal reforms and improved management strategies to address loss of connectivity and freshwater biodiversity and to support sustainably management of freshwater fisheries (including addressing IUU fishing) and aquaculture

National reform of policies, strategies and regulations in accordance with regional agreements and MEA commitments

Improved policy formulation processes, IWRM implementation and conjunctive management of surface and groundwater resources

Build capacity to gather and synthesize scientific, local and people science and mainstream into decision making processes

Establishment of flood and drought early warning systems and disaster risk management plans

Nature-based Solutions to improve water quality, freshwater ecosystem health, including wetlands and curb floods, droughts, climate change impacts, river/lake shoreline deterioration and to further aquifer recharge

Build capacity to gather and synthesize scientific, local and people science and mainstream into decision making processes

Ensure the inclusion of the ecosystem dimension into the water, energy, food nexus, to further environmental and water security

Testing Paying for Ecosystems Services in transboundary contexts and between ecosystems.

Supply chain approaches for increased water efficiency and reduction of ecosystems pressures,

Increase water efficiency, reuse, and reduce point and non-point sources of pollution addressing both primary and emerging pollutants, along the source-to-sea continuum

De-risking innovation through incremental finance and piloting innovative technologies

Support fragile and/or conflict affected countries, via a country-based pilot to fully engage in the transboundary process

Contributions of Integrated Programs to International Waters Outcomes

Shared freshwater and marine ecosystems weave through the different focal areas of the GEF and the Integrated Programs proposed for the GEF-8 Strategy. There will be multiple entry points for obtaining contributions from the IPs to the International Waters focal area, as well as vice versa. Whether it is related to Food Systems Integrated Program, Ecosystem Restoration Integrated Program, Sustainable Cities Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Circular Solutions to Plastic Pollution Integrated Program, Blue and Green Islands Integrated Program, Clean and Healthy Ocean Integrated Program, and Elimination of Hazardous Chemicals from Supply Chains Integrated Program, there is a myriad of synergies and contributions that can and will be delivered towards the overall goals of the GEF-8 replenishment. This is indeed important, but more important is the fact the combinations of IPs with Focal Area investment strategies will further the opportunities for countries and people to curb environmental stress and expand the opportunities for a decent and healthy future.

Role of the private sector in supporting International Waters Outcomes

The engagement of both public and private sectors will be essential towards delivering sustainable, tangible results in transboundary marine and freshwater ecosystems. Therefore, the GEF International Waters Focal area will stimulate private sector engagement along the different supply chains to reduce impacts on the freshwater and marine ecosystem environments. These could entail working with large-scale commercial fishing fleets, development of marine spatial plans to identify investment opportunities for both private and public sector, advance private sector engagement to increase water, food, energy and environmental security, such as through multi-stakeholder platforms, industry roundtables and interest group and increase water efficiency, reuse, and reduce point and non-point sources of pollution addressing both primary and emerging pollutants, along the source to sea continuum. In short, the IW GEF-8 strategy will be able to support implementation of the GEFs private sector strategy. Moreover, through private sector engagement, the International Waters focal area will be de-risking innovative investments within the freshwater and marine sectors, through utilizing the advances that has been undertaken in the formulation of TDA/SAPs. This will be essential in de-risking investments, but also provide an essential cost-saving factor which will make such investments more viable and durable in the long-run.

Chemicals and Waste Focal Area

Global Context of Chemicals and Waste

The GEF's mandate in the management of chemicals and wastes is derived from its role in the financial mechanism of the Stockholm Convention on Persistent Organic Pollutants, as defined by Articles 13 and 14,[401] and from the Minamata Convention on Mercury as defined by Article 13.[402] The chemicals, and topics covered by the focal area are dynamic, as the Stockholm adds chemicals to its annexes on a regular basis and the Minamata Convention has its own process for amending its annexes to include more sectors/products or advance phase out dates. The Stockholm Convention provides guidance on programming priorities to the GEF based on findings of the quadrennial reviews of the GEF and a needs assessment for the Convention. The Minamata Convention has so far provided initial guidance at the first COP that sets priorities for the Convention. In addition, in accordance with Article 9 (b) of the Instrument for the Establishment of the Restructured Global Environment Facility, 2019,[403] the GEF provides funding to support the implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer[404] and supports certain areas under the Strategic Approach to International Chemicals Management (SAICM) that require global action.

Economic Scope of the Global Chemicals Industry

The UNEP Global Chemicals Outlook II (GCO II) 2019,[405] estimates that the global chemicals industry has a value of $5 trillion per year and is projected to double in size by 2030. The growth will occur primarily in the developing countries which already accounts for approximately 61% of the chemicals industry by GDP according to an industry report.[406] This report also confirms the UNEP GCO II data on the size of the industry.

The economic contribution of the chemicals sector is equivalent to seven percent of the world's GDP that year (roughly equivalent to the combined GDP of India, Brazil and Mexico), while its employment contribution was as large as the population of Mexico. The report further shows that Asia Pacific has the largest chemical industry by GDP and is twice as large as the next largest region, which is Europe. North America, Africa and the Middle East and Latin America follow.

Stockholm Convention on Persistent Organic Pollutants

Minamata Convention on Mercury

Instrument for the Establishment of the Restructured Global Environment Facility, 2019

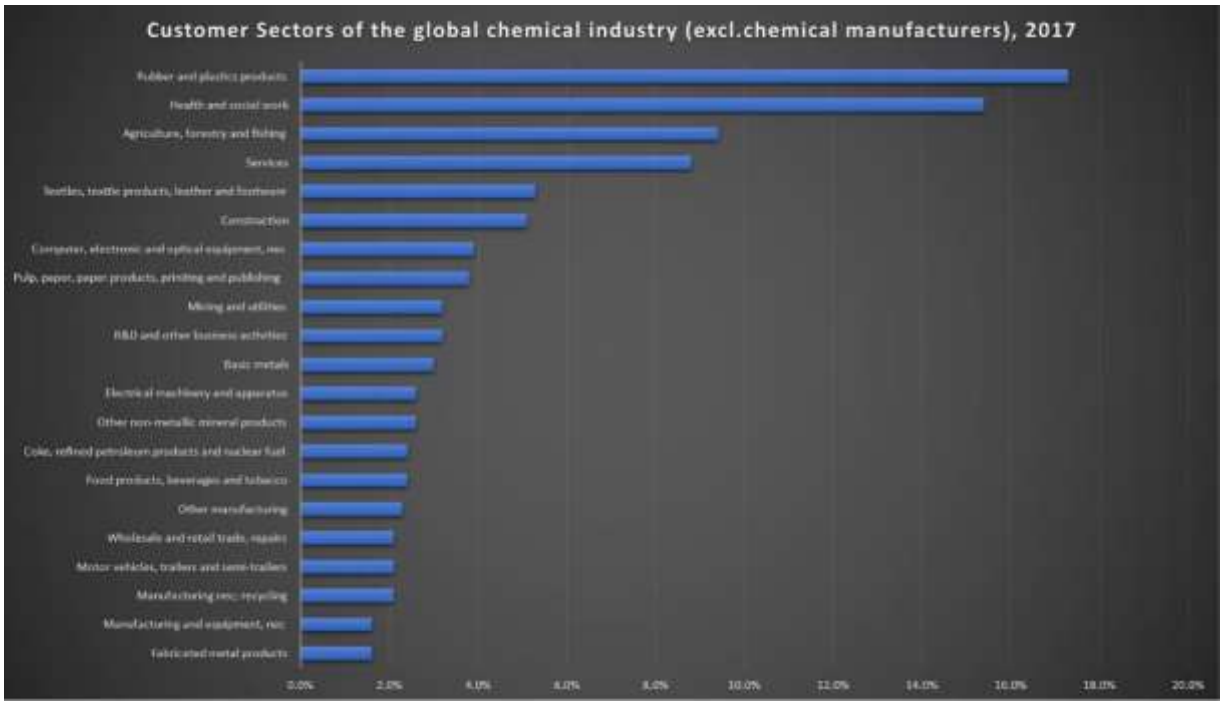
In eligible countries with economies in transition

Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development

The Global Chemical Industry: Catalyzing Growth and Addressing Our World's Sustainability Challenges, Oxford Economics, 2019

Most chemicals, when used responsibly, are beneficial for human development and are used in a wide range of sectors as illustrated below in figure 7.

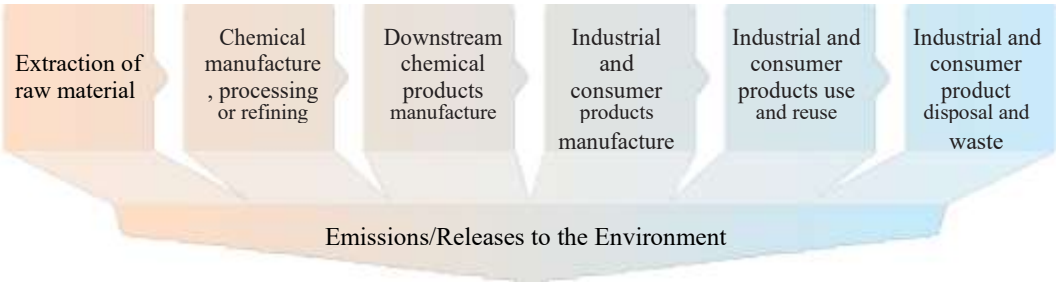
Figure 7: Customer Sector of the Global Chemical Industry[407]



Impact of chemicals on human and ecosystem health:

Throughout the supply chain of the chemicals industry there are emissions and releases to the environment as seen in Figure 8.

Figure 8. The supply chain of the chemical industry, with emissions/releases to the environment[408]



The Global Chemical Industry: Catalyzing Growth and Addressing Our World's Sustainability Challenges, Oxford Economics, 2019, Figure 6

Source – Figure 5.1, Pg., 93, Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development

The UNEP GCO II concludes that growth in the industry is driven by global megatrends and by chemical intensive industry sectors including fashion, construction, agriculture, and electronics. The report further concludes that hazardous chemicals and other pollutants such as plastics and pharmaceutical pollutants continue to be released into the global environment in large quantities.

The Stockholm Convention and Minamata Convention highlights the harm to human health caused by the chemicals covered by them.

Extensive studies, including several recent studies[409,410,411] have confirmed the adverse impacts of hazardous chemicals including pesticides, endocrine disrupting chemicals, mercury, and other chemicals on ecosystem health and on human health.

The Stockholm Convention initially listed twelve chemicals that had documented evidence, including the harmful impacts of a group of persistent made-man chemicals on wildlife.[412] Subsequent studies have confirmed links to adverse impacts on human health including chronic health impacts.[413] The Stockholm Convention has since added an additional eighteen chemicals with several[414] under consideration for future listing, based on the research and scientific studies which continue today.

In the risk profiles presented for chemicals listed in Annex A and B the Stockholm Convention, there is one prevailing factor; these chemicals have significant impacts to ecosystem and species health and as such threaten and can undermine efforts to preserve nature. In addition, they can have adverse effects in humans.

Valery E. Forbes, Steve Railsback, Chiara Accolla, Bjorn Birnir, Randall J.F. Bruins, Virginie Ducrot, Nika Galic, Kristina Garber, Bret C. Harvey, Henriette I. Jager, Andrew Kanarek, Robert Pastorok, Richard Rebarber, Pernille Thorbek, Chris J. Salice, Predicting impacts of chemicals from organisms to ecosystem service delivery: A case study of endocrine disruptor effects on trout, Science of The Total Environment, Volume 649, 2019, Pages 949-959

Ann M. Vuong, Kimberly Yolton, Changchun Xie, Kim N. Dietrich, Joseph M. Braun, Glenys M. Webster, Antonia M. Calafat, Bruce P. Lanphear, Aimin Chen, Prenatal and childhood exposure to poly- and perfluoroalkyl substances (PFAS) and cognitive development in children at age 8 years, Environmental Research, Volume 172, 2019, Pages 242-248

Ito HC, Shiraishi H, Nakagawa M, Takamura N (2020) Combined impact of pesticides and other environmental stressors on animal diversity in irrigation ponds.

Aaron T. Fisk, Cynthia A. de Wit, Mark Wayland, Zou Zou Kuzyk, Neil Burgess, Robert Letcher, Birgit Braune, Ross Norstrom, Susan Polischuk Blum, Courtney Sandau, Elisabeth Lie, Hans Jørgen S. Larsen, Janneche Utne Skaare, Derek C.G. Muir, An assessment of the toxicological significance of anthropogenic contaminants in Canadian arctic wildlife, Science of The Total Environment, Volumes 351–352, 2005, Pages 57-93

Preambular text of the Stockholm Convention on Persistent Organic Pollutants

Chemicals proposed for listing by the Stockholm Convention

Taken as a whole, hazardous chemicals controlled by the chemicals Conventions and those of global concern create an economic and environmental burden. The UNEP Global Chemicals Outlook II indicates that the benefits of action to minimize adverse impacts have been estimated in the high tens of billions of United States dollars annually and the World Health Organization estimated the burden of disease from selected chemicals at 1.6 million lives in 2016 (this is likely to be an underestimate according to the report). Further to this, the Stockholm Convention's last needs assessment in 2017[415] estimated that 5.2 billion was needed in the period 2018-2022 to meet the needs of developing country Parties, and the early findings of the 2022-2026 assessment suggest that similar amounts will be required. Additionally submissions and proposals/requests from developing country parties to the Minamata Convention also indicate substantial and growing implementation needs.

While previous GEF strategies have made significant progress in addressing chemical pollution, most recently noted in the effectiveness evaluation decision at the eighth COP of the Stockholm Convention,[416] several gaps need to be addressed as a matter of priority if the upward trend of hazardous chemical pollution is to be reversed to ensure a healthy people and planet including: legislation and technical capacity in developing countries, improving access to knowledge, science and technology, the need for new and innovative financing, lack of awareness of sustainable solutions, lack of consumer demand for sustainable and green solutions, and lack of market penetration of the introduction of sustainable supply chain management.

Role of the Multilateral Environmental Agreements in Addressing Chemicals Pollution

The chemicals controlled by the multilateral environmental agreements require global cooperation. To support implementation these conventions, have financial mechanisms which are set up to "support developing country Parties and Parties with economies in transition in implementing their obligations."

The GEF operates under the guidance of, and is accountable to, the Conference of the Parties (COP) of the Minamata Convention on Mercury[417] and functions under the authority, as appropriate, and guidance of and is accountable to the Conference of the Parties of the Stockholm Convention on Persistent Organic Pollutants.[418]

Each COP provides guidance on overall strategies, policy, program priorities and eligibility for access to, and utilization of, financial resources. This is managed in accordance with the respective memorandum of understanding between the GEF Council and the Conference

UNEP/POPS/COP.8/INF/32 – Report on the assessment of funding needs of Parties that are developing countries or countries with economies in transition to implement the Stockholm Convention for the period

SC-8/18: Effectiveness evaluation of the Stockholm Convention

Article 13, Para 7, Minamata Convention on Mercury

Article 13, Para 6, Stockholm Convention on Persistent Organic Pollutants

of the Parties of the Stockholm Convention[419] and the Minamata Convention.[420] The Minamata Convention additionally provides guidance on an indicative list of categories of activities that could receive support from the GEF Trust Fund, which it did at COP 1[421] in September 2017.

Regarding programming, both Conventions have provided guidance on priority areas which primarily refer to legally binding obligations and enabling activities.

The Stockholm Convention has provided initial guidance at COP 1 and updated guidance to the GEF since then at each COP based on the findings of the quadrennial review of the GEF and the needs assessment. Guidance on programming priorities include inter alia:

reiterate ongoing relevant guidance such as prioritization of meeting the 2025 and 2028 deadlines for PCB,

phase out and elimination of chemicals listed in Annex A of the Convention,

management and where possible phase out and elimination of chemicals listed in Annex B of the Convention and,

reduction and as far as possible elimination of chemicals listed under Annex C of the Convention,

Support legal and regulatory frameworks,

Support of updating of national implementation plans.

The Stockholm Convention has also provided guidance of a policy nature including engagement of regional centers of the Convention in programming, increase in private sector engagement in the implementation of the Convention and facilitate synergy among the chemicals and waste Conventions and with other focal areas and impact programs of the GEF.

The Minamata Convention has provided guidance that prioritizes activities for funding and a list of indicative activities to be funded which is overall guided by paragraph 8 of Article of the Minamata Convention which directs the GEF to "take into account the potential mercury reductions of a proposed activity relative to its costs."

In addition to the legally binding chemicals conventions, the International Conference on Chemicals Management (ICCM) has over four meetings requested the GEF and accepted by the

SC-1/11: Memorandum of understanding between the Conference of the Parties of the Stockholm Convention and the Council of the Global Environment Facility

Memorandum of understanding between the Conference of the Parties of the Minamata Convention and the Council of the Global Environment Facility

Decision MC-1/5 and annex to Decision MC-1/5

GEF council to include elements of SAICM into GEF programming which has facilitated early action on areas such as e-waste, plastics, chemicals of concern including pesticides, pharmaceuticals, and chemicals from other sectors.

While the GEF does not receive guidance from the Montreal Protocol, through a memorandum of understanding between the respective Secretariats of the GEF and the Multilateral Fund for the Implementation of the Montreal Protocol, the GEF follows the policy and programming priorities of the Executive Committee of the Multilateral Fund Secretariat.

GEF-8 Chemicals and Waste Focal Area Programming Strategy

As noted in the "Report on the Seventh Replenishment of the GEF Trust Fund[422] in the chemicals and waste strategy paragraphs 213 – 218, there is a need to shift from a chemical by chemical-based approach to a sector-based approach. The GEF-7 strategy has yielded significant advances in the work of the focal area which has: facilitated holistic approaches to managing chemicals and waste in SIDS and LDCs, started addressing chemicals in major supply chains including textiles, advancing engagement on the gold supply chain and plastics, and brought in significant engagement of the private sector into supporting implementation of the Conventions, for example the ISLANDS program, the GOLD+ program and the Africa LDC project.

GEF-8 will be structured along four program areas. This builds on the experience from GEF-7 and prior focal area strategies and guidance on programming priorities from the COPs of the Stockholm Convention, the Minamata Convention, and the International Conference on Chemicals Management. It also builds on the growing and converging understanding that supply chains and mega trends are the primary drivers of chemical pollution which have severe consequences for human and environmental health as highlighted in the recommendations from the UNEP Global Chemicals Outlook II and the Dasgupta review.

Objectives 1 – 3 below apply to the Stockholm Convention, the Minamata Convention, relevant objectives for SAICM and the Montreal Protocol.

In programming resources to address chemicals and waste priorities, the following principles, in no intentional sequence, will be used in determining the choice of projects in the focal area:

Directly supports implementation of the Stockholm Convention, Minamata Convention.

Supports some aspects of SAICM that require global action, a

Supports the Montreal Protocol for the countries supported by the GEF

GEF/A.6/05/Rev.01 - Report on the Seventh Replenishment of the GEF Trust Fund, 2018

Potential to generate multiple global environmental benefits and socioeconomic benefits including facilitating equal access of women and men to financial services and productive assets to boost their livelihoods, e.g., supporting income generating activities for women-owned businesses working in the management of chemicals and waste.

Facilitates women's participation and decision-making opportunities.

Facilitates gender sensitive awareness raising and communication.

Cost Effectiveness - the potential chemicals reductions of a proposed activity relative to its costs will be a major factor in consideration of funding.

Sustainability – all projects should at a minimum incorporate a pathway to ensure sustainability of the activities as well as contribute to sustained sound management of chemicals and waste. In this regard the proposals will need to demonstrate how the interventions will change the behavior of the private and public sector to ensure sustainability of the intervention.

Innovation – Projects should seek to develop and scale locally developed technologies and practices particularly in the context of the LDCs and SIDS[423] including in the design of financial mechanisms at the sub-national, national, and regional levels.

Private Sector Engagement – Projects should seek to create or improve the enabling environments, including through dedicated responsibility, in which the private sector can engage to reduce the use of hazardous chemicals and to prevent the emission of harmful waste.

Projects/Programs that promote/lead to Resource Efficiency and sustainable consumption and production approaches, like circular economy or sustainable material management.

Prioritized in National Implementation Plans, Minamata Initial Assessments, ASGM National Action Plans as well as reviews undertaken by the COPs on effectiveness in respect of the focus of the project/program.

Supports policy coherence across national institutions to manage hazardous chemicals and waste.

Builds on or uses existing networks, regional, national, and sub-national institutions including regional centers set up under the chemicals and waste conventions; and

Supports the objectives of the Integrated Programs and of other Focal Area strategies.

[423] The promotion of innovation in SIDS is highlighted by the recent SIDS Evaluation by the GEF's Independent Evaluation Office https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

Objective 1: Creation, strengthening and supporting the enabling environment to transform the manufacture, use and sound management of chemicals and to eliminate waste and chemical pollution.

Work under this objective will support the development, strengthening of the enabling conditions and environment for the phase out of hazardous chemicals and waste. The work in this objective will also support the elimination of existing hazardous chemicals and waste in the environment and put in place the policy, regulatory environment, and institutional capacity to prevent future buildup of chemicals and waste, including through the development and implementation of financial instruments and mechanisms at nation level. To achieve this, countries will be supported to develop legislation and policies that are coherent across national institutions, based on a review and assessment of existing policy/legislation. These reviews will allow deregulating or amend policies and legislation that do not foster a shift towards elimination of hazardous chemicals and waste and waste streams containing or that can emit hazardous chemicals because of mismanagement.

Activities can include policy, legislation and capacity and institutional strengthening of the public sector, private sector, CSOs and others to facilitate activities including, but not limited to:

Investments to eliminate hazardous chemicals, products containing these chemicals and waste,

Access to, and transparency of chemical information in products and materials.

Reverse logistics and supply chains to enable recovery of materials and products for reuse, thereby preventing them from building up in the environment.

Regenerative design of products and materials, which will facilitate removal of hazardous chemicals from supply chains of materials and products and facilitate more closed loop and circular supply chains.

Green and sustainable approaches, practices, and safer alternatives to hazardous chemicals.

Green approaches to managing waste that contains hazardous chemicals, or can emit hazardous chemicals if improperly managed, including supporting enterprises to do this responsibly.

Green procurement to facilitate elimination of products and materials that contain or can contribute to the emission of hazardous chemicals and a build-up of material that contains hazardous chemicals,

Participation and incentivization of women in businesses that work in management of chemicals and waste.

Support of financial mechanisms and instruments for innovation in clean and regenerative design of products and materials, particularly those that are developed using indigenous peoples/local communities' knowledge.

Support to develop and implement financial instruments and mechanisms at national level to allow for access to finance for business to sustain and scale project and program results.

Policy, legislation, and technical capacity to manage products, materials and chemicals containing hazardous chemicals throughout their lifecycle, including trade.

Enabling activities under the Stockholm Convention and Minamata Convention including, national implementation plans and national implementation plan updates, national action plans for the artisanal and small-scale gold mining and Minamata Initial Assessments.

Global Monitoring Plans.

Objective 2: Prevention of future buildup of hazardous chemicals and waste in the environment

Under this objective investment will be made to eliminate hazardous chemicals in use and to safeguard against future regrettable alternatives. Work under this objective will seek as far as possible to leapfrog to green/sustainable alternatives to hazardous chemicals, use regenerative design of products and materials that both eliminate the use hazardous chemicals, and reduce/ eliminate as far as possible the emissions of hazardous chemicals to the environment. This will be achieved by supporting changes in manufacturing, while recognizing that many chemicals will still be in use and in commerce and will require sound management of a traditional, regulatory nature.

This area of work will endeavor to support an increase in the market share of industry and enterprises that adopt sustainable and regenerative supply chains. The following priorities will be supported:

Introduction and use of best available techniques and best environmental practices to minimize and ultimately eliminate emissions of unintentionally produced POPs and mercury from major source categories included in the Stockholm and Minamata Conventions.

Reduction and elimination of mercury from the artisanal and small-scale gold mining sector.

Elimination of primary mercury mining and associated trade, along with controls on use of mercury from primary mining.

Phase out and eventual elimination of mercury or mercury compounds used in manufacturing processes contained in Annex B of the Minamata Convention.

Elimination of the use of mercury and POPs in products (Including brominated flame retardants, PFOS, PFOA, PFHxS and short chain paraffins) and in sectors that use and emit these chemicals as well as the use of mercury in products (as specified in Annex A of the Minamata Convention).

Phase out of substances controlled by the Montreal Protocol for countries with economies in transition.

Management of hazardous chemicals that require global and coordinated approaches.

Objective 3: Elimination of hazardous chemicals and waste

Currently there are stockpiles of waste/obsolete hazardous chemicals as well as products and materials that contain POPs, chemicals of concern, HCFCs and HFC and mercury.

There are limited options for materials already in landfills, however there are opportunities to implement environmentally sound management technologies and techniques for chemicals that exist in products and materials in a wide range of sectors.

Work under this objective will support implementation of environmentally sound management of stockpiles of waste/obsolete chemicals and products and material that contain or can emit POPs, chemicals of concern, HCFCs and HFC and mercury.

The following will be supported inter alia:

Elimination of the use of polychlorinated biphenyls (PCBs) in equipment by 2025.

Environmentally sound waste management/disposal of mercury/mercury containing waste or persistent organic pollutants including liquids containing PCBs and equipment contaminated with PCBs having a PCB content above 0.005%, in accordance with paragraph 1 of Article 6 and part II of Annex A of the Convention, as soon as possible and no later than 2028; and

Prevention of waste/products containing persistent organic pollutants or mercury from entering material recovery supply chains.

Non-combustion, including green technologies to disposal of materials and products containing POPs, mercury, and chemicals of concern.

Capacity-building for the development of strategies for identifying and assessing sites contaminated by mercury or mercury compounds and, as appropriate, the remediation of those sites.

Contributions of Integrated Programs to Chemicals and Waste Outcomes

With little exception most of the chemicals listed by the Stockholm Convention and Minamata Convention are used in, or emitted from one or more supply chains, including fashion, particularly textiles, electronics, plastics (certain classes), building materials and in major economic sectors including tourism, health care, industrial production and manufacturing, mining, and agriculture. In this regard the chemicals and waste focal area will accrue global environmental benefits and positive outcomes from the following Integrated Programs:

Elimination of Hazardous chemicals from Supply Chains.

This IP will work to significantly reduce POPs, mercury, and hazardous chemicals of concern from the supply chains of fashion and construction.

The chemicals industry and the sectors that use chemicals include the largest global companies with extensive reach into almost every aspect of our lives. As indicated earlier, the size of the chemicals sector in GEF recipient regions is larger than the non-recipient regions. The chemicals and waste strategy specifically will need to build on the major initiatives in the front-runner enterprises that are seeking to build sustainable and green supply chains as well as partner with private sector entities engaged in major chemical use sectors including textiles, construction, and electronics in addition to sectors that contribute significantly to waste such as tourism.

As part of the overall strategy to sufficiently cover such a large and diverse industry, the IP will focus its private sector engagement through multi-stakeholder platforms that can address the concerns of the marketplace, investors and policy makers at the scale required to support systemic transformation. Such platforms include the GEF Gold initiative, the Sustainable Tire Industry Project, the renewable bioeconomy platforms of the WBCSD and the WEF, and GEF's own opportunities to catalyze or consolidate platforms to better address the marketplace opportunities for better chemicals and waste outcomes.

The focal area will also help identify, incubate, and accelerate businesses in developing countries that contribute to each of the programs 1-3, particularly those that are led by women and other underrepresented communities including IPLCs.

Circular Solutions to Plastic Pollution

Certain plastics, particularly those used in the electronics sector and synthetic fibers used in textiles can contain POPs, and for these materials to achieve true circularity the plastics must be designed along regenerative principles and have in place reverse logistics to enable recovery of materials. This IP can achieve some of the outcomes for the chemicals and waste focal area in

selected plastic supply chains as defined in the integrated program on Elimination of Chemical Pollution and Environmental Degradation in Supply Chains of Global Significance

Sustainable Cities

The infrastructure of cities uses significant amounts of chemicals, including chemicals controlled by the Stockholm and Minamata Conventions and the Montreal Protocol and generates waste both during the life of city infrastructure and processes, and at the end of life of products, equipment, materials and the buildings and structures themselves. If the sustainable cities IP supports development of building and material standards that require that inputs do not include hazardous chemicals and require green molecules or other means to replace hazardous chemicals, this IP can contribute to the outcomes of the chemicals and wastes focal area. Also, if municipal and urban industrial waste management strategies under the sustainable cities IP include reduction of hazardous chemicals and waste as co-benefits, it can complement chemicals and waste focal area objectives. These two entry points for chemicals and waste reduction will likely be part of the integrated and circular economy approach of the Sustainable Cities IPs.

Amazon, Congo, and Critical Forest Biomes

Compared to other land use such as agriculture, pasture, and logging, mining (and especially artisanal and small-scale gold mining) was often considered a small-scale cause of deforestation. Recent research in Amazon and Congo show that the effects of entire mining operations are much broader than the areas cleared for the pit with a cascade of effects responsible for deforestation and forest degradation: creation of transport infrastructures, demand for meat and food, new access to farmers and hunters, in addition to the eventual use of mercury to extract gold from the ore. In these biomes, stopping gold mining in primary forests, particularly those that use mercury, or finding alternative livelihoods for gold miners, will have benefits to the Minamata Convention. Any activity in this direction will need to be articulated to the national action plan for the artisanal and small-scale gold mining sector of the participating countries.

Green and Blue Islands

The use of chemicals in key economic sectors in SIDS has had impacts on key ecosystems. Through the SIDS-Nature-based Solutions program, the tourism, urban and food sectors (agriculture and fisheries) will be targeted. Under the food sector the program will seek to address integrated upstream challenges and implement downstream interventions to reduce agrochemical use on agricultural land and utilize Nature-based Solutions to curb sources of land-based hazardous chemicals. This will deliver land-based benefits related to resilience of ecosystems dependent on soil health as well as reduce levels of pollution in marine ecosystems.

Food Systems

The use of chemicals in food systems, particularly in agriculture in the form of pesticides, specifically those covered by the Stockholm Convention, has severe impacts on the soil biodiversity which greatly reduces productivity in food systems and. Phase out of hazardous pesticides and a shift to non-chemical approaches such as restorative agriculture will both eliminate hazardous chemicals and improve productivity per hectare of food systems so that LDN targets can be achieved.

Role of the private sector in supporting Chemicals and Waste Outcomes

The chemicals industry and the sectors that use chemicals include the largest global companies with extensive reach into almost every aspect of our lives. As indicated earlier, the size of the chemicals sector in GEF recipient regions is larger than the non-recipient regions. The chemicals and waste strategy specifically will need to build on the major initiatives in the front-runner enterprises that are seeking to build sustainable and green supply chains as well as partner with private sector entities engaged in major chemical use sectors including textiles, construction, and electronics in addition to sectors that contribute significantly to waste such as tourism.

As part of the overall strategy to sufficiently cover such a large and diverse industry, the focal area will focus its private sector engagement through multi-stakeholder platforms that can address the goals of the Conventions, concerns of the marketplace, investor mandates and policy makers at the scale required to support systemic transformation. Such platforms can include the GEF planetGOLD initiative, the Global Mercury Partnership, the renewable bioeconomy platforms of the WBCSD and the WEF, and GEF's own opportunities to catalyze or consolidate platforms to better address the marketplace opportunities for better chemicals and waste outcomes.

The 2020 GEF Private Sector Engagement strategy further outlines the modalities of the engagement for the private sector to support the delivery of GEBs in the Chemicals and Waste focal area. The PSES will be used as a guideline to deepen engagement of the private sector to influence better chemicals management.

The focal area will also help identify, incubate, and accelerate businesses in developing countries that contribute to each of the programs 1-3, particularly those that are led by women and other underrepresented communities including IPLCs.

GLOBAL PROGRAMS

A. Mobilizing Private Investment for Environmental Goals through the Blended Finance Global Program (Non-Grant Instruments)

To rapidly scale up investment in the environment and meet the unfolding environmental crises and tipping points, global leaders, the private sector, the financial sector, and CSOs are converging in their calls for action. Blended finance is an effective tool to help mobilize private investment but still represents a small portion of total global investment. A recent report on market trends shows that the Blended Finance transactions and annual financing has remained steady, averaging USD 11 billion per year throughout 2014-2019. Climate change mitigation projects in clean and affordable energy (SDG 7) still dominate, while investments in nature (SDG14 and SDG 15) are less than 1%. With less than 50 blended finance transactions annually in these thematic areas, the GEF Non-Grant Instruments (NGI) window with an average of 4 projects per year, is playing a critical role.

The financial sector is key to effectively redirect financial flows from environmentally harmful investments to environmentally positive actions. Recent trends in the financial industry are encouraging: ESG investment soared in the last two years and, according to research by PwC, ESG European funds could experience a more than threefold jump reaching EUR 7.6 trillion in assets (USD 9.2 trillion) by 2025.[424] Green bonds are proliferating and reached a new record in 2020 with more than USD 300 billion in new issuances. The European Union, central banks and regulators from all over the world are increasingly seeking to disclose climate risks. Nevertheless, most of the initiatives remain in the "green" classification and focus on climate change mitigation investments and climate risks. Attracting private capital to invest in nature is still challenging and the financing gap remains large.

Disclosure, metrics, and measurement remain key challenges for investment in the environment at scale, this is particularly relevant in countries with less capacity. The GEF participation in the working group for the creation of the Taskforce for Nature-related Financial Disclosures (TNFD) supports transparent, harmonized disclosure of nature-related risks and impacts by financial institutions as a necessary first step towards redirecting financial flows to environmental positive actions. More support to the standardization of metrics and financial disclosure requirements will be key to future growth.

GEF's STAP recommends a renewed effort in GEF-8 to seek coordinated public and private investment flows, including demonstrating new financing options and the viability of investments, to "crowd-in" greater investment in GEBs. STAP recommends GEF seek partners where it can apply its particular integrating leverage between environmental and financial capital

[424] Financial Times. (2020). ESG funds forecast to outnumber conventional funds by 2025. https://www.ft.com/content/5cd6e923-81e0-4557-8cff-a02fb5e01d42

systems to greatly magnify total investment across the GEBs.[425] Further, STAP acknowledges the gender aspects of small businesses, encouraging GEF to "foster new entrepreneurship for women and youth, opportunities for enterprises that create value, are restorative, socially-connected, and environmentally-oriented; and create growth through eco-business."[426]

GEF-7 Blended Finance Lessons Learned

GEF and its Partner Agencies were among the first international funds to pioneer the use of blended finance structures for climate change mitigation, validating numerous business models still in use today.[427] The GEF work in blended finance has evolved from the early GEF cycles, resulting in a separate set-aside during the GEF-4 replenishment negotiations. The goal of this separate window of financing was to expand private sector investment in GEF strategic priorities. The use of non-grant instruments such as debt, equity or guarantees at concessional terms offers unique advantages for private sector participation since it enables the GEF to de-risk financial structures, provide patient capital or lengthen maturities of financing (among other financial enhancements). The GEF-5 replenishment established a similar set-aside for non-grant instruments, followed by the GEF-6 NGI Pilot with US$ 99.5M, and the GEF-7 NGI Program with US$ 136 M. Since GEF-6, the proceeds/reflows generated by projects under this separate window of financing are required to be transferred to the GEF Trust Fund.[428]

Throughout, the GEF blended finance initiatives under the subsequent NGI windows have successfully invested in highly innovative projects, generated GEBs, and achieved high co-financing ratios with strong participation of the private sector. During GEF-6 and GEF-7, co-financing for GEF investments is more than double the average co-financing ratio for the GEF portfolio, and participation of private sector co-financing is more than three times higher than general GEF grant programs/projects.

GEF-7 Programming Directions identified several key priorities for improving on prior efforts[429] which were implemented under the GEF-7 NGI Program.[430] Among these, to enhance transparency, the GEF designed a competitive selection process to access the set-aside with clear selection criteria published in calls for proposals. [431] Projects selected are required to be aligned

GEF/STAP/C.59/Inf.07. STAP's Initial Perspective on GEF-8. https://www.thegef.org/council-meeting-documents/staps-initial-perspective-gef-8

Ibid.

Meltzer, J. P. (2018). Blending Climate Funds to finance low-carbon, climate resilient infrastructure. https://www.brookings.edu/wp-content/uploads/2018/06/Climate-Finance_Working-Paper.pdf

GEF/C.47/06 GEF-6 Non-grant Instrument Pilot and Updated Policy for Non-Grant Instruments

GEF/R.7/19. GEF-7. Replenishment Programming Directions. para 413, p. 135. https://www.thegef.org/council-meeting-documents/gef-7-programming-directions

GEF/C.55/12. GEF-7 Non-Grant Instrument Program. http://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.55.12_NGI.pdf

Call for Proposals GEF-7 Non Grant Instrument. https://www.thegef.org/sites/default/files/documents/GEF_NGI_program_fifth_call_proposals.pdf

with Programming Directions and generate GEBs; projects are evaluated and selected based on the disclosed criteria in the call for proposals**.** Additionally, the GEF formalized the collaboration with the Ad-hoc Advisory Group of Financial Experts (AGFE) and expects to further strengthen the collaboration during GEF-8.

In both GEF- 6 and GEF-7, the projects selected have been characterized by increasingly integrating and combining different focal areas and trust funds. Investment from the set-aside in "frontier areas" such as land degradation, international waters or biodiversity went from zero in earlier GEF cycles to about 60% in GEF-6 and GEF-7. Diversifying focal areas in a given project can help multiply the sources of revenue, hence reducing the risk of investment while generating multiple GEBs. Project proposals also presented multiple opportunities across GEF trust funds by combining concepts such as land degradation, climate change, resilience, adaptation, and Nature-based Solutions.

GEF flexibility in offering different types of financial instruments to attract private investment under a dedicated set-aside has proven to be key in achieving high co-financing ratios and high private sector participation.

Innovation requires flexible terms of financing and new financial products. While equity is the most requested instrument for first-of-a-kind projects and testing new asset classes, investment in frontier areas may require de-risking mechanisms to reach scale. Concessional debt and/or risk sharing mechanisms are also key for investments in LDCs and SIDS, which are underserved by private sector finance. These countries also need support in developing a pipeline of bankable projects and increased focus on investments in MSMEs and women-owned enterprises.[432] In all cases, GEF's ability to provide local currency financing and long maturities were valuable to success.

Box 2. GEF-7 NGI Program Highlights

Several projects in GEF-7 aimed at innovating, creating new asset classes and financial structures that have the potential to transform industries and reach scale. GEF flexible terms of financing remains a comparative advantage of the GEF financing.

A - GEF investment in innovative financial structures:
The Wildlife Conservation Bond (GEF ID 10330) combines the use of public, private, and philanthropic resources to create a new type of structured bond that pays the coupon if the black Rhino population in two parks of South Africa increases. The GEF financing will test a new type of asset class with the potential to be replicated with various species.
The GEF-EBRD Circular Economy Regional Initiative (GEF ID 10328) will provide financing that seeks to scale up circular economy initiatives for private sector entities (mostly SMEs) in the Western Balkans and Turkey. The project's innovative financial mechanism will focus on addressing barriers to investments in circular economy technologies

OECD/UNCDF (2020), Blended Finance in the Least Developed Countries 2020: Supporting a Resilient COVID-Recovery, OECD Publishing, Paris, https://doi.org/10.1787/57620d04-en.

and processes by rewarding behavior change with interest rates reduction and technical assistance from EBRD. The GEF concessional loan will allow to reduce interest rates when milestones related to circular economy are achieved.

The GEF will invest equity in the *Food Securities Fund (GEF ID 10667)* a publicly listed and open-ended investment fund providing loans to local agri-businesses through "aggregators" or companies operating in developing and emerging countries that aggregate agricultural produce from and/or provide goods and services to farmers, in particular smallholder farmers. The financial structure of the fund is designed to reach scale and share risks with value corporate partners that source their supply from the recipients of the financing. This is the first private sector project to be aligned with a GEF Impact Program (FOLUR).

B - GEF investment in de -risking mechanisms to scale up solutions.
The *COVID-19 Off-Grid Recovery Platform* (GEF ID 10667) will establish an innovative financing mechanism aimed at quickly deploying funds for energy access companies (including SMEs) in their off-grid operations, with a view of addressing the financial distress and short- and medium-term lack of liquidity these companies are facing as a result of the current pandemic. The GEF will provide a concessional loan to ensure a quick deployment of resources; the financing platform leverages on the commercial outreach and existing market knowledge of several competitively selected partner funds under a public-private investment scheme.
The *GEF-IFC Green Shipping Initiative (GEF ID 10501)* will establish a financing platform aiming to accelerate the retrofit of fleets to increase fuel efficiency. The GEF will invest in a subordinated position in a platform that has the potential to transform one of the most carbon intensive industries towards a sustainable, low-carbon future. The project will provide a de-risking structure that enables initial anchor investors to test the financing model and will unlock and scale up available private sector financing for greener shipping.

Grant funding is often needed in the design of blended finance transactions to cover technical assistance needs or structuring costs. Grant financing, on top of the non-grant investment, can be helpful for designing projects, creating financing platforms and for overall implementation with technical assistance. In SIDs and LDCs especially, but not exclusively, where the average project size is small and risks are high, grant-based technical assistance is usually needed to deliver successful results.

Disclosure, metrics, and measurement remain key challenges for investment in climate and nature at scale. Harmonized data and standardized metrics and disclosure are necessary for the re-alignment of financial flows toward climate goals and nature positive investments. GEF could invite and work with agencies to apply methodologies such as the Science-Based Targets Network (SBTN) to document alignment of private sector investments with Convention priorities for GEBs.[433]

The standard GEF project cycle and procedures may discourage many private sector project developers from applying for GEF financing. Overall, private investment is sensitive to

[433] See methodologies at: https://sciencebasedtargetsnetwork.org/

market conditions, more so when seeking to mobilize financial resources from asset managers and financial intermediaries. In order to work with these partners fast execution and disbursements are needed—an area where GEF needs to improve.

MSME financing though local financial intermediaries and corporate value chains can be very effective. Support for small-sized projects could be achieved through local partners such as microfinance institutions (MFIs) or corporate value chains with a mission to support sustainability of their sourcing. Microfinance institutions tend to also be gender inclusive and improve financial literacy and environmental impacts.

Agency capacity to design and implement blended finance. Only a subset of GEF agencies has the financial expertise to design complex financial structures or analyze and manage financial products required in Blended Finance projects.

Increasing and Enhancing the Impact of GEF Blended Finance Global Program

The first step to increase impact is to grow the resources allocated to the Blended Finance Global Program (NGI set-aside). Expert stakeholders suggest that GEF's resource allocation should increase to US$ 500 million or more. At this resource level, expected co-financing from private sector investment could reach US$ 4-5 billion, replicating the entire GEF-7 replenishment but with private sector funding, thereby helping to significantly reduce the financial gap.

The GEF will seek to support innovation at the forefront of investments in nature and climate: biodiversity, land degradation neutrality, sustainable agriculture, and food systems, while integrating resilience, Nature-based Solutions, and adaptation. In cases where private sector risk aversion may still prevent the mobilization of private capital at scale in climate change projects the GEF will provide financing for efforts in climate change mitigation.

The GEF will also seek to support de-risking mechanisms for scale-up and investment in LDCs and SIDs. To achieve these goals, maintaining GEF flexibility to financially innovate is key. New financial instruments such as convertible grants, performance-based grants, financial instruments-linked to environmental performance, and support for new market mechanisms could be added to the list of existing eligible products under the NGI Policy. The GEF will continue to support the structuring of new asset classes and issuance of securities linked to nature or climate goals in capital markets.

Since disclosure, metrics, and measurement also remain key challenges for private investment in the environment at scale, additional GEF support for initiatives that seek to promote the reallocation of private finance and investment to low carbon and nature positive economies (such as TNFD or green finance). This support could be delivered through MSPs and with the grant allocation of the Global Blended Finance Program.

The GEF will explore the use of thematic calls for proposals to attract more interest in priority areas of investment and look for opportunities in GEF multi-trust fund projects that will deliver expanded private sector engagement for the adaptation and resilience agenda.

Enhancing the GEF Blended Finance Global Program

As GEF expands the Blended Finance Global Program, additional steps to streamline the process and improve the selection process through the multiple calls for proposals will be implemented. GEF Agencies are required to inform the relevant GEF OFPs of each proposal in their respective countries ahead of Council approval and maintain OFPs informed of their work with national stakeholders during project development, implementation and monitoring.

The combination of grant funding and non-grant instruments in truly "bleeding edge" projects and in projects that benefit LDCs and SIDS is often requested by Agencies. Grant availability under this window is beneficial and even could be necessary for achieving innovation or replication of projects at scale.

As MSMEs continue to be underserved, GEF proposes to identify mechanisms to enroll financial intermediaries such as local MFIs as executing partners who can expand services to underserved MSMEs/smallholder farmers on the front lines of environmental change. Whenever relevant, lessons learned from GEF SGP with MSME financing can be used to better serve MSMEs.

The need to operate at higher speed while maintaining transparency, points to some opportunities for streamlining GEF processes and reducing the amount of time for blended finance projects to be reviewed, approved, and implemented. These include:

Further streamline call for proposals to enhance transparency and reduce complexity, shortening the time for applications and approval process.

A resource envelope of US$500 million would also allow the GEF to consider one or more individual projects and investment platforms of significant scale (e.g., USD-50-75 million) that will enable projects such as aggregation platforms, securitization, and other vehicles to mobilize investors through capital markets.

Invite GEF agencies to solicit innovative proposals from novel executing partners, civil society, MFIs, local banks, entrepreneurs, and the growing blended finance community.

Work with the subset of agencies that have the technical capacity, and internal procedures to structure blended finance projects for sound management of GEF investments to cut the time for CEO endorsement by 50% through streamlining internal Agency processes.

Increase outreach to Agencies to encourage SIDS and LDCs have full opportunity to participate in projects accessing the blended finance set-aside.

Consider increasing the number of medium-sized projects since they have demonstrated potential for innovation according to the GEF IEO.[434]

Improve knowledge management and learning for GEF blended finance projects. The GEF Blended finance team will work to generate, capture and transfer knowledge to build capacity and foster replication of blended finance structures.

GEF/E/C.59/03, Evaluation of the Role of Medium-Sized Projects in the GEF Partnership, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C59_03_IEO_MSP_Evaluation_Nov_2020_0.pdf

A Renewed Country Support Program for GEF-8

For the past three GEF cycles, the Country Support Program (CSP) has successfully provided recipient countries with assistance and capacity building to fully participate in the GEF Partnership and make better use of GEF resources. The goals of the CSP are: (i) to provide flexible support to countries, particularly their Focal Points, to build capacity to work with the GEF Agencies and Secretariat in order to set priorities and to program GEF resources, and (ii) to enhance inclusive dialogue and improve coordination between ministries and stakeholders at the national level and to facilitate input from key stakeholders.

Box 3: An Overview of the CSP

As one of two GEF corporate programs, the CSP is administered and implemented by the GEF Secretariat since 2010. A dedicated country relations team drives the organization of CSP events and activities, continuously informed by demand and feedback from countries and stakeholders.

CSP core activities include Expanded Constituency Workshops, Constituency Meetings, National Dialogues, other project and program related workshops, meetings of recipient Council Members and Introduction Seminars.

Up to June 30, 2021, the CSP has organized 356 events with more than 17,000 participants, including support for 75 National Portfolio Formulation Exercises (in GEF-5 and GEF-6) as well as targeted capacity building and South-South knowledge-sharing through the Stakeholder Empowerment Series (in GEF-7).

As the key capacity building and outreach vehicle for the GEF, the CSP (Box 3) contributes to enabling a strategic, better-coordinated access to GEF resources by informing, assisting and empowering GEF Operational Focal Points, Political Focal Points, Council Members and Alternates, Convention Focal Points, Civil Society Organizations (CSOs), and GEF Agencies. The program fosters engagement and cooperation between members of the GEF Partnership and it facilitates the dialogue between increasingly diverse stakeholders. The CSP also serves as a knowledge-sharing mechanism for the changing requirements of the GEF and as a feedback-mechanism on GEF policies.

The CSP as a component of a GEF-8 Country Engagement Strategy

Country engagement and ownership is a core principle of the GEF. The GEF's mission is to support developing countries and countries with economies in transition in delivering on their commitments to Multilateral Environmental Agreements and generate Global Environmental Benefits. Recipient countries must thus lead and drive the process of identifying priorities for national action along environmental domains that are in line with the GEF mandate and that also represent additional global environmental benefits for a healthy and resilient planet. This lies at the center of the GEF programming and delivery. The COVID-19 pandemic has made the GEF business model even more important since environmental issues must be central to sustainable development. As countries establish strategies for green, blue, clean, and resilient recovery, the GEF mandate and resources can have a huge influence in making this recovery truly "better".

As part of this ambition, there is a renewed sense of urgency in ensuring that GEF recipient countries are well equipped, have the capacity and knowledge to lead strategic decisions on environmental priorities, and engage with partners in ensuring lasting and impactful global environmental outcomes. As the GEF's programming moves into more integrated spheres, robust country engagement is increasingly critical to delivery, while greater demands are being placed on Operational Focal Points (OFPs) and country stakeholders.

The IEO Evaluation of the CSP[435] and the recommendations of the OPS-7[436] provide the basis for the adoption of *a large-scale, coordinated approach to country engagement.* The Secretariat is therefore in the process of developing a strategic and holistic approach to country engagement and empowerment that will expand from the CSP into an overarching Country Engagement Strategy. While this chapter presents the activities of the CSP for GEF-8, these will be fully integrated into the wider Country Engagement Strategy which will be presented to the Third Replenishment Meeting in January 2022.

New Approaches to the CSP in GEF-8

Within this context of an emerging and GEF-8 Country Engagement Strategy, the CSP for GEF-8 focuses on three core objectives:

Improving collaboration at the country level through inclusiveness, aimed at i) broadening the engagement of stakeholders at CSP events, and ii) expanding the outreach and support to stakeholders beyond CSP events.

Further increasing country ownership and leadership by empowering Operational Focal Points (OFPs), focused on i) enabling OFPs to efficiently program and manage their GEF portfolio, and ii) enhancing policy coherence at the country level.

Promoting South-South knowledge-sharing through tailored responsiveness, targeted to customizing the approach to capacity building to the specific needs of stakeholders, and diversifying outreach tools.

The CSP in GEF-8 builds on and incorporates recent, valuable feedback from:

IEO Evaluation of the Country Support Program (CSP). The evaluation concluded that the CSP has contributed to enabling a more strategic, better-coordinated access of countries to GEF resources and served as a communication-mechanism for the changing requirements of the GEF and as a feedback-mechanism on new GEF policies, as well as a knowledge-sharing mechanism between stakeholders. The evaluation further identified areas for improvement, including the need to frame CSP activities in a clear strategy, ensure inclusiveness of stakeholders beyond CSP events, potentially utilize National

Evaluation of the Country Support Program (CSP) - GEF/E/C.60/03
Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, GEF IEO, 2021

Dialogues to foster policy coherence and the mainstreaming of the environment across sectors, broaden the reach of GEF information and South -South exchange and further focus on ownership challenges of some Least Developed Countries and Small Islands Developing States. Based on its main findings, the evaluation made six recommendations to further improve the CSP.

Comments from donors after 1st GEF-8 replenishment meeting.[437] Donors expressed their support to the CSP and the continued capacity building the program provides to countries. To increase the CSP's efficiency, donors also made comments around specific issues to be improved: strengthening the role of OFPs, broadening stakeholders to ensure inclusiveness in CSP activities and tailoring CSP content to countries' circumstances.

Feedback from CSP stakeholders.[438] A survey to participants in CSP events in GEF-7 showed an overwhelming satisfaction with the program, emphasizing its usefulness, value and relevance. Some of the main comments stressed the contribution of CSP activities to improving country programming and project development, as well as significantly improving the relationship between countries and Agencies. Beyond CSP events, the continuous support and responsiveness from the Secretariat's staff were considered as highly satisfactory. Respondents also indicated the need to enhance capacity on project design and portfolio oversight, as well as in-depth discussions on case studies and good practices.

New approaches and activities are being introduced to the CSP in GEF-8 in response to the IEO recommendations, which are summarized in Table 3:

Table 3: New GEF-8 CSP approaches and activities

New approaches and activities	In response to IEO recommendations
Development of the CSP as a component of a wider GEF-8 Country Engagement Strategy that will include an implementation plan, a theory of change, and a monitoring plan	• Recommendation (b): Develop a clear CSP Strategy and an implementation plan with an appropriate budget and resource envelope. • Recommendation (c): Strengthen technical expertise in the CSP team and monitoring and reporting systems
Improving collaboration at the country level through inclusiveness as one of the strategic pillars of the CSP for core activities, including Stakeholder	• Recommendation (e): Enhance inclusiveness, so that inclusiveness at events turns into improved collaboration on the ground

Strategic Positioning and Programming Directions, GEF/R.8/02/Rev.01, April 2021
Participants' Perspectives on CSP Activities during GEF-7, conducted on May 2020

Engagement Series, as well as new activities.	
Further increasing country ownership and leadership by empowering OFPs as the second strategic pillar of the CSP. Promoting South-South knowledge-sharing through tailored responsiveness as the third strategic pillar for the CSP. Customized approach to capacity building for specific stakeholders: OFP Empowerment: National Steering Committees Onboarding training for new OFPs OFPs Community of Practice Platform Operational support for OFPs Information management capacity building Building execution capacity of stakeholders: National Executing Agencies CSOs Enhancing outreach Production of tailored outreach products Support to environmental journalists	• Recommendation (f): Apply a customized approach to capacity building
Disaggregation of the National Dialogues into National Dialogues on portfolio prioritization and programming and targeted National Dialogues on specific country needs	• Recommendation (d): Revisit the reach and timing of National Dialogues to align them better with country needs for support.
As part of the proposed new activities to empower OFPs, the CSP will assess ways to complement and collaborate with the capacity building efforts by other environmental funds, such as the Green Climate Fund and the Adaptation Fund	• Recommendation (a): Build on current efforts to collaborate with other global environmental funds

The GEF-8 Country Support Program

As a demand-driven program, the CSP is continuously evolving to provide improved support to countries and stakeholders, as well as to changing national circumstances. In addition, valuable comments and feedback served as the foundation to build on and refocus the CSP in GEF-8.

The CSP aims to refocus some of its activities to assist countries more effectively. The need for a renewed CSP approach is based on common concerns and challenges, including, among others, the need to further enable OFPs to prioritize, coordinate and monitor GEF projects; enhance knowledge-sharing among OFPs and among stakeholders; and provide targeted capacity building on particular policies and guidelines.

For GEF-8, three core objectives as well as relevant principles have been identified to bring selective focus to the program. These are:

Improving collaboration at the country level through inclusiveness.

Core CSP events engage diverse stakeholders, including Operational Focal Points (OFPs), Political Focal Points (PFPs), Council Members and Alternates, Convention Focal Points, CSOs and the private sector. While each CSP event has a different target audience, all CSP events are designed to promote open dialogue among diverse stakeholders. As a result, the participation at CSP events encourage knowledge-sharing, collaboration and partnership-building through inclusive dialogue.

The CSP will enhance inclusiveness to ensure collaboration at the country level is improved, at and beyond CSP events, focusing on two principles:

Broadening the engagement of stakeholders at CSP events. To further advance inclusiveness at CSP events, the program will broaden the engagement of stakeholders. For events organized by OFPs, with the support of the CSP, the program will continue to require the inclusion of all relevant line ministries, Convention Focal Points for the five conventions the GEF serves, as well as CSOs, among other key national stakeholders. The program will compile an updated list of contacts, where necessary, to share with OFPs.
For events organized by the CSP, the program will deliver modules on best practices of inclusiveness, including, for example, how to work more closely with GEF Agencies and executing agencies, how to manage a portfolio of projects, how to analyze project implementation reports and financial closure reports and how to effectively engage with civil society.

Expanding the outreach and support to stakeholders beyond CSP events. To further advance knowledge-sharing and help strengthen partnerships on the ground between stakeholders, the CSP will expand its outreach and support beyond events. The CSP will

share best practices and lessons learned of successful inclusiveness in programming, project preparation and execution as well as portfolio management with key stakeholders engaged in CSP events. When necessary, personalized follow up with stakeholders will be sought.

Further increasing country ownership and leadership by empowering OFPs.

OFPs are at the core of GEF operations in recipient countries and responsible for coordinating with other relevant ministries and stakeholders. The IEO OPS7 recommends that the GEF should leverage the Country Support Program to enable greater capacity building and strengthening of OFPs and other national institutions to ensure a more coherent delivery of programming. National Steering Committees empower the role and function of the OFP by ensuring they have the necessary support and consensus around the decisions they make. The CSP will provide targeted empowerment of OFPs by promoting National Steering Committees[439] to further increase country ownership and leadership. The strengthening of the role and function of OFPs will focus on two principles:

Enabling OFPs to efficiently program and manage their GEF portfolio. To enable OFPs to efficiently program and manage their GEF portfolio, the CSP will promote and encourage OFPs to set up National Steering Committees. The Program will share lessons and best practices from those countries where these multi-stakeholder committees are effectively functioning as well as promote dialogue and exchange of experiences among OFPs.

Enhancing policy coherence at the country level. To enhance policy coherence at the country level in support of multilateral environmental agreements, the CSP will strengthen the facilitation role of OFPs to advance dialogue and collaboration with and among line ministries and relevant stakeholders, possibly through proven institutional settings that facilitate such mainstreaming.

Promoting South-South knowledge-sharing through tailored responsiveness.

The CSP provides capacity building to a wide range of stakeholders with diverse levels of capacity. Content for CSP events has been developed and regularly updated for the different events. A tailored approach to capacity building will increase the impact of the CSP, by becoming responsive to the specific needs to the various stakeholders it supports. Increased capacity of different stakeholders will, in turn, further advance dialogue and knowledge-sharing among stakeholders. The CSP will tailor content for each category of the stakeholders it

[439] Out of the 144 recipient countries the CSP assists, about 10 percent have adopted National Steering Committees (NSC): some are more formal, as the examples described in Thailand and Cote d'Ivoire (Box 4 and Box 5), while some function informally. The NSC have the specific mandates to select GEF projects but they are not responsible for project oversight and monitoring or other tasks. The NSC model has been promoted and presented in every ECW. Best practices have been shared by OFPs with participants at ECWs and SESs.

supports, to further promote South-South exchanges among counterparts from different regions to promote knowledge-sharing and to seek synergies, focusing on the following two principles:

Customizing the approach to capacity building to the specific needs of stakeholders. To customize the approach to capacity building, the CSP will utilize a series of new and complementary activities targeted to different stakeholders, including OFPs, executing agencies, CSOs and journalists; and organize activities focused on specific country needs.

Diversifying outreach tools. Additional outreach tools will be introduced to diversify and enhance CSP activities, as well as promote increased dialogue and knowledge-sharing among stakeholders, with particular focus on OFPs.

CSP Activities in GEF-8

A set of complementary core activities and new components will be implemented by the CSP in GEF-8, using a mix of in-person and virtual delivery modalities. These are:

Core CSP Activities:

Expanded Constituency Workshops (ECWs). The CSP will organize, on average, 11 in-person ECWs a year in recipient constituencies, starting in 2023. These workshops are inclusive, engaging OFPs, PFPs, Convention Focal Points, CSOs, Agencies and other stakeholders. Up to ten participants per country will be financed by the CSP to take part of these workshops. Content for ECWs will be updated annually, focusing on GEF-8 policies and procedures, as well as new modules tailored to specific needs of each constituency.

Stakeholder Engagement Series (SESs).[440] Responding to the request for training on specific issues as well as for promoting South-South knowledge-sharing, SESs will be organized. These targeted sessions will bring together stakeholders from different regions, enabling feedback and exchange of good practices and lessons learned across countries and constituencies. Specialized themes will include, for example, GEF-8 new strategies and policies, how to manage portfolios, how to analyze project implementation reports and financial closure reports, benefits of National Steering Committees. The CSP will organize, on average, 9 virtual SESs a year throughout the cycle, starting in mid-2022.

*National Dialogues***.** In order to facilitate CSP programming and to promote policy coherence within each country, the CSP will reinforce efforts to encourage OFPs to organize National Dialogues, engaging a more diverse set of relevant national

SESs are proposed as a CSP core activity in GEF-8, to be added to those executed in previous cycles. SESs were the result of the need to adapt ECWs to a virtual format due to travel restrictions since 2020 (GEF-7).

stakeholders. During GEF-8, National Dialogues will be better targeted and disaggregated into: a) National Dialogues on portfolio prioritization and programming, which will be encouraged as soon as the GEF -8 Programming Directions and STAR country allocations are approved in June 2022; and b) targeted National Dialogues throughout the entire cycle focusing on specific issues; these may include the mainstreaming of national policies in support of multilateral environmental agreements, strengthening collaboration with civil society and increasing the engagement of the private sector. As in past cycles, National Dialogues will continue to be fully demand-driven and will be delivered at the requests of OFPs.

*Introduction Seminars***.** In past cycles, only one annual in-person Introduction Seminar was organized in Washington DC, with about 80 participants. The 2021 Introduction Seminar engaged more than 500 participants in a virtual training. Building on this experience and on increased stakeholders' demand, the CSP will organize two Introduction Seminar every year, to be held virtually. These training sessions target new Agency staff, OFPs, and selected stakeholders. Convention Secretariat staff will also be invited to take of these seminars, since new staff could greatly benefit from a better understanding of the GEF its policies and operations.

Constituency Meetings. At the request of Council Members, the CSP will organize Constituency Meetings for every constituency, to support the coordination and preparation for decision-making before every bi-annual GEF Council meeting. The most suitable platform will be utilized depending on the needs and preferences of countries in each constituency.

Pre-Council meetings of Recipient Council Members. The CSP will continue to support travel expenses of Council Members from recipient country constituencies to organize meetings prior to each Council meeting held in person.

In addition, the CSP will continue producing *Country Factsheets* –an information tool to foster greater accountability and ownership of GEF resources by countries. These one-page summaries provide OFPs with consolidated and concise analytical data on country programming to facilitate evidence-based decision making. Country Factsheets are a customized analysis aggregating data and metrics separately available to OFPs through the GEF Portal.

New CSP Activities

The new CSP activities in GEF-8 are closely inter-linked with the core CSP activities. These include a set of complementary components to provide a customized approach to capacity building for specific stakeholders. These are:

OFP Empowerment

CSP activities are intended to further strengthen the role of OFPs, taking into account the different institutional organization, technical capacity and needs of each country, with a view to continue helping OFPs to coordinate among relevant ministries for improved policy coherence and play a more active role in accompanying identification, preparation and execution of GEF projects and programs. Based on the GEF business model and limitations to transferring direct support to OFPs, the renewed CSP will provide OFPs institutional capacity building and project-related operational support through the following interlinked activities:

National Steering Committees. In some countries, OFPs carry out their responsibilities supported only by a small number of staff in their ministries, while in other cases OFPs have the institutional support of a National Steering Committee, which include representatives from relevant line ministries, Convention Focal Points and key stakeholders, including CSOs, and are chaired by the OFP.

The CSP will work closely with OFPs to encourage recipient countries to adopt this governance model, for the selection of projects and for a more efficient management of monitoring of the GEF portfolio. Lessons and experiences from countries with successful National Steering Committees, such as Thailand (Box 4), Brazil and Cote d'Ivoire (Box 5), will be shared.

Box 4: Thailand's National Steering Committee

The GEF National Steering Committee in Thailand was launched during the GEF-7 National Dialogue. It is chaired by the OFP and comprised of members from all relevant ministries, including the PFP. The Committee is responsible for determining policies and guidelines on the selection and implementation of GEF projects.

The prioritization of projects is supported and guided by six independent Focal Area Technical Working Groups, consisting of members from relevant government agencies, CSOs, academic institutions and the private sector, responsible for the preliminary screening project proposals, before submitting to the GEF Steering Committee for consideration and endorsement. Project proponents present the project concepts demonstrating ownership during the Technical Working Group meeting as well as the Steering Committee meeting. Upon the Technical Working Group's recommendation and the Steering Committee endorsement, the OFP issues the letter of endorsement.

The monitoring of projects under execution is done on a regular basis. The OFP convenes a meeting of the Committee, the Focal Area Technical Working Groups, beneficiaries and stakeholders. GEF Agencies are invited to these meeting to respond to questions from participants. These meetings enable all national stakeholders to be regularly informed on progress and, when necessary, jointly address challenges.

Box 5: Cote d'Ivoire's National Steering Committee

The GEF National Committee in Côte D'Ivoire was created by decree in February 9, 2012. It is a national framework for consultation and coordination of GEF activities, focused on promoting environmental protection and sustainability.

The National Committee is composed of 16 members and chaired by Ministry of Economy and Finance, which serves as the OFP. The Ministry of Environment and Sustainable Development, which serves as the PFP, is the first Vice-president and the Minister of Foreign Affairs is the second Vice-president. Its work and decisions are supported by a Technical Committee, composed of 12 members, which is responsible for overseeing the project cycle.

The OFP is the Permanent Secretary of the National Committee and is responsible for its administrative and financial management. The OFP also serves as the contact point for the coordination of activities. The Government provides an annual budget to support the administrative cost of the office of the Permanent Secretary.

Onboarding training for new OFPs. The CSP will provide personalized training for new OFPs to empower them to fulfill their responsibilities. Continuous support and assistance will continue to be provided as needed, following current practice.

OFP Community of Practice Platform. Many OFPs deal with similar challenges in the design and implementation of projects and can learn from each other's experiences. The CSP will create and moderate a knowledge-sharing and learning platform customized to OFPs. The platform will facilitate access to and sharing of knowledge and learning as well as provide a forum for discussion and mentoring directly amongst OFPs, enabling increased South-South knowledge-sharing and exchange. The platform will also showcase the strategic visits to selected countries for a group of OFPs to further promote South-South knowledge-sharing and exchange of best practices in project design and implementation.

*Operational support to OFPs***.** The CSP will continue to build the capacity of OFPs to manage their GEF portfolio. In order to enable OFPs to effectively oversee and monitor their GEF portfolio, it is proposed to include a component in every first GEF-8 national project that will support the OFP with dedicated funds. This dedicated support will cover the costs of field visits to enable OFPs to perform their responsibilities in overseeing project execution for the whole GEF-8 cycle. This additional support is intended to complement the CSP empowerment efforts and additional project-specific capacity building financing.

*Information management capacity building***.** The CSP will build and strengthen the capacity of OFPs' offices to create institutional memory within relevant government agencies and to ensure continuity of GEF's work in a country, regardless of changing political circumstances. Targeted support will include, among others, the creation and upkeep of filing systems for global environmental activities, projects and relevant national policies, the organization and update of database of relevant national contacts.

In all the activities described above, OFPs from LDCs and SIDSs will be given priority, to further strengthen their ownership and capacities, by tailoring activities to their specific needs.

In addition, the CSP will assess ways to complement and collaborate with the capacity building efforts by other environmental funds, such as the Green Climate Fund[441] and the Adaptation Fund.

The GEF and GCF Secretariats have agreed on an overarching framework for deeper cooperation between the two funds.

Building execution capacity of stakeholders

Executing agencies are responsible for projects on the ground. From inception, design and formulation of activities to the execution, monitoring and evaluation of a project, executing agencies can gain knowledge and experience to enhance country ownership. The CSP will adopt a tailored approach to build the execution capacity of stakeholders through the following activities:

*National executing agencies***.** The CSP will provide targeted capacity building to national executing agencies, including line ministries and other stakeholders. Tools and methods will be tailored to train stakeholders on the entire project cycle. The creation of a community of practice for national executing agencies and other stakeholders will further promote learning, knowledge-sharing, coordination and exchange of experiences. The training to national executing agencies will be piloted in Latin America and the Caribbean region, in collaboration with the Organization of American States, and gradually expanded to other regions.

CSOs. The CSP will partner with experienced CSOs which have successfully executed GEF projects to mentor and train other CSOs so that they can become partners in project execution. The transfer of knowledge, experience and lessons from CSOs mentors will build the capacity of additional CSOs to encourage new and additional partnerships. In coordination and close consultation with CSOs mentors, the CSP will develop content for the training, examples of successful projects engaging CSOs and other relevant information materials.

Enhancing outreach

OFPs and stakeholders can greatly benefit from a more targeted outreach to increase knowledge-sharing. The CSP will enhance outreach through the following activities:

Tailored outreach products. The CSP will produce a series of outreach products, including articles focused on the program for the GEF newsletter, a regular newsletter for

[441] The GEF and GCF Secretariats agreed on a Long-Term Vision on Complementarity, Coherence and Collaboration (GEF/C.60/08) to build on and enhance collaboration and cooperation between the two funds

OFPs and articles and interviews for the GEF blog. These communications products will further enhance South-South knowledge-sharing by documenting on-the-ground experiences, as well as feature successful practices, for example on National Steering Committees, that can be adapted and replicated in countries.

*Support to environmental journalists***.** The CSP will develop, convene and nurture a network of environmental journalists by providing GEF related information. Journalists will increase their knowledge on GEF projects to produce articles and stories. By providing customized information, the CSP will complement and work closely with the Secretariat's Communications Team outreach work, further enhancing the visibility of the GEF at the local and national level.

Maximizing the Contribution of Local Actions, Civil Society, and the GEF Corporate Program for the Small Grants Programme to Support the GEF Ambition in GEF-8 and Beyond

The Imperative Role of Local Action and Civil Society

Civil society makes a vital contribution to all areas of sustainable development, human rights, policy making and social services. An important characteristic of a well-functioning state is synergy between government, civil society and the private sector. Empowered civil society groups play important roles influencing and setting national and global agendas, delivering environmental outcomes, as well as supporting domestic policy coherence and sustainability. They bring citizens' voices to national and international debates, initiate and implement local solutions, and elevate local needs in national and global strategies. Local actions conceived and executed by civil society organizations (CSOs) and community-based organizations (CBOs) are critical to conserving and restoring the environment while enhancing well-being and livelihoods at the community level and beyond.

The SDGs, as well as guidance from the MEAs, continue to stress the need for translating global agreements into effective action at local, national and sectoral levels. In addition, findings of the recent IPCC Report (2021)[442] underscore the mounting risks to those "on the front lines" of the climate crisis and that this is not the time for inaction or the status quo, stressing that now is the time for governments and investors to step up their action commensurate with the scale of the crisis.

Local communities, groups and actors remain at the frontlines of climate change and environmental degradation, and they have been bearing the brunt of the socio-economic impact of the Covid-19 pandemic in recent months. Communities are experiencing a disproportionate burden of these impacts and are often marginalized in top-down planning and decision-making processes. As outlined in the GEF-8 Programming Directions, the needed actions and investments must include both global "top down" and "bottom-up" dimensions. The new GEF-8 Programming Directions further emphasize the existence of barriers, opportunities, and solutions at the country level that must be taken into consideration, including the inadequate recognition of the roles of Indigenous Peoples and civil society organizations and a call for a "whole of government" approach in GEF engagement with recipient countries.

In line with the vision of the IPCC Report, the GEF ambition for GEF-8 and beyond highlights the centrality of local actions and civil society actors in meeting global climate goals, SDGs, and poverty alleviation priorities. This in turn will require

[442] https://www.ipcc.ch/report/ar6/wg1/

that local actions carried out by civil society actors, through the GEF SGP Corporate Program and by other GEF- Financed projects and programs, play an increasing role in supporting GEF's ambition to contribute to a green and blue recovery and a healthier, more productive and resilient planet. The GEF SGP Corporate Program has played, during the last 30 years, an important role supporting local actions and civil society actors to influence and deliver on national and global sustainable development and environmental goals and commitments.

Box 6. A Snapshot of the GEF Small Grants Programme

Serving, since 1992, as GEF's unique Corporate Program that provides direct financing and capacity development to CSOs and CBOs, generating global environmental benefits and critically important local conservation, development, and livelihoods results.

Providing a demand-driven grant mechanism for local actions and support to local communities and marginalized groups that typically lack technical/institutional capacity to address environmental challenges and access to needed financial resources.

Offering small grants up to US$50,000 and strategic project window for grantmaking up to US$150,000 for scaling up and supporting initiatives that cover many communities, critical landscapes/seascapes or thematic priorities.

Channeling over US$600 million grant funding to CSO and CBOs, since its inception, with over 25,000 grants to CSOs and CBOs in 133 developing countries and economies in transition.

A lot has changed, however, since its establishment in 1992. Not only have civil society organizations and their roles evolved, but the threats from climate change, biodiversity loss, chemical pollution, and pressure on forests, oceans, landscapes, and wildlife are increasingly impacting development prospects for local communities and their livelihoods. Just in the last two years, for example, the impact of the COVID-19 pandemic has dramatically changed the context and opportunities for local communities and vulnerable populations around the world with massive job losses, shrinking economies and loss of livelihoods, all negatively impacting women,[443] as well as other marginalized groups and local communities around the world. An increased ambition and approach are required to boost the support for civil society and local communities to address these ongoing challenges.

Increased ambition and approach to move towards a SGP 2.0 in GEF-8 and beyond

the GEF Partnership is refining its ambition and strategic approach in GEF-8 and beyond, it is increasingly considering the complex interconnections of the economic, environmental, and social elements underpinning sustainable development. This will necessarily include additional measures to advance more inclusive and integrated

[443] https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/gender-equality-in-the-wake-of-covid-19-en.pdf?la=en&vs=5142

approaches and strategic efforts and investments to ensure that all actors - government, private sector and civil society – are mobilized and engaged in transforming social and economic systems for a sustainable future. Local actions supported by civil society actors, through the GEF SGP Corporate Program, and by other GEF Financed projects and programs, will have to play an increasing role to help deliver on GEF's ambition to contribute to a green and blue recovery and a healthier, more productive and resilient planet.

The Third Joint GEF-UNDP Evaluation of the SGP (2021) (hereafter referred to as the Third Joint SGP Evaluation)[444] corroborates findings from previous Joint Evaluations[445] that the SGP continues to be relevant to evolving environmental priorities at all levels as well as delivering high levels of coherence with the GEF programmatic framework. The Evaluation further suggests that "this relevance extends to SGP as an operational modality within the GEF family and as a financing mechanism that channels funds to civil society organizations.[446] The Third Joint SGP Evaluation also highlights that SGP has been consistent in its delivery of environmental results at local, national, and global levels and in generating economic and social benefits.

Experiences and lessons learned from engaging and supporting civil society organizations, through the SGP over the last 30 years, will be critically important as countries around the world are pledging to build back better from the COVID-19 pandemic. The knowledge, skills and partnerships with civil society and community-based organizations will need to, however, be mobilized at an unprecedented scale to counteract the adverse impacts of the pandemic and to muster the ideas, innovations, collective will and local action needed to build back greener. In response to the COVID-

pandemic, SGP aligned efforts with the GEF's guidance on COVID-19 and identified measures contributing to immediate response and relief efforts. As we shift from response efforts to recovery measures to build back greener, the GEF SGP Corporate Program has a key role to play to support the important roles of local communities and civil society. SGP will need to build on past successes while finding new and innovative ways to support the most vulnerable and hard-hit populations (including women, indigenous peoples and youth) to amplify country responses and most importantly catalyze and mobilize the needed civil society engagement, action and innovations to support pathways towards a green recovery. This warrants a major need for raising ambition in GEF-8.

GEF/E/C.60/01 Joint Evaluation of the GEF Small Grants Programme (2021) para 23

Joint Evaluation of the GEF Small Grants Programme (2008), GEF and UNDP Independent Evaluation Offices, p.

and Joint Evaluation of the Small Grants Programme, March 2015, GEF and UNDP Independent Evaluation Offices, Executive Summary (page 24

GEF/E/C.60/01 Joint Evaluation of the GEF Small Grants Programme (2021) Para 29

In GEF-8, the GEF's ambition is to increase the scale and scope of financing for civil society while elevating the GEF SGP Corporate Program as the premier GEF grant mechanism and platform for civil society and local communities for the global environment. This will build on lessons learned of over nearly 30 years of the GEF SGP Corporate Program implemented by UNDP, including the long history of directing investments to priority geographic areas in line with its landscape-seascape management approach. These investments at landscape and seascape levels have included community-based and multi-stakeholder governance approaches and efforts that harness traditional knowledge, support local innovation and to share knowledge. As further detailed below, it is proposed that the GEF SPG, implemented by UNDP SGP, will further strengthen its contribution to (i) Community-based management of threatened ecosystems and species; (ii) Sustainable agriculture and fisheries, and food security; (iii) Low-Carbon Energy Access Co- Benefits; (iv) Local to Global Coalitions for Chemicals and Waste Management; and (v) Catalyzing Sustainable Urban Solutions.

It is further envisaged that GEF SGP Corporate Program will (i) further strengthen alignment with GEF Focal Area priorities; (ii) support delivery of the Integrated Programs proposed for GEF-8; and (iii) continue playing an important role in supporting and delivering on MEA and SDG commitments. It is proposed that further efforts be made to extend partnerships with other relevant GEF Agencies and partners to facilitate civil society engagement and to drive integrated local actions that support countries' commitments to the Paris Agreement, the Post-2020 Global Biodiversity Framework, Land Degradation Neutrality targets, the UN Decade on Ecosystem Restoration, and other relevant global initiatives.

Pathways for further defining and informing a longer-term vision and modalities for the GEF SGP Corporate Program in GEF-8 and beyond.

As the GEF is setting out a new and more ambitious agenda to expand the GEF SGP Corporate Program and move towards SGP 2.0 in GEF-8, the Secretariat proposes to initiate a stock-taking and consultative process to further inform and detail the new operational modalities and models (see below). This approach is in line with the findings and recommendations of the Third Joint SGP Evaluation urging the GEF to take stock of the past 25+ years of programming to inform future replenishment discussions. It is expected that this stocktaking exercise will commence in early September 2021, and that the early findings of this stocktaking and consultative process will inform key elements and components of the proposed SGP 2.0 in GEF-8, including the proposed:

Strategic initiatives and cross-cutting priorities for SGP in GEF-8 and beyond.

Expansion of the GEF SGP model, including opportunities for other Agencies to access financing from the GEF SGP Corporate Program, as well as exploring operational models to extend micro-finance as a new innovation and implementation modality.

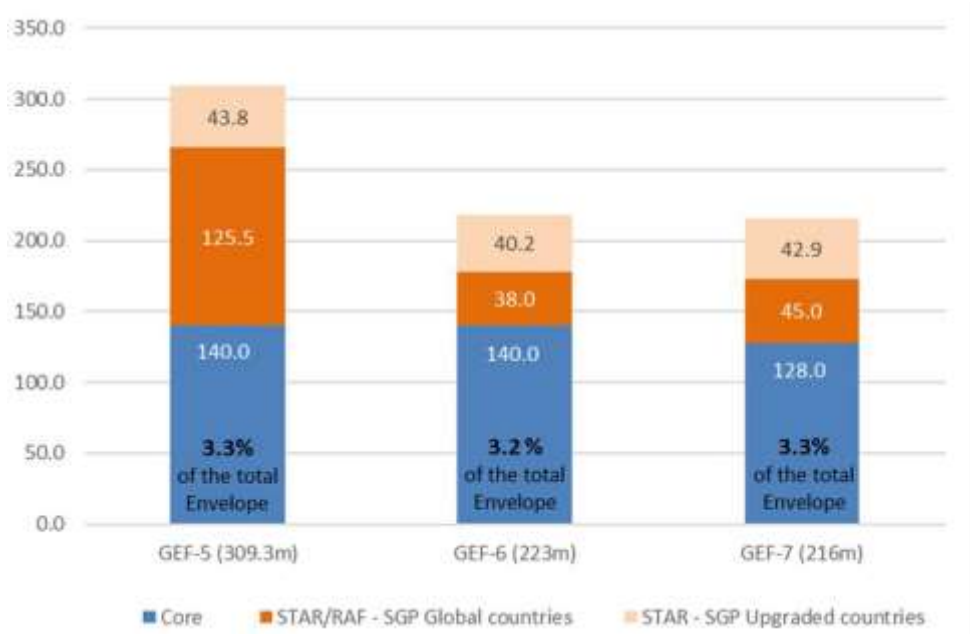
Recalibrations of key SGP modalities, implemented by UNDP, including updating eligibility criteria related to the SGP universal access/opportunity and SGP upgrading policies.

Early findings of the stocktaking and consultative exercise will be incorporated in forthcoming GEF-8 Replenishment documents. In addition, the planned SGP Implementation Arrangements for GEF-8 (to be prepared for the June 2022 GEF Council) will include more detail in order to support decision-making by the GEF Council at the onset of GEF -8. It is important to note, however, that the Secretariat does not expect that the findings of the longer-term visioning process will be immediately reflected in the GEF-8 implementation arrangements, but that the findings of this exercise will help guide a gradual expansion and transitional shift of the GEF SGP Corporate Program over GEF-8 towards GEF-9.

Proposed Gradual Expansion of the GEF SGP Model to Increase GEF's Financing Window for Civil Society in GEF-8 and beyond.

In past replenishment periods, the core financing envelope of SGP (in relation to the share of the total GEF financing envelope) has been limited to slightly above 3% (not including set asides provided through the GEF System of Transparent Allocation Resources (STAR) or co-financing secured by UNDP through CSOs/NGOs, bilateral and multilateral donors, foundations, private sector, governments) as illustrated in the graph below. It is also important to note that, while the overall finance has stagnated and decreased, the number of participating countries have increased from 122 to 129 countries, including the upgrading country programs that increased from 9 to 16 countries.

Figure 9. Resource allocations to the GEF SGP across recent GEF Replenishment periods (in millions)



In GEF-7, the SGP allocation to countries for the grant component to CSOs (70M), implemented by UNDP, was on average around 700,000 USD. A larger SGP core financing envelope would increase the amount of financing available to CSOs across all SGP Participating Countries. In GEF-8, the Secretariat proposes to substantially increase the share of the core allocation to the GEF SGP Corporate Program. Significantly increasing the share of the SGP core financing envelope would also help reduce reliance on STAR resources.

Most importantly, the renewed ambition to increase the financing envelope would substantially help deliver more financing to civil society organizations, including IPLCs, women, and youth. It would also help ensure the needed strategic engagement and contribution of these key actors and stakeholders to help achieve the ambitious targets set forth in the proposed GEF-8 programming directions. As further outlined in the sections below, the Secretariat propose that this will be delivered by strengthening existing mechanisms and introducing/piloting new modalities, including:

Continued and increased resource allocation for the existing SGP, implemented by UNDP. Increase in core financing should help to improve cost effectiveness and reducing reliance on country STAR allocations. Recalibrations of key SGP modalities are also envisaged, including updating eligibility criteria related to the SGP universal access/opportunity and SGP upgrading policies. In addition,

SGP strategic initiatives and cross-cutting priorities should help to further align and enhance its design and monitoring to support GEF-8 focal area priorities and the proposed Integrated Programs for GEF-8.

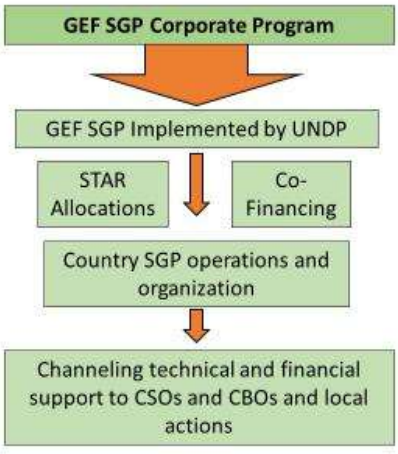
Establish a new financial window to allow an increased number of GEF Agencies to channel resources to catalyze engagement, actions and sustainable innovations by civil society actors to support GEF priorities and ambitions. This is proposed to include a new and complementary finance set aside to allow new GEF Agencies to strategically and effectively engage civil society actors and leverage their important role in the delivery of targeted Integrated Programs proposed in GEF-8.

Pilot a new innovative micro-finance modality to allow a selected number of GEF Agencies and finance institutions to partner with established global, regional and/or local micro financing institutions (MFIs) to support local actions, prioritizing women, youth and IPLC to help the delivery of local and global environmental benefits in line with the GEF-8 Programming Directions.

Current SGP Model

Since its establishment in 1992, the SGP has been implemented solely by UNDP on behalf of the GEF Partnership (see Figure below). While the overall GEF funding allocations for SGP have been agreed at each of the GEF Replenishment meetings, the programmatic directions and more specific modalities have usually been presented at the onset of each replenishment cycle as part of the SGP Implementation Arrangements approved by the GEF Council.

Figure 10. Schematic overview of the current GEF SGP Model



Corroborated by findings from the Third Joint SGP Evaluation, this SGP modality has proven to be effective in delivering results over the last 25 years. The same

Evaluation highlighted, however, a set of important challenges and opportunities that suggest careful review and updates across key existing SGP financing modalities. It further recommended that the GEF should reappraise its vision for the SGP in order to expand its purpose and potential for impact as well as exploring opportunities for drawing on the expertise of its expanded Agency network. In response, the Secretariat is proposing to engage the broader GEF Partnership to gradually introduce and test a set of new modalities. These proposed modalities are outlined below, and the Secretariat is planning to work in close collaboration with UNDP, other GEF Agencies, partners and stakeholders to refine the details of these important modifications as part of the longer term vision stocktaking and consultative process leading up to the forthcoming replenishment meetings. It is envisaged that additional details on the proposed new modalities will be incorporated in the GEF-8 SGP Implementation Arrangements, to be presented to the GEF Council at the onset of GEF-8 in June 2022.

Proposed Expanded SGP/CSO Model to Increase GEF's Financing Window for Civil Society in GEF-8

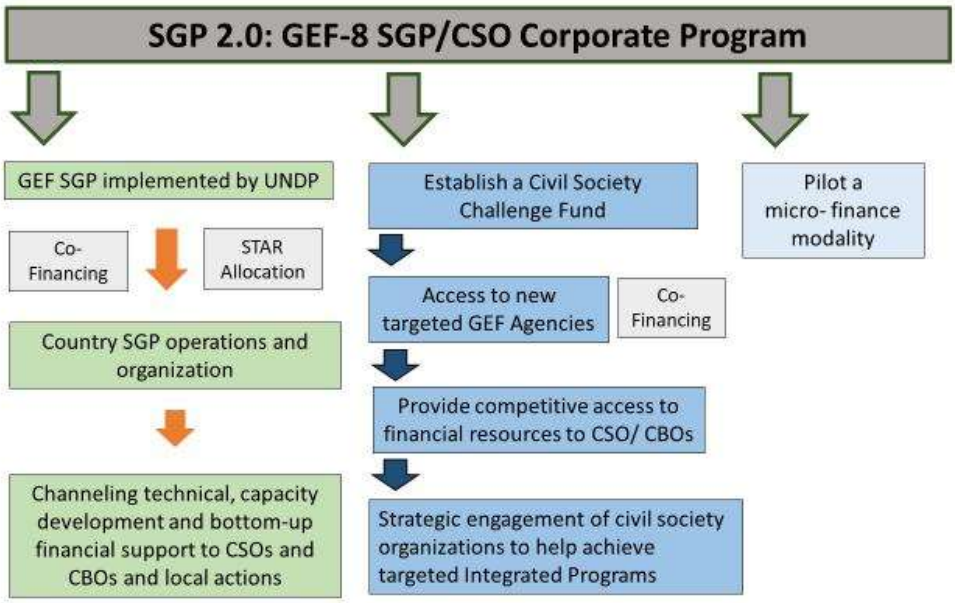
To support the GEF-8 Strategy and Healthy People Healthy Planet, the proposed overall objective of the GEF SGP Corporate Program in GEF-8 is to:

> *Catalyze and mobilize the civil society actors and local actions needed to address major drivers of environmental degradation and help deliver multiple benefits across the GEF's mandated thematic dimensions , while promoting sustainable development and improved livelihoods.*

It is further envisaged that the GEF SGP Corporate Program will help contribute to global and national aspirations for development pathways that are nature-positive, climate-neutral and pollution free. Recognizing the successes of the current SGP model that has been implemented for nearly thirty years, the Secretariat takes note of the findings of the recent Third Joint SGP Evaluation and proposes to update existing SGP modalities and to introduce/pilot some initial expanded modalities. The new SGP model proposed for GEF-8 would not only ensure the continuation of the existing SGP, implemented by UNDP, but it would also allow for new opportunities to expand and test new modalities to expand diversity of GEF Agencies to access and channel GEF resources to support civil society actors and the needed local actions and innovations. Introducing this model, the Secretariat proposes to slightly rename the GEF SGP Corporate Programme to the GEF SGP/CSO Corporate Program. This to better visualize the Secretariat's intention to gradually expand the scale and scope of the SGP modality and to allow

other GEF Agencies to engage and strategically channel resources needed for civil society organizations and actors to deliver on the GEF-8 increased ambition.[447]

Figure 11. Schematic overview of the proposed GEF SGP/CSO Corporate Model



As illustrated in the above figure, the proposed GEF SGP/CSO Corporate Program in GEF-8 would include:

Continued and increased resource allocation for the existing SGP, implemented by UNDP, as per the current institutional model:

Increase in financing should help to improve cost effectiveness, while pursuing universal access/opportunity, updating the upgrading policy, and reducing SGP reliance on country STAR allocations. In addition, SGP strategic initiatives and cross-cutting priorities will further align and enhance its design and monitoring efforts to support GEF-8 focal area priorities and the proposed Integrated Programs for GEF-8.

Establishment of a new financial window to allow more GEF Agencies to channel resources to civil society actors and strategically engage and leverage their important

This additional window for civil society is also envisaged to be closely coordinated with the efforts outlined in the Renewed Country Support Program for GEF-8 and to respond to the IEO Evaluation of Institutional Policies and Engagement of the GEF, 2021 (https://www.gefieo.org/sites/default/files/documents/reports/gef-policies-2020.pdf) highlighted, among other things, that the "The CSO Network's efforts to build itself up as a mechanism for strengthening civil society participation in the GEF – a skills building strategy, a country contact concept to help connect Regional Focal Points with the country CSOs and other GEF Partners, member recruitment – are hampered by internal tensions and financial constraints". The IEO Evaluation of Institutional Policies and Engagement of the GEF, 2021.

role in the delivery of proposed Integrated Programs:

This new window would include a competitive and complementary finance modality for other GEF Agencies to strategically channel GEF financing to civil society actors and local innovations. The window would focus explicitly on catalyzing engagement, actions and sustainable innovations by civil society actors to support GEF priorities and ambitions. It would be strictly linked to supporting the enhanced role of civil society actions and innovations needed to build back greener as set out in the proposed GEF-8 Programming Directions. It would further allow new GEF Agencies to access financing to strategically and effectively engage civil society actors in the design and implementation of GEF projects and programs. The new financing window would build on proven GEF models such as the GEF Challenge Program for Adaptation Innovation (see box below). Drawing on the operational modality of the Challenge Programme, this could include the introduction of an open competition for civil society actors (with special criteria to benefit and leverage the important roles of women and youth groups as well as IPLC) to submit innovative concepts for consideration and approval, based on calls for proposals by selected GEF Agencies. Secretariat proposes to directly engage and preselect appropriate GEF Agencies to test this modality in GEF-8. Facilitated by the GEF Secretariat, discussions and consultations with possible Agencies would follow the broader GEF process to identify Lead Agencies for the Integrated Programs proposed in the GEF-8 Programing Directions. Agencies interested in taking advantage of this new window would need to submit an expression of interest and to demonstrate capability to carry out the responsibilities associated with managing this modality, including their comparative advantage to manage a challenge program for civil society organizations. The Secretariat is at this stage considering linking this new window to a limited set of targeted and strategic Integrated Programs such as the Food System and the Sustainable Cities Integrated Program. Key selection criteria for participating civil society organizations could include CSOs and CBOs in LDCs and SIDS, preselected topics such as gender, youth and Indigenous Peoples. Other selection criteria could include a geographical focus and or topics such as biodiversity.

It is envisaged that this new financial window would allow opportunity to more strategically channel financing to civil society actors and organizations aligned with emerging GEF priorities and ambitions and to support the delivery of future GEF project and programs. The new window could also include opportunities for scaling up successful approaches and models through the GEF SGP and other partners, and further enhance the capacity of the civil society organizations to support global environmental benefits. It could provide a slightly larger level of

funding to CSOs and CBOs initiatives compared to the GEF SGP grants implemented by UNDP. It would further help contribute to increasing the financing for key civil society actors while targeting resources for these actors to meaningfully engage and contribute (at the country, regional and global levels) to the delivery of the broader and more ambitious GEF-8 programming direction.

Box 7. The LDCF/SCCF Challenge Program

An innovative GEF Challenge Program for Adaptation Innovation was introduced in the Programming Strategy for the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) in 2018. The program was designed to identify, test and highlight innovative adaptation approaches with potential to be replicated and scaled up through cooperation with institutional investors, bilateral or multilateral providers of climate finance, and other sources. It also aimed to promote innovation in adaptation technologies and techniques by supporting sustainable innovation ecosystems for micro, small, and medium enterprises (MSMEs).

The program planned to operate as an open competition, based on a call for proposals to identify innovative proposals with potential for significant adaptation and resilience benefits with an emphasis on entrepreneurship in the adaptation and climate resilience space. The process and financial terms for the Challenge Program was approved by the LDCF/SCCF Council in 2018. Since then, the GEF Secretariat has issued two Calls for Proposals, each for a US$10 million envelope, with a maximum two million and minimum of $0.5 million allowed per submission. Both calls focused explicitly on catalyzing innovation to harness the potential of private sector actors. Nine proposals out of 388 concept submissions were selected as finalists to move towards project concept development and approval. The selection criteria included (a) Project/program quality; (b) Equitable distribution of funds among eligible countries and regions; (c) Degree of innovation; (d) Potential to catalyze private sector for climate change adaptation at scale; and (e) Support for priority sectors and themes. The nine selected project concepts were invited to advance to the next stage, which involved PIF preparation and review following the normal LDCF and SCCF project review process for Medium Sized Projects (MSPs).

3. Pilot a new innovative micro-finance modality to support women, youth and IPLCs

The COVID-19 crisis has not impacted everyone in the same way. Micro-, Small and Medium-sized Enterprises (MSMEs), especially those led by women, youth, ethnic minorities and migrants have been impacted in unique and significant ways. A recent survey on COVID-19 impact among businesses[448] highlighted that nearly 62% of women-led small businesses have been strongly affected by the crisis, compared to just over half of firms led by men, and women-owned are 27% more likely not to survive the pandemic.

Even before the pandemic, MSMEs in LDCs and SIDS did not have adequate access to financial products and services to initiate and implement local solutions to

[448] https://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/ITCSMECO2020.pdf

sufficiently contribute to global environmental benefits.[449] Green microfinance has focused mostly on the climate change aspect and other environmental areas remain underdeveloped. MSMEs and community-based organizations have a clear interest in investing in nature-based solutions, adaptation and biodiversity. They nevertheless often lack the know-how and adequate financial instruments to do so. The business case for investing in these local actions and solutions is increasing and there is a potential untapped potential of other GEF Agencies to deliver microlending products to generate GEBs. The proposed new modality would allow strategic partnerships with a selected number of GEF Agencies and finance institutions to further leverage their engagement with established global, regional and/or local micro financing institutions (MFIs) to support local actions, prioritizing women, youth and IPLC entrepreneurs to help the delivery of local and global environmental benefits. It would promote green micro, small, and medium enterprises while prioritizing nature-based solutions to generate environmental outcomes to support GEB targets set out on the GEF-8 Programming Directions. Introducing and testing this new blended finance component of the GEF SGP/CSO Corporate Program would allow the GEF to engage new GEF Agencies to partner with established MFIs that can combine blended financing mechanisms with technical assistance focused on women, youth and IPLC entrepreneurs to support the needed innovations and design of sustainable financial products that could attract additional private sector investment. The GEF Secretariat proposes to directly engage and preselect appropriate GEF Agencies to pilot this modality in GEF-8. The selected Agency(s) would then in turn facilitate the selection of the appropriate MFIs that would execute and monitor environmental impacts and actions by the MSMEs they support in line with the proposed GEF-8 results architecture.

Efforts to further define this new financing window for the GEF SGP/CSO Corporate program would draw on the learning, knowledge and good practices from other GEF experiences (e.g. Adaptation SME Accelerator project, CC Blend project through the Challenge Program, etc.).[450]

It is envisaged that, if principally agreed by GEF-8 replenishment participants, the two new proposed modalities (outlined above) would be further developed and presented at the next Replenishment meeting in January 2022, taking advantage of the early findings of the stocktaking and consultative process to be launched in September 2021.

There is a potential untapped significant GEB impact potential from GEF finance that could be brought to bear with certain implementing Agencies and MDBs to guarantee lines of credit with commercial finance to focus microlending products on generating and monitoring impact for GEBs

E.g GEF's involvement in the European Inclusive Finance Network (https://www.european-microfinance.org/).

Proposed modifications to existing SGP modalities, principles and criteria

As mentioned above, the Third Joint SGP Evaluation highlighted a set of important areas for improvement suggesting careful review and potential updates across key existing SGP financing modalities. In response to these recommendations, important updates and revisions to some key modalities and principles are envisioned, including:

Facilitate Universal Access/Opportunity: In line with the SGP Implementation Arrangements for GEF-7, approved by the GEF Council in 2018,[451] the SGP has continued to expand its country coverage in GEF-7.[452] The SGP has now expanded to 129 countries (113 countries are supported by the core allocation and country STAR under the SGP Global Programme, and 16 countries are SGP Upgraded Country Programmes financed by allocations from their respective country STAR). During GEF-8, additional efforts will be extended to facilitate opportunities to ensuring that all eligible and interested countries are provided the opportunity to participate in SGP. Efforts to expand universal access/opportunity would need to take into account the overall resource envelope for the SGP and to be assessed in connection with the proposed process to review/recalibrate the SGP Upgrading Policy (see below).

*Recalibrate the SGP Upgrading Policy***:** The SGP upgrading policy,[453] approved in GEF-5, responded to the need to transition the longest standing and most mature SGP country programs to a new funding regime that would enable more budgetary control by country programs and the opportunity to raise increased funding on their own. It also responded to *"the rapid growth and the need for mature countries to expand and take on greater responsibilities while liberating core funds for new countries to access the programme".* The Third Joint SGP Evaluation, however, concluded that *"the disadvantages and risks of the upgrading process outweigh its short-term financial advantages*", including transfer of funding pressure from the corporate program level to the individual country STAR allocations. In this regard, GEF's Management Response to the

GEF/C.54/05/Rev.01, GEF Small Grants Programme: Implementation Arrangements for GEF-7

At the onset of GEF-7, there were 23 eligible countries that were not receiving funds from the SGP, of which only two (Nicaragua and Chile), had ever received SGP funds previously. (Further note that Malaysia is in the process of transitioning to UCP, while Angola, Bangladesh, Eswatini and Gabon joined as new country programs under the SGP core/ Global Programme in GEF-7. Also note that Pakistan and Thailand are UCPs that have not received any STAR funding in GEF7.)

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Joint Evaluation, approved by Council in June 2021,[454] outlines a process to review and revise the SGP upgrading policy in collaboration with UNDP and other stakeholders. The options to modify the criteria will need to carefully consider/balance needs for expansion and programmatic development as well as issues such as CSO capacity, potential for global environmental benefits, and transaction costs. Options to be considered may include**:** (i) elimination of the upgrading policy altogether and provision of an increased core resource envelope, set-aside for SGP, to support greater coverage and continuity of resource flows to countries or (ii) modification of the upgrading policy and criteria to consider government and CSO relationship, CSO capacity and potential for global environmental benefits.

Optimize the proportion of SGP financing for CSOs and CBOs: SGP serves as GEF's only dedicated funding mechanism for civil society. In the past, the Secretariat has tracked the proportion of SGP financing allocated to CSOs and CBOs (using the methodology defined and calculated in the First Joint SGP Evaluation in 2008.[455] This allocation remains a valuable marker of SGP operations and the Secretariat's ambition to maximize the GEF financing directly flowing to CSOs and CBOs. In addition to considering past allocations as reference and benchmark, the Secretariat proposes to ensure adequate GEF-8 SGP funding for capacity building, knowledge management, monitoring and evaluation as well as the needed technical assistance and communication components. As outlined in the GEF's Management Response to the Third Joint SGP Evaluation,[456] GEF is considering the benefits of ensuring that SGP program resources flowing directly to CSOs are carefully defined and determined in terms of terminology and methodology, and that benchmarks to maximize the flow of resources to CSOs take into consideration programmatic costs and the overall financial envelope/resources for the GEF-8 SGP. GEF proposes that this proportion should be defined in relation to the overall resource envelope and strategy of the SGP and to be incorporated in the GEF-8 GEF SGP Implementation Arrangements to be approved by the GEF Council.

*Adjust delivery mechanisms at country and global levels through improved governance modalities***.** Leading up to GEF-8, planned assessments and consultations at the country level will seek to provide further input and feedback on, for example, potential improvements to the organization of the SGP National Steering Committees in relation to its decision-making ability and transparency,

The term "upgrading" refers to the transition of the longest standing and most mature SGP country programmes (excluding LDCs and SIDS) to a new funding regime reliant on access to country STAR resources

https://www.gefieo.org/sites/default/files/documents/reports/sgp-2008.pdf

GEF/E/C.60/09: Management Response to: Third Joint GEF-UNDP Evaluation of the Small Grants Programme (para 6-7)

role in selecting grants for CSOs and CBOs, as well as exploring options of finding complementary mechanisms or entry points to increase the opportunity of CSOs and CBOs to influence national policy. At the global level, planned assessments and consultations will help to identify potential improvements in terms of the organization and facilitation of the SGP Steering Committee to provide more timely and strategic directions as well as increasing participation of other key stakeholders. It is also envisaged that as the GEF roll-out new modalities to expand access to other GEF Agencies and pilot micro-financing model that additional modifications to the Global SGP Steering Committee might be warranted. This could provide opportunities to include new members to leverage opportunities for additional learning and knowledge sharing.

Elevate opportunities for innovation, scaling up and replication: SGP has a good track record of financing and testing innovative ideas, tools and methods at the local level. There is still potential, however, to further identify, monitor and learn from factors that facilitate opportunities to scale them up through:

(i) partnerships and multi-stakeholder alliances and facilitating broad-based engagement across relevant stakeholder groups to mobilize CSO participation with a view to building, strengthening and catalyzing diverse coalitions of actors to contribute towards transforming the key economic systems that threaten the global environment; (ii) fostering scalable digital partnerships at a suitable level for small-scale actors (such approaches have linked smaller businesses to larger entities and provided safer, more efficient and accurate solutions); and (iii) targeted support towards scaling up finance for community-based environmental actions, including businesses and enterprises.

Advance private sector and business-oriented approaches: In alignment with the GEF's Private Sector Engagement Strategy (GEF PSES 2020),[457] SGP will advance its efforts to strategically support multi-stakeholder platforms and dialogues to seek greater scale and impact as well as identifying private sector entry points at the global and local levels. This may include further efforts to leverage entry points for Private Sector Engagement and mechanisms to work at the micro, small, and medium enterprise (MSME) level[458] and forging partnerships through related private sector entities, including through collaboration with local micro-financing entities and MSMEs at the local and

[457] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF_C.58_05_GEFs%20Private%20Sector%20Engagement%20Strategy_0.pdf

[458] A recent GEF IEO evaluation on the MSME sector (https://www.gefieo.org/sites/default/files/documents/council-documents/c-60-e-05.pdf) showed that MSME projects typically involved more types (scales and legal structures) of private sector actors, suggesting that these projects engage a wider spectrum of private sector actors across the value chain. More than half of MSME projects involved at least three types of private sector actors.

community level. Building on experiences with micro-credit in a number of SGP Country Programmes, in addition to the conventional grant modality, appropriate and context-specific opportunities could be explored on a pilot basis on a limited scale, partnering with existing programs and supporting relevant CSOs and institutions that provide soft loans to small-scale initiatives.

Proposed Strategic Initiatives and cross-cutting priorities for SGP in GEF-8

Strategic Initiatives/Directions

As an overarching approach to its grantmaking modality, SGP has strategically directed its investments to priority geographical areas in line with its landscape-seascape management approach. These investments at the landscape and seascape level have promoted community-based and multi-stakeholder governance approaches and efforts that harness traditional knowledge, support innovation, and share knowledge. The Third Joint SGP Evaluation highlighted the value of this approach to grant-making. At the same time, it also informed that the ways that SGP interventions are packaged could be simplified and consistent across its operational phases.[459] As mentioned above, leading up to GEF-8, additional efforts will be made to further improve SGP initiatives' alignment with the GEF-8 proposed integrated programs and focal area priorities. In this regard, countries will be required to target investments in geographical contexts where integration can foster such alignment/complementarity by supporting locally driven solutions.

Building on findings from the Third Joint SGP Evaluation and broader lessons learned in GEF-7, the following five strategic initiatives - consistent with those of GEF-7[460] – are envisaged to be strengthened and further developed in GEF-8:

Community-based management of threatened ecosystems and species: SGP grants would support conservation and sustainable use, including engaging and supporting local CSOs and CBOs in the management of protected areas and corridors, forest landscapes, integrated river-basins, and large marine ecosystems, as well as mainstreaming biodiversity in key production sectors. This would include support to territories and areas conserved by indigenous peoples and local communities and to CSOs and CBOs in the management and co-management of other private and public protected areas. These priorities are

GEF/E/C.60/09: stated that "The ways that SGP interventions are packaged, such as strategic initiatives, focal area results, innovation programmes and Grantmakers Plus initiatives, should be simplified" and further concluded that "a small number of thematic frameworks (e.g., landscape/seascape approach) may be adopted to steer or shape programming, incentivize innovation or address urgent and emerging issues, but the pace of change should be slow enough to allow for local adoption and internalization by local communities."

GEF/C.58/05

consistent with the approach proposed for the Wildlife Conservation and Development Integrated Program.

Sustainable agriculture and fisheries, and food security: SGP would continue to support community-driven initiatives across production landscapes/seascapes to enhance the sustainability and productivity of priority socio-ecological systems, with a focus on food staples and commodities, livestock, and aquaculture. These initiatives include the application of agroecological, regenerative, and biodiversity friendly principles and practices based on traditional knowledge and agronomic/agro-ecological science. SGP would also continue to support community-based efforts to achieve national and local Land Degradation Neutrality targets. The priorities are consistent with the Food Systems Integrated Program and with the Ecosystem Restoration Integrated Program where livelihood and food security benefits are explicitly linked.

Low-Carbon Energy Access and Co-Benefits: Building on its experience in supporting affordable clean energy in remote areas and vulnerable communities, SGP would scale- up low carbon transformation by de-risking private sector investment and supporting innovation and adoption of cutting-edge technologies relevant to the community context, including energy access for health services and digital technologies. This is very much in line with the Net-zero Accelerator Integrated Program and with potential to scale-up adoption of technologies.

Local to Global Coalitions for Chemicals and Waste Management: SGP would support actions to benefit local communities in rural and urban areas enduring threats from chemicals and waste, either as users or consumers, through innovative, affordable and practical solutions to chemical and waste management, including plastics and e-waste management, supported by existing multi-stakeholder platforms and partners. These priorities will directly support the Integrated Programs on Circular Solutions to Plastic Pollution, and on Elimination of Harmful Chemicals from Supply Chains.

Catalyzing Sustainable Urban Solutions: SGP would continue to pilot activities to target vulnerable people and communities in the urban context, promoting an integrated management approach through public-private partnerships. This would include support to low-emission and resilient urban development such as waste and chemical management, energy, transport, watershed protection in rural hinterlands through compensatory ecosystem services arrangements, restoration corridors, and biodiversity conservation. These priorities are consistent with the Sustainable Cities Integrated Program.

As part of its overarching approach, SGP will further continue efforts to enhance social inclusion to strengthen integration and engagement of IPLC, women, youth, and

persons with disabilities. SGP will continue supporting actions to:

promote women's role in the implementation of projects and promote gender equality and women's empowerment;(ii) build the capacity of Indigenous Peoples to engage in and lead SGP grant activities (building on the successes of the SGP Indigenous Peoples' Fellowship Program);

incorporate youth participation and role in SGP projects, supporting skills trainings, mentorship programs and channeling youth perspectives in community, national and international discourses: and

promote participation of persons with disabilities to ensure concrete results on both environment and socio-economic issues.

In addition to addressing focal area objectives, as noted above, each SGP initiative will also be linked to one or more of the Integrated Programs proposed for GEF-8. This will enable countries to align potential interest in the Integrated Programs with priorities for SGP funding in targeted geographies. This will create opportunities for countries to mobilize and harness CSO and CBO contributions toward achieving impactful outcomes at scale. It is also expected that the stocktaking and consultative process to elaborate the long-term vision for SGP will contribute to further refining and detailing these strategic initiatives and cross-cutting priorities.

SGP Cross-cutting priorities

In addition to the proposed efforts to strengthen and further develop the SGP strategic initiative/direction (mentioned above), the following cross-cutting priorities will be further defined and strengthened in GEF-8:

Facilitating CSO-Government-Private Sector Policy Dialogues: The GEF Private Sector Engagement Strategy (PSES), approved by Council in 2020, highlighted the need to mobilize the private sector as a key agent for market transformation. During GEF-8, SGP would, in line with the PSES, expand its Dialogue Platforms to provide more opportunities for civil society and local actors/communities to influence policy and regulatory schemes and to participate in important planning and technical dialogues and platforms with governments and the private sector. This would provide increased opportunities for civil society actors (including Indigenous Peoples, women, youth and persons with disabilities) to influence broader national agendas, provide localized/indigenous solutions for development and environmental challenges and benefit from public and private financing. At the same time, it could increase the potential for private sector actors to invest in projects and change policy to support sustainability at the local level. These platforms could also provide opportunities to discuss possible shifts in relevant policies and practices as well as encourage strong partnerships with the private sector to help scale up successful projects in the future.

Supporting Capacity Development: SGP-supported projects have traditionally included capacity-building, communication and experience-sharing elements. In addition to capacity development activities incorporated in regular SGP projects, it is expected that capacity development as a multifocal program area will continue to be supported as a SGP grant window in GEF-8. These grants consist of stand-alone projects that are strategic and support the work of the other areas of work at the portfolio level.

Advancing knowledge management and learning: Knowledge, learning and communication are critical to the success of SGP and its impacts, especially considering its reach to CSOs and CBOs with limited capacity in remote areas. In addition, learning plays an important role in project and grantee sustainability, as well as for the broader adoption of efforts through scaling up and replication. SGP has a long track record of capturing knowledge generated at the project, national and global levels in diverse knowledge management and communications products, using innovative knowledge exchange tools to share lessons learned globally. Similarly, at the local level, SGP has supported knowledge exchanges and training workshops, as well as other important efforts to establish and nurture local networks of CSOs and CBOs. Considering the importance of knowledge and learning, SGP would continue to test and ground-truth appropriate community technologies, methods, and approaches, and promote uptake and scale-up by further improvement of existing platforms (e.g., the SGP Digital Innovation Library and South-South Cooperation Platform, and the SGP Innovation Library) for sharing community innovations.

The SGP would also support local and national CSOs (including members of the GEF CSO Network) in the design of capacity development and knowledge and learning components of SGP Country Programmes, including exploring opportunities for these CSOs to carry out these initiatives as part of grant projects. In addition, more dedicated efforts would be placed in GEF-8 on ensuring that lessons from the SGP are more strategically fed into the wider GEF knowledge management system and into current and future GEF projects and programs.

Aligning Results Measurement, Monitoring and Reporting Framework with the new SGP Ambition

A robust results framework for the SGP, as a GEF Corporate Program is critical. Throughout its operational phases, GEF has aimed to broadly align SGP strategy with its corresponding focal area programming directions and bring the SGP results framework in line with the GEF's Results Framework.[461] In GEF-7, SGP's results framework and

[461] In GEF-7, SGP's indicators were established and its methodology adjusted to monitor, measure and report its contribution in alignment with 5 of the 11 most relevant GEF-7 Core Indicators.

indicators were adjusted to monitor, measure and report on relevant GEF-7 Core Indicators outlined in the updated results architecture.[462] In GEF-8, efforts will be made to continue aligning the SGP's monitoring framework and methodology with the proposed GEF-8 Results Measurement Framework, building on lessons learned to-date within the SGP to strengthen socio-economic measurements and indicators to better account for the full scope of SGP's results and impacts. SGP will continue to strengthen a number of performance measurements to better monitor the efficiency of the GEF SGP Corporate Program as GEF's primary financing mechanism dedicated to financing and building capacity of civil society and local communities to generate global environmental benefits.

In addition, the stocktaking exercise proposed to be initiated over the next months is expected to further help define and elaborate a more detailed theory of change for the GEF SGP Corporate Program. This is expected to help finetune any proposed modifications to SGP measurements and indicators to better capture outputs and outcomes, including from both SGP strategic initiatives and cross cutting priorities.

VI. PRIVATE SECTOR ENGAGEMENT

The Private Sector Engagement Imperative

As documented in the succession of WEF Global Risks Reports,[463] environmental risk has been well acknowledged by political and business leaders with the level of concern rising steadily throughout the last two decades. In 2021, the WEF Global Risks Report showed that the highest ranked global risks by impact and by likelihood were all environmental, including extreme weather events, human-made environmental damage and disasters and major biodiversity loss.

There is no doubt that the transformational changes needed in the coming decade will not take place at the scale or the speed required without the full engagement of the private sector. It requires broad coalitions of governments, both national and sub-national, the private sector at all scales, citizens (as consumers and investors) and academia.

Business responses to these challenges and the COVID 19 pandemic are driving business action in the "Decade of Delivery" and to realize these goals, the private sector has developed many new initiatives and commitments:

Net zero GHG emissions goals

GEF/C.54/11/Rev.02: UPDATED RESULTS ARCHITECTURE FOR GEF-7 (https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.54.11.Rev_.02_Results.pdf)

The World Economic Forum 2021 The Global Risks Report

Land, forest and ecosystem restoration targets (Bonn Challenge)
Biodiversity targets (21 Action Targets of the post-2020 Global biodiversity framework)
Reporting against key SDG goals and targets
Creating circular economy systems and a renewables-based bioeconomy
A reduction in the use of hazardous chemicals
Water use efficiency, wastewater management and water stewardship
Certification, standards, traceability and reporting protocols
Build back greener/better
Food Systems Summit recommendations
WBCSD Vision 2050[464] – Time to Transform

The collective message of these global initiatives points to the need for systems transformation be it what we eat and how food is produced (food systems), how we live (city systems), how we move and power the economy (energy transition), and how we produce and consume goods and services (circular economy) and manage water and biodiversity (natural systems).

The GEF places high priority on the need effectively engage with the private sector if we are to succeed in our mission and deliver lasting global environmental benefits at a faster rate, with a broader scale, and more efficiently than could be achieved without partnerships with the private sector. Actions under GEF-8 programming directions support a vision in which the GEF acts as a catalyst and enables the private sector, at all scales, to tackle the key drivers of environmental degradation, to reverse unsustainable global trends and to extend the delivery of global environmental benefits so that they:

Occur faster and at a larger scale;

Are delivered more efficiently; and,

Are more durable than could otherwise be achieved.

Investors are increasingly considering ESG issues in their investment decision-making and are demanding firms provide consistent, comparable, and reliable information on topics. A number of jurisdictions have also adopted or are in the process of developing reporting requirements for companies to provide detailed information on a wide range of sustainability issues. The recommendations of the Task Force on Climate Related Financial Disclosures (TCFD)[465] provide firms with a voluntary framework that they can use to disclose how climate-related risks and opportunities are integrated into governance, strategy, risk management, metrics and targets. The task Force on Nature Related Financial Disclosures (TNFD),[466]

The World Business Council For Sustainable Development 2021, Vision 2050
The Taskforce on Climate-Related Financial Disclosures
The Taskforce on Nature-Related Financial Disclosures

once finalized, will develop a framework to assess, manage and report on their dependencies and impacts on nature.

It is against this background that the private sector is driven to act, invest and ultimately transform economic systems that reward sustainability performance.

Measures to engage the private sector, through the Integrated Programs, blended finance and other entry points to the GEF portfolio, must take into account the longer-term vision championed by private sector leaders and provide pathways for engagement that are compatible with a long-term vision.

Many private sector focused initiatives have set targets for 2030 or 2050 timeframes. The WBCSD Vision 2050 (Version I in 2011, Version II 2021) outlines societal must-haves for a sustainable world, the SDGs set targets and metrics for 2030, Net Zero commitments that align to the Paris Agreement posit a 2050 timeline, as does the CBD 2050 Vision for Biodiversity.

GEF-8 should therefore be considered as a foundation to enable longer term systemic transformation with consideration and planning for private sector engagement that incorporates concomitant time horizons, which can also build robust and durable project outcomes into the next two GEF investment rounds, from 2022-2026 (GEF-8), 2026-2030 (GEF-9) and beyond the GEF funding horizons.

GEF-8 Strategy – Integration to Support Transformation

The defining feature of the GEF-8 private sector engagement is the opportunity to leverage Private Sector integrated approaches.[467] Systemic transformation is best addressed through integrated approaches that deliver global environmental benefits across a range of focal areas relevant to each geography and IP context.

Each IP incorporates its own set of private sector objectives, identifying the major platforms for engagement, key entry points the and expected modalities of engagement that can optimize the contribution made by the private sector to integrated approaches in delivering durable GEBs beyond the GEF-8 cycle.

In the 2021 review of GEF-6 Integrated Approach Pilot (IAP) Programs,[468] the private sector, as an actor in the transformation of markets, is noted as a critical stakeholder group across all three IAP programs:

The GEF 2020 Strategy 2015, p21-23

The GEF IEO Formative Evaluation of the GEF Integrated Approach to address the Drivers of Environmental Degradation, 2021

"Across all three programs, the integrated approach created opportunities for a range of options to crowd-in the private sector, from co-financing and parallel financing to the creation of institutional platforms for catalyzing change. The IAP program design activities involved a wide range of private sector entities at national, regional and global levels."

The review also found that IAPs demonstrated a higher level of private sector engagement by operating at global, regional and local scales thus providing multiple entry points for the private sector with solutions and contributions relevant at each level. This approach supports more systemic transformation across sectors and reaches into markets and demand centers.

As identified in GEF IEO OPS6, the dominant focal areas for private sector engagement have been in Climate Change and in Chemicals and Waste. In GEF-8, the contribution of the private sector will be better leveraged through integrated approaches across multiple focal areas with a predicted strong rise in support for biodiversity outcomes coupled to land, forest and ecosystem restoration.

As new initiatives that support integrated approaches emerge such as Business for Nature (BfN), One Planet for Business and Biodiversity (OP2B), concepts such as post COVID-19 Build Back Better/Greener, the linkages between human and environmental health under the Healthy Planet, Healthy People[469] philosophy and Nature-based Solutions (NbS) build the links across focal areas. It is through positioning the GEF as the *"hub for integration"* that the private sector can be best engaged.

Strengthening the integration between the Convention served by the GEF through approaches to tackling biodiversity loss, climate change and land degradation in conjunction will also prove a valuable contribution to raising the ambition of non-state actors and the formation of new partnerships.

Working with Multi-stakeholder Platforms

GEF needs to maximize its engagement with the broad range of private sector actors that are critical for systems change. In line with the proposed programming directions for GEF-8 and GEF's revised PSES, GEF will develop extensive and broad-based engagement across relevant stakeholder groups, including the private sector and CSOs, with a view to building, strengthening and catalyzing diverse coalitions of actors that can meaningfully contribute towards transforming the key economic systems that threaten the global environment.

Multi-stakeholder platforms for sustainability provide the GEF with the opportunity to scale private sector partnerships vertically, comprehensively through value chains and

[469] https://www.unep.org/resources/report/our-planet-healthy-planet-healthy-people

horizontally, through landscapes, cities, countries and regions. This horizontal and vertical interconnectivity offered through platforms can extend the reach and influence of GEF funding well beyond specific geographies and bring a wider range of resources and solutions from all levels of the private sector.

The Good Growth Partnership, the FOLUR and Sustainable Cities Impact Programs, GEF Planet GOLD, GPAP, E-waste, EE Accelerators, the 3% Club and E-Mobility are all prime examples of multi-stakeholder platform effectiveness championed by the GEF.

Each IP will engage existing leading platforms or co-create with the private sector a multi stakeholder platform to drive the systemic changes needed across the networks of actors in economic sectors and support the delivery of environmental benefits on-the ground in an integrated manner.

To foster engagement of the private sector, the IPs will convene private sector working groups as needed to support the development of initiatives, to make program adjustments in response to changing conditions and to maintain connectivity with the leading private sector actors to foster a collaborative working environment and exchange of ideas.

In line with the GEF PSES goal to support the engagement of entrepreneurs and the GEF IEO recommendations to engage MSMEs,[470] each IP will include flexible approaches that can target specific desired outcomes or address key systemic challenges within the societal or geographic context. These flexible approaches may include challenge programs, competitions and coopertitions, innovation hubs and awards that do not require extended planning periods or complex administration that could deter this segment of the private sector from participation.

The Private Sector as a Partner of Choice

The GEF seeks to become a partner of choice for the private sector, however in OPS6,[471] less than half (43%) of the private sector respondents interviewed agreed that GEF's ability to engage the private sector was a comparative advantage and highlighted a lack of awareness in the broader engagement opportunities with the private sector beyond financing.

There is a need for greater understanding of the respective roles of both the private and the public sectors in the actions of delivery and modalities of engagement. GEF-8 will support approaches that define where the public and private sectors can best work collaboratively in the pursuit of global environmental benefits. The capacities of the private sector, above and beyond financial resources, include a wide range of engagement modalities that optimize the

GEF IEO Evaluation of GEF Engagement with Micro, Small, and Medium Enterprises (MSMEs) 2021
GEF IEO Sixth Comprehensive Evaluation of the GEF: Update and Synthesis, 2018

contributions of the private sector to the transformational agenda and are documented in the 2020 GEF Private Sector Engagement Strategy.[472]

Recognizing the Contribution of the Private Sector

The GEF will permit private sector actors that are actively engaged in GEF IPs and initiatives to use the GEF logo for marketing and awareness purposes, subject to prior written approval from GEF communications with expressly defined and timebound usage parameters. The application of the GEF logo may feature on company websites, annual integrated and sustainability reporting, social media and events banners which have a direct reference to the company's partnership activities in the GEF IPs. Private sector actors engaged in the GEF partnership will be invited to GEF events, such as the private sector COP days, to the GEF Assembly and other relevant meetings to highlight the impact and benefit of private sector engagement and to raise awareness of GEF's work with the private sector.

Investing in Integrated Approaches

New and innovative approaches for the private sector to support the goals of systemic transformation and integration in GEF-8 have been identified as part of the IP development and TAG process with private sector and multi-stakeholder groups.

Valuing and Monetizing Nature-based Solutions (NbS).

Through new NbS financial instruments and blended finance, additional private sector investments can bolster the country STAR allocations, driving more market-based finance into countries with the potential to well exceed current GEF-7 investment levels. This would further facilitate investment in ecosystems stocks and flows from the private sector and create new ways to value companies, measure performance and drive investment into the most sustainable companies.

In 2019, US$45 billion was raised through carbon pricing revenues and more than 14,500 crediting projects have been registered, generating almost 4 billion tCO2e of cumulative carbon credits with the forestry sector credits representing 42% of all credits issued in last five years. Modelling from IETA estimates the value of prospective NDC investment through NbS at US$ 250 billion.[473]

A NbS policy-to-finance facilitation platform will work to support countries in their endeavors to access finance and that the relevant IPs will work to address through the structural and technical challenges in the countries where they operate. Relevant IPs will aim at building

[472] The GEF Private Sector Engagement Strategy 2020, table 1, p17.

[473] International Emissions Trading Association 2019 The Economic Potential of Article 6 of the Paris Agreement and Implementation Challenges

national capacity for countries to undertake NbS where the private sector is increasingly recognizing that by including NbS in their decisions and investments, they can create greater value for themselves and protect the natural capital upon which they are dependent. In addition, investments undertaken at national and regional levels will provide the opportunity to share best practice and information between the public and private sector and harmonize their NbS approaches and to further facilitate private sector finance.

The WEF report Nature and Net Zero[474] identifies opportunities to realize Net Zero emissions targets and other corporate climate mitigation commitments on the ground through GEF projects. The GEF, as the "hub of integration" is well positioned to direct investment into national level priorities through the NbS approach. In line with the GEF PSES to work with multi-stakeholder platforms, emerging initiative such as the Taskforce on Scaling Voluntary Carbon Markets (TSVCM) or the Voluntary Carbon Markets Integrity Initiative (VCMI) can be engaged to support these processes and align private sector efforts with the country level priorities.

While about 130 Nationally Determined Contributions (NDCs) include the use of nature for climate mitigation and adaptation purposes further work is needed to translate commitment into policy certainty for investors and project proponents. Through the IP portfolio, opportunities for the private sector to invest upstream in countries meeting their Nationally Determined Contributions, targets under the post 2020 framework and land degradation neutrality ambitions can be facilitated by investments in the enabling environment and national level capacity.

GEF Digital Platform - Creating the Digital to Environmental Dividend.

The technologies of the Forth Industrial Revolution (4IR) offer the opportunity to create wide-reaching environmental benefits through the application of data, the connectivity of devices through the IOT, artificial intelligence and machine learning.

The scale and cost effectiveness of these technologies can help countries move away from manual, labor intensive analog processes to automated and real-time digital applications that save time and money while supporting the delivery of GEBs.

Although the private sector is active across the deployment of 4IR in the global North, closing the digital divide with recipient countries in the global South can also support a wide range of environmental benefits delivered through systems improvements with more equitable access to economic opportunities, socio-economic benefits and jobs creation.

[474] World Economic Forum 2021, Nature and Net Zero

A new GEF Digital to Environmental Dividend (D2ED) program will support countries develop their capacity through direct engagement with the private sector across four main thematic areas that have been identified as needs in the IP portfolio.

Monitoring and evaluation

Where Earth observations through remote sensing and satellite data can be deployed to assess and monitor areas of many millions of hectares that would otherwise be impossible to manage with manual or land-based systems. Machine learning and artificial intelligence can be used to augment observations and link data sets to refine integrated spatial planning baseline setting, prioritization, monitoring, evaluation, and modelling in key IPs:

In the Ecosystem Restoration IP, the use of a Planetary Computer, Trends Earth for both defining and monitoring land restoration activities funded under GEF-8 and linked to spatially explicit, geo-referenced LDN targets and related implementation efforts. This would benefit future monitoring and national reporting of both LDN and ecosystem restoration efforts to implement targets set under the MEAs at national level.

In the Circular Solutions to Plastic Pollution IP machine learning can be used to identify plastic production and consumption patterns and prioritize key intervention points. For example, machine learning and block chain can also be used to connect businesses along the plastics value chain from manufacturers to consumers to recycling facilities. These insights could also power passive cleanup systems to help remove plastic that is already impacting our marine ecosystems.

In the Wildlife Conservation for Development IP cloud computing can automatically identify animals in videos, making it easier, more affordable, and faster for researchers and conservationists to study camera trap footage.

In the International Waters focal area satellite data and machine learning capabilities can develop approaches that include both field-scale and watershed-scale data to make recommendations based on program goals such as reducing groundwater demand, improving irrigation, reducing nutrient runoff, or building vegetation buffers. The result is both a region-wide and field-specific plan that identifies specific actions, ranked in order of cost-efficiency for achieving conservation goals.

Climate, water and biodiversity fintech

Climate, water and biodiversity fintech approaches use digital financial technology to catalyze decarbonization and boost biodiversity through big data, deep learning and AI. GEF's support for climate, water and biodiversity fintech will explore how 4IR technologies such as AI and blockchain can help intermediaries mobilize capital towards decarbonization and investments that are net positives for biodiversity. Standardized disclosure of climate-related and nature-related financial risks and opportunities create a supportive development environment to

achieve scale and impact. Importantly, banks and investors can use these technologies to drive scope III emissions reductions into their customers' supply chains.

On-the-ground environmental performance using the Internet of Things (IOT)

From waste sorting, to crop protection, the management of renewable energy systems, soil carbon measurements and water monitoring, the use of connected robots and the IOT to increase both automation and precision is a valuable tool in delivering a reduction in the use of chemicals, more efficient water allocations (environmental flows, water trading) and the optimal distribution or storage of renewable energy.

Both the quality and the volume of accurate data needed to make decisions on resource allocation and environmental planning can be bolstered through big data, AI and deep learning. Through networks of advanced sensors and observations in land, climate, oceans and embedded with software, network connectivity and computing capability, decision makers can collect and exchange data over the internet and enable automated solutions to multiple problem sets. Such access to information can also build more resilience into landscape action plans and optimally direct investment to maximize GEBs.

The formation of the GEF digital consortium will co-create or strengthen technology platforms comprised of leading firms and ICT providers to accelerate efforts across GEF's Integrated Programs to deliver GEBs. GEF will provide support for shared, open-access and standardized systems that can be readily deployed in the context of the recipient countries. The creation of a digital fabric as a common thread throughout the GEF Impact Programs will further support integration and scale in line with the GEF vision for private sector engagement outcomes.

In addition to the GEBs, significant co-benefits aligned to the SDG targets could also be expected, including better access and use of technologies that support gender equality, reductions in child labor, enhanced livelihoods, improved worker safety, reduced exposure to hazardous chemicals and improvements in skills and training.

The GEF will build on the efforts in existing platforms (WEF Fourth Industrial Revolution for the Earth Initiative, Harnessing the Fourth Industrial Revolution for Oceans and Harnessing the Fourth Industrial Revolution for Sustainable Emerging Cities and the UNEP Coalition for Digital Environmental Sustainability (CODES)) and advance the solutions selected and developed with interventions at the global, regional, and country level. Proposed interventions include:

The GEF will use its convening power to co-create or support coalitions and platforms with private sector partners that seek to develop and deploy technology that can deliver the environmental dividend, close the digital divide and help countries achieve their

MEA objectives. Private sector engagement from global technology leaders in platforms will be critical, along with other stakeholders, CSOs and NGOs.

Build country capacity for digital engagement (environmental, telecommunications, education and planning ministries). Countries must have expanded capacity, training, and expertise to benefit from the full suite of opportunities under the 4IR. The GEF will support specific country projects, guided by global coordination and best practices, with a focus on countries that risk missing out due to a digital divide. Regional hubs of best practice will also be considered to achieve scale and optimize data use.

Engage with private sector actors that are already leaders in sustainability and technology to further accelerate adoption through knowledge exchanges and development hubs. Leading developers that seek to support agile approaches into project design will be encouraged to join the initiative and develop new opportunities in new markets.

Build and advance tools for methodologies, tracking, and reporting. The coalition of willing partners will work on both voluntary and regulatory standards, backstopped by stakeholder consultations and strong analysis.

Dialogues and partnerships that bring technology developers and providers together with environmental experts to co-develop these innovations will ensure they are developed for the public good, to maximize GEBs while minimizing risks of unintended social or environmental consequences and target solutions for the MSME sector

Resourcing and Supporting Private Sector Engagement in GEF-8

The broad implementation of GEF-8 private sector engagement will require additional resourcing to maximally benefit from the engagement with the private sector and to service the growing requirements for knowledge resources, reporting and coordination. Each Agency should appoint a lead for private sector engagement that will also be the representative on the GEF Agency Private Sector Working Group.

In GEF-7, many Agencies created specific roles as part of their programs dedicated to supporting the engagement of the private sector, including at the country-project level to drive local private sector engagement. Where needed, Agencies should consider project support with dedicated resources assigned to private sector with responsibilities for convening, planning, sharing information, developing knowledge resources and applying reporting metrics.

As a continuation of the activities under the PSES, the GEF Agency private sector working group will function under member-determined priorities with agenda points and actions that can support the effectiveness of private sector engagement across the portfolio, foster

knowledge exchange and the development of resources. The working group will meet four times per annum, once in a face-to-face or hybrid setting aligned to the GEF Agency retreat.

As part of Integrated Program implementation planning, especially in working in the formative stages of programme design where important decisions on co-finance, modalities of engagement, partnership formation and platform engagement are made, an allocation for technical assistance can be made to Agencies under prescribed criteria to enhance the overall effectiveness of the IP's work with the private sector.

GEF Secretariat resources will be bolstered to include a resource dedicated to the management of information, reporting and knowledge resources and the further development and use of the Management Information System across the GEF Partnership.

As part of the overall deepening of private sector participation in the GEF, private sector secondments and interns can be engaged to support both general and targeted engagement in IPs and enhance the understanding of GEF's operating environment and modalities among private sector actors.

Private Sector and Gender equality and Inclusivity

As an agent of transformative change, the private sector can play a critical role in supporting gender equality and through fostering inclusive approaches, especially working through the private sector in the decision-making processes and resources allocations that can improve women's access, use, and control of resources, including land, water, forest, and fisheries.

Women make up a large percentage of participation in many key industries relevant to the GEF-8 portfolio, especially in agriculture and textiles, and specific private sector programs can be developed that support women's private sector activities, economic empowerment and the delivery of global environmental benefits.

Metrics and Reporting

Metrics developed through the actions documented in the GEF PSES implementation plan will be further tested and refined to create a more complete picture of the GEF's work with the private sector, including metrics for integration (Healthy Planet, Healthy People metrics) and private sector additionality.

The Private Sector Advisory Group

The Council, at its 54th meeting, recommended the formation of a Private Sector Advisory Group (PSAG), which was empaneled and convened during 2019 according to the Terms of Reference approved by Council in Da Nang, Viet Nam, 26 June 2018. At the 57th GEF Council

Meeting, The Council invited the PSAG it to continue dispensing its duties, until the end of the GEF-7 replenishment cycle.

The PSAG will continue to operate under GEF-8, with a revised TOR, to support the GEF partnership and advise the GEF Partnership on strategic direction, to provide feedback to the GEF processes and support the development of private sector focused initiatives.

The GEF partnership needs to strengthen other forms of ongoing awareness raising, training and knowledge exchange opportunities with private sector partners. Ad-hoc private sector advisory groups will be convened for specific issues and guidance related to optimizing the private sector's contribution to the GEBs. These groups will be informal and will function without attribution to foster a free and open exchange of ideas, consultation and feedback.

Finally, drawing on emerging experiences of other similar institutions (CIF) and existing arrangements for CSO participation, the GEF will consider inviting private sector representatives to engage as observers in GEF Council Meetings, thus directly informing GEF governance and decision-making.

ANNEX 1. GEF BIODIVERSITY FOCAL AREA AND ASSOCIATED PROGRAMMING INVESTMENTS THAT CONTRIBUTE TO ACHIEVING THE GLOBAL BIODIVERSITY FRAMEWORK ACTION TARGETS

Global Biodiversity Framework Action Targets	GEF Biodiversity Focal Area and Associated Programming Investments that Contribute to Achieving the GBF Action Targets
Target 1. Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas.	Biodiversity Focal Area, International Waters Focal Area, Amazon, Congo, and Critical Forest Biomes Integrated Program, Greening Transportation Infrastructure Development Integrated Program, Wildlife Conservation for Development Integrated Program, Blue and Green Islands Integrated Program
Target 2. Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems.	Biodiversity Focal Area, Ecosystem Restoration Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Wildlife Conservation for Development Integrated Program
Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	Biodiversity Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, International Waters Focal Area, Blue and Green Islands Integrated Program
Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict.	Biodiversity Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program
Target 5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.	Biodiversity Focal Area, International Waters Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program,
Target 6. Manage pathways for the introduction of invasive alien species, preventing, or reducing their rate of introduction and establishment by at least 50 per cent, and control or eradicate invasive alien species to eliminate or reduce their impacts, focusing on priority species and priority sites.	Biodiversity Focal Area
Target 7. Reduce pollution from all sources to levels that are not harmful to biodiversity and ecosystem functions and human health, including by reducing nutrients lost to the environment by at least half, and pesticides by at least two thirds and eliminating the discharge of plastic waste.	Chemicals and Waste Focal Area, Elimination of Hazardous Chemicals from Supply Chains Integrated Program, Circular Solutions to Plastic Pollution Integrated Program, Clean and Healthy Ocean Integrated Program, Sustainable Cities Integrated Program
Target 8. Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through ecosystem-based approaches, contributing at least 10 $GtCO_2e$ per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity.	Climate Change Mitigation Focal Area, Greening Transportation Infrastructure Development Integrated Program, Food System Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Biodiversity Focal Area, Sustainable Cities Integrated Program

Global Biodiversity Framework Action Targets	GEF Biodiversity Focal Area and Associated Programming Investments that Contribute to Achieving the GBF Action Targets
Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities.	Biodiversity Focal Area, International Waters Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Inclusive Conservation Initiative
Target 10. Ensure all areas under agriculture, aquaculture and forestry are managed sustainably, in particular through the conservation and sustainable use of biodiversity, increasing the productivity and resilience of these production systems.	Food Systems Integrated Program, International Waters Focal Area, Biodiversity Focal Area, Amazon, Congo, and Critical Forest Biomes Integrated Program, Wildlife Conservation for Development Integrated Program
Target 11. Maintain and enhance nature's contributions to regulation of air quality, quality and quantity of water, and protection from hazards and extreme events for all people.	Greening Transportation Infrastructure Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Clean and Healthy Ocean Integrated Program, Blue and Green Islands Integrated Program
Target 12. Increase the area of, access to, and benefits from green and blue spaces, for human health and well-being in urban areas and other densely populated areas.	Sustainable Cities Integrated Program
Target 13. Implement measures at global level and in all countries to facilitate access to genetic resources and to ensure the fair and equitable sharing of benefits arising from the use of genetic resources, and as relevant, of associated traditional knowledge, including through mutually agreed terms and prior and informed consent.	Biodiversity Focal Area
Target 14. Fully integrate biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies, accounts, and assessments of environmental impacts at all levels of government and across all sectors of the economy, ensuring that all activities and financial flows are aligned with biodiversity values.	Biodiversity Focal Area, Greening Transportation Infrastructure Development Integrated Program, Blue and Green Islands Integrated Program
Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal.	Biodiversity Focal Area, Amazon, Congo, and Critical Forest Biomes Integrated Program, Food Systems Integrated Program, Greening Transportation Infrastructure Development Integrated Program, Elimination of Hazardous Chemicals from Supply Chains Integrated Program, Clean and Healthy Ocean Integrated Program, Circular Solutions to Plastic Pollution Integrated Program[475]
Target 16. Ensure that people are encouraged and enabled to make responsible choices and have access to relevant information and alternatives, taking into account cultural preferences, to reduce by at least half the waste and, where relevant the overconsumption, of food and other materials.	Food Systems Integrated Program

[475] The Private Sector Engagement Strategy will serve a cross-cutting function supporting actions that will contribute to this target as well.

Global Biodiversity Framework Action Targets	GEF Biodiversity Focal Area and Associated Programming Investments that Contribute to Achieving the GBF Action Targets
Target 17. Establish, strengthen capacity for, and implement measures in all countries to prevent, manage or control potential adverse impacts of biotechnology on biodiversity and human health, reducing the risk of these impacts.	Biodiversity Focal Area, Food Systems Integrated Program
Target 18. Redirect, repurpose, reform or eliminate incentives harmful for biodiversity, in a just and equitable way, reducing them by at least US$ 500 billion per year, including all of the most harmful subsidies, and ensure that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity.	Biodiversity Focal Area
Target 19. Increase financial resources from all sources to at least US$ 200 billion per year, including new, additional and effective financial resources, increasing by at least US$ 10 billion per year international financial flows to developing countries, leveraging private finance, and increasing domestic resource mobilization, taking into account national biodiversity finance planning, and strengthen capacity-building and technology transfer and scientific cooperation, to meet the needs for implementation, commensurate with the ambition of the goals and targets of the framework.	Biodiversity Focal Area
Target 20. Ensure that relevant knowledge, including the traditional knowledge, innovations and practices of indigenous peoples and local communities with their free, prior, and informed consent, guides decision-making for the effective management of biodiversity, enabling monitoring, and by promoting awareness, education and research.	Biodiversity Focal Area and Inclusive Conservation Initiative
Target 21. Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories, and resources, as well as by women and girls, and youth.	Biodiversity Focal Area and Inclusive Conservation Initiative

Annex II

GEF/R.8/07
August 30, 2021

Second Meeting for the Eight Replenishment of the GEF Trust Fund
September 29 – October 1, 2021
Virtual Meeting

GEF-8 Strategic Positioning Framework
(PREPARED BY THE GEF SECRETARIAT)

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STRATEGIC POSITIONING OF THE GEF IN A POST COVID-19 WORLD A.

Introduction

The Global Environment Facility (GEF) is the largest and most experienced multilateral fund dedicated to addressing environmental threats to the planet. Established on the eve of the 1992 Rio Earth Summit, GEF's core mission is to support developing countries protect and sustainably use nature, upon which all life depends. The GEF is the only entity whose mandate embraces all facets of a healthy environment: biodiversity, climate change, land degradation, international waters, and chemicals and waste.

The GEF operates in 4-year funding cycles. Since its inception, it has provided more than $21.1 billion in grants and mobilized an additional $114 billion in co-financing for more than 5,000 projects in 170 countries. Through its Small Grants Programme, the GEF has provided support to more than 25,000 civil society and community initiatives in 133 countries. Among the many achievements emerging from this portfolio, the GEF has supported the creation and/or management of over 3,300 protected areas totaling more than 860 million ha of land of global significance for biodiversity. GEF investments have also resulted in more than 8 billion tons of GHG emissions avoided. Finally, GEF investments have resulted in improved enabling policy and institutional environments in recipient countries and increased capacity to deal with the global environment.

The GEF-6 cycle (2014-2018) introduced the Integrated Approach Pilots (IAPs) and other larger-scale systemic investments through programmatic approaches. In GEF-7 (2018-2022), the GEF launched the Impact Programs to promote more robust, integrated, and impactful programs across many more relevant sectors while addressing multiple drivers of environmental change. These programs and the investments in GEF-8 are meant to be catalytic and lead to transformational change as defined by STAP "…the GEF should require that a transformative investment involves a pathway to durable change at a sufficient scale to deliver a step improvement in one or more global environmental benefits (GEBs)".[1]

Much learning is emerging that can be used to ensure the effective and efficient use of GEF resources while at the same time delivering longer-term and more durable global environmental outcomes (see Box 1). Also, emerging findings by the GEF Independent Evaluation Office (IEO) through their Overall Performance Study of the GEF-7 cycle (OPS-7) support the integrated approach as more conducive to the incorporation of innovation in multiple sectors as part of GEF's business model and as one of its comparative advantages.[2]

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https://www.stapgef.org/resources/advisory-documents/achieving-transformation-through-gef-investments

GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021."

Environmental threats from climate change, biodiversity loss, chemical pollution, and pressure on forests, oceans, landscapes, and wildlife are negatively impacting human development, livelihoods, and social justice. As we have known for some time, the latest IPCC Report has now confirmed unequivocally that human-caused emissions, from burning fossil fuels and deforestation are responsible for the observed warming of the Earth's atmosphere, oceans and land.[3] These new findings clearly point to the absolutely essential and pressing nature of the mandate of the GEF, and its role in delivering on the Paris Agreement and halting the negative impact of climate change.

Against such mounting stressors, GEF-8 strategic planning also must address the challenges presented by the greatest health and economic crisis in a generation: the COVID-19 pandemic. The pandemic has been a stark reminder that the world is on the wrong track, with conflict between nature and economic systems causing a global zoonotic disease outbreak. The resulting toll on our society will inevitably influence how countries transform their economies over the coming decade. Hence, the GEF-8 cycle will seek to promote a green, blue, and resilient recovery, and to create pathways to a more equitable, nature-positive, and carbon neutral world.[4]

Context and background for the GEF-8 Replenishment

The proposed strategy for GEF-8 is framed against the backdrop of three inter-related challenges facing the global environment: the COVID-19 pandemic; mounting stressors on natural systems; and the urgency for robust financing and a transformative agenda. This section describes the nature of these challenges and implications for positioning the GEF as the financial mechanism for the global environment.

B.1 COVID-19 and the Not-So-Black Swan: Breakdown of the Human System-Natural Systems' Nexus

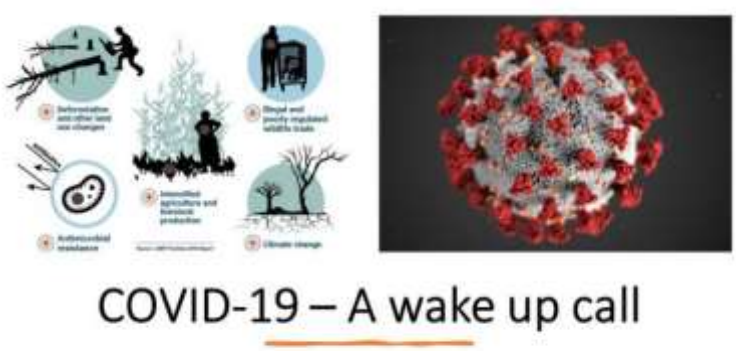
The past 18 months saw the emergence of the most serious pandemic in more than a century. The globalized nature of the existing market system helped to spread a highly contagious zoonotic disease that proved to have widespread impact on the structure of societies and economies, triggering dramatic losses of jobs and livelihoods, while being especially damaging to disadvantaged people, women, and girls. Still far from being contained, the pandemic is forcing humankind to confront the devastating effects of the unrelenting degradation

IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press.

Early findings from the IEO's ongoing evaluation on "The GEF's comparative advantage in supporting a greener future" highlight the GEF's adaptability to emergent environmental challenges and trends. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021."

of nature (Figure 1). Experts armed with a solid body of science -based evidence had long warned that an epidemic on the scale of COVID-19 was due to happen; it was a question not of "if" but of "when." Hence, COVID- 19 was not at all a Black Swan (an unforeseen event with significant consequences) but rather an expected outcome of growing exposure of people to wildlife.

Figure 1. The emergence of SARS-CoV-2 and the pandemic have been a wake-up call



We can say with confidence that COVID-19, at its core, is a result of the direct collision between natural systems and human systems. The remarkable economic growth experienced during the last half century has disrupted ecosystems through the expansion of human settlements and unplanned urbanization. Combined with the growth of intensive agriculture and infrastructure projects, this disruption has resulted in rampant deforestation and widespread land degradation and has also brought more people into close proximity to wildlife and livestock, thereby leading to the creation of zoonosis hotbeds greatly increasing the risk of zoonotic pathogen emergence. What we are experiencing should not have come as a surprise.

With the understanding that the fundamental root cause of novel zoonotic diseases resides in the weakening of the services that ecosystems have provided for humanity over thousands of years, transformational change to the human systems—energy, cities, food, and production/consumption—is needed to restore a balance between natural and human systems for the health of the planet.

The pandemic and societal response to it have also taught us that massive changes in human (as well as government and business) behavior are possible in short time frames. Entire countries instituted lockdowns and/or adopted social distancing measures. The crisis has also provided the world with an opportunity to consider how to apply sustainable policies and regulations in our social and economic systems and prompted businesses to rethink their operations with a special focus on green and sustainable supply chains.

Many countries have pledged to build back better as the world emerges from the COVID-pandemic by considering how economic and financial policies can support their objectives for cleaner energy, greener cities, and expanded marine protected areas, among many other measures. But the transitions leading to lasting transformation can only be achieved by the adoption of a sustainable, inclusive, resilient, low-carbon, low-polluting, nature-positive, and circular economy-based pathway for society, one that can reduce, prevent, and mitigate future shocks coming from climate change, natural and manmade disasters, and other global challenges. Unfortunately, according to the Finance for Biodiversity Initiative,[5] up to 70 percent of the economic stimulus packages studied are not building back greener.

The GEF recognized the seriousness of the pandemic to its work. Immediately after the onset of COVID-19, the GEF created a COVID-19 Task force to assess the impacts and the opportunities created by the pandemic on the work of the GEF.[6] A report by the Task Force reinforced the central role of the GEF in ensuring a healthy planet that can help prevent future pandemics and other disruptions expected from the current environmental degradation.[7] More specifically, by addressing factors underlying the increasing number of zoonotic diseases, such as the high-risk global wildlife trade and natural ecosystem degradation and destruction, the GEF can play an important role in restoring a better balance between people and nature. The Task Force Report noted that through programs like the Good Growth Platform, the Sustainable Cities Impact Program, the Food, Land Use, and Restoration Impact Program, and the Global Wildlife Program, the GEF is working to help build an economy and a society that will thrive despite the inevitable shocks that will come through climate change and future pandemics.

B.2 Mounting Stressors on the Health of the Planet

Recent global assessments on the state of biodiversity, ecosystems, climate change, and oceans unfortunately all point to continued deteriorating trends, despite some improvement over the last few years. Syntheses of the latest scientific reports ("The State of the Planet") by the GEF Scientific and Technical Advisory Panel (STAP) suggests that many indicators of planetary health are still going in the wrong direction. Extinction rates are now tens to hundreds of times higher than the average of the past 10 million years, resulting in a homogenization of ecosystems, with a reduction in resilience.[8] GHG emissions that drive climate change are at their highest levels ever registered (Figure 2). Worrying trends are emerging with faster-than-expected increases in the frequency of attributable climate extremes, more Arctic warming than

Greeness of Stimulus Index, Finance for Biodiversity Initiative, Feb. 2021.

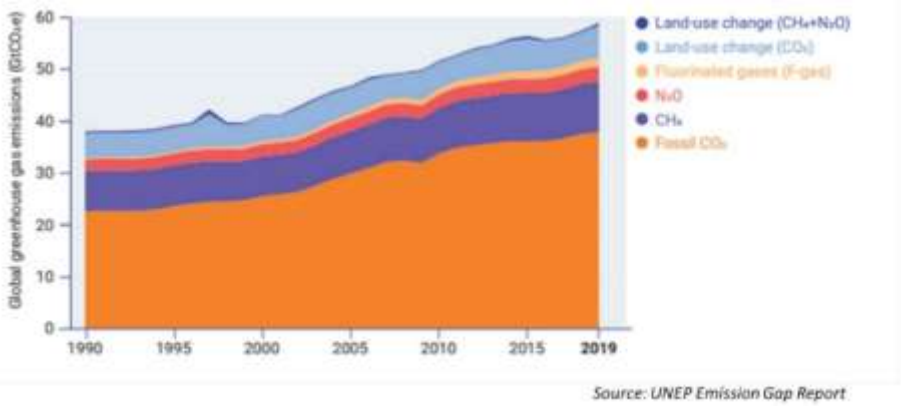
GEF/C.58/Inf.07/May 16, 2020.

This is also underscored by early findings from the IEO's ongoing evaluation on "The GEF's comparative advantage in supporting a greener future", which show that the GEF is well positioned to play a pivotal role in "building back greener" after the COVID-19 pandemic. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021."

Future Earth. Our Future on Earth 2020. www.futureearth.org/publications/our-future-on-earth.

anticipated[9] and repeated indications that icecap melting is accelerating irreversibly on human timeframes.[10]

Figure 2. Global GHG emissions are at the highest level ever recorded



Furthermore, approximately 20 percent of the Earth's vegetated surface shows persistent declining trends in productivity, mainly as a result of land and water use and management practices.[11,12] The loss of biodiversity (Figure 3) and its associated ecosystem services has not been reversed and threatens human well-being in many ways. The oceans are under increasing threat from climate change and associated acidification, loss of coral reefs, overfishing, and pollution, requiring more substantial efforts than have been deployed to date (Figure 4). Freshwater systems including transboundary freshwater systems that underpin and connect ecosystems, human health, and key economic sectors are being depleted rapidly, threatening livelihoods, and triggering conflicts. Global forest loss and possible tipping points in the Amazon can trigger unexpected and irreversible global damage to the environment.[13] In addition, hazardous chemicals, including persistent organic pollutants, ozone depleting substances, mercury, and highly hazardous pesticides, remain a significant threat to human health, ecosystems, and biodiversity.

J.E. Overland, E. Dunlea, J.E. Box, R. Corell, M. Forsius, V. Kattsov, et al. The urgency of Arctic change Polar Science (2019), 10.1016/j.polar.2018.11.008.

Briner, J.P., Cuzzone, J.K., Badgeley, J.A. et al. Rate of mass loss from the Greenland Ice Sheet will exceed Holocene values this century. Nature 586, 70–74 (2020). https://doi.org/10.1038/s41586-020-2742-6; Garbe, J., Albrecht, T., Levermann, A. et al. The hysteresis of the Antarctic Ice Sheet. Nature 585, 538–544 (2020). https://doi.org/10.1038/s41586-020-2727-5; The IMBIE Team., Shepherd, A., Ivins, E. et al. Mass balance of the Greenland Ice Sheet from 1992 to 2018. Nature 579, 233–239 (2020). https://doi.org/10.1038/s41586-019-1855-2; Shepherd, A. et al. Trends in Antarctic Ice Sheet Elevation and Mass. 16 May 2019. Geophysical Research Letters, Volume46, Issue14. https://doi.org/10.1029/2019GL082182.

Shukla et al., (editors). Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. IPCC (2019)

United Nations Convention to Combat Desertification. 2017. The Global Land Outlook, first edition. Bonn, Germany https://advances.sciencemag.org/content/5/12/eaba2949

Figure 3. Biodiversity loss in different regions

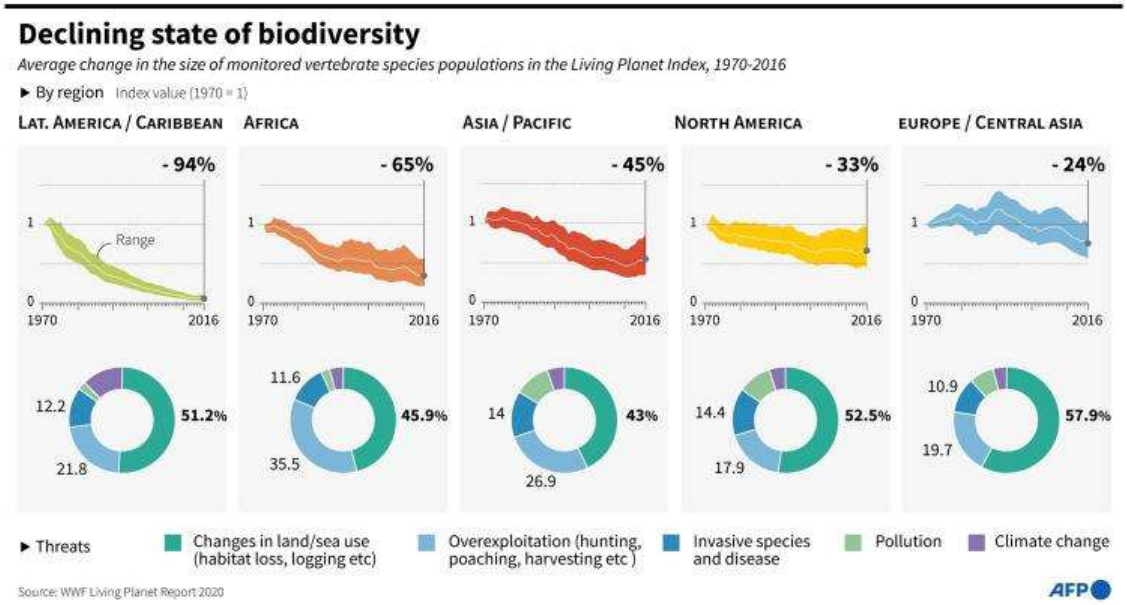
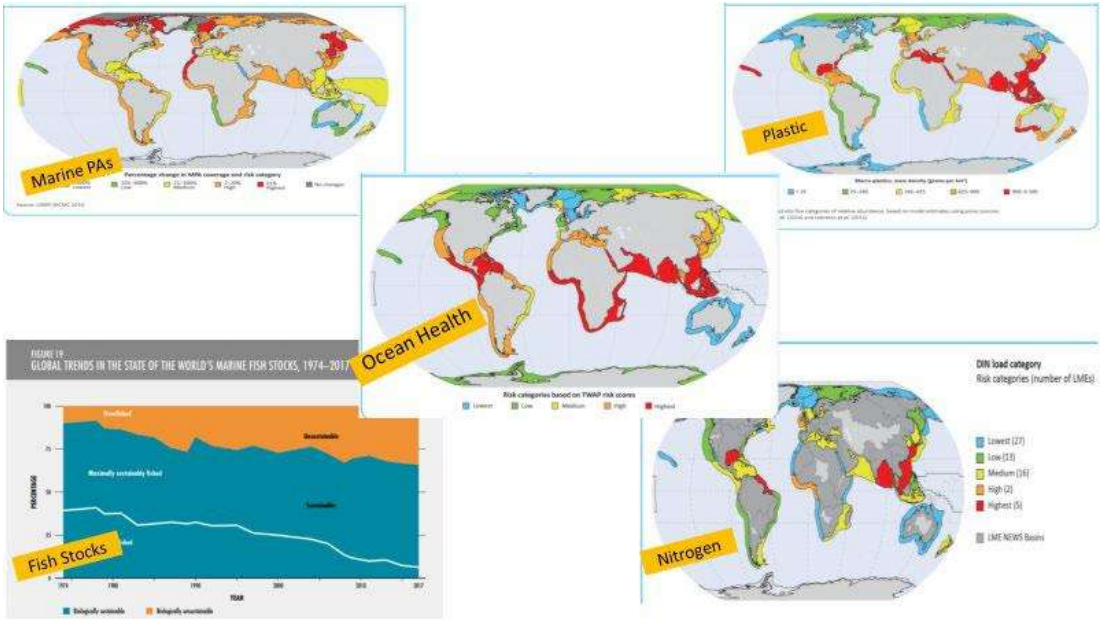


Figure 4. Declining ocean health across various metrics



Science no longer supports the view that the environment is merely one of many facets of sustainable development. The Dasgupta Review[14] recognized and quantified the direct value of nature to people in great detail, convincingly making the case that economies and livelihoods are inescapably intertwined and dependent on the goods and services that nature provides. The continued deterioration of nature and its ability to provide essential services to people can progressively undermine the prospects for the achievement of the Sustainable Development Goals (SDGs) and to maintain and improve quality of life. The GEF embraces the conclusions of the Dasgupta Review and incorporates the logic of its proposed solutions in the GEF-8 Programming Directions.

B.3 Funding Levels and Strategic Investments Commensurate with a Rising Ambition for Transformative Change

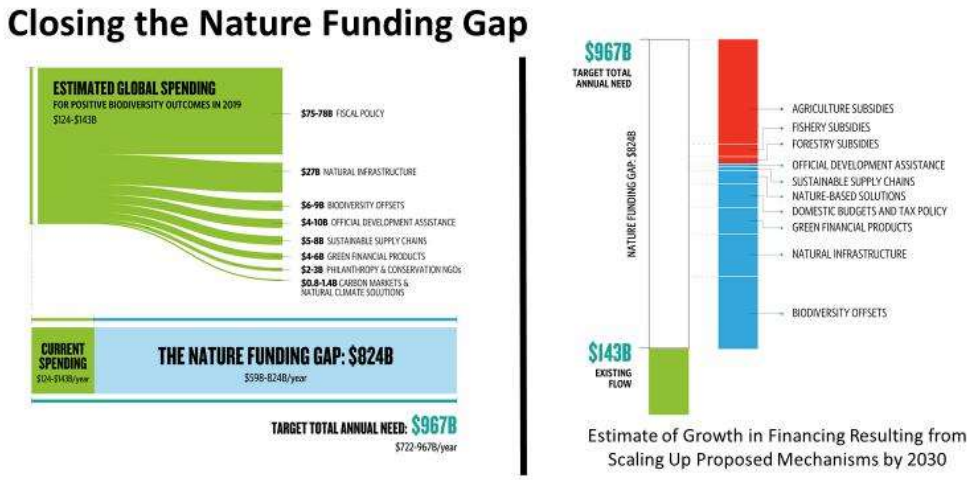
As the GEF contemplates the delivery of its mission during this decade, it is important to improve both the levels of financing and associated strategic investments required to help realize the many global commitments made by countries and the international community in the lead up to 2030 and beyond.

In recognition of the unique value of the GEF in the stewardship of the global environment, its mandate has expanded significantly through successive replenishment cycles, while its funding has remained largely unchanged. The growth in co-financing of GEF-funded projects has, to some extent, helped to alleviate the funding gaps, but the challenge of securing adequate financing will need to be resolved in the upcoming replenishment cycles.

The mandate of the GEF to support developing countries in meeting their commitments to multilateral environmental agreement (MEAs) is foundational to sustainable development and essential to prevent setbacks to the gains that countries and the development community have made in reducing poverty and improving livelihoods. For instance, while most of the world's biodiversity is located in developing countries, only 22 percent of financing directed to nature conservation is spent there. Despite a growing environmental mandate, available funding for the GEF has remained limited (<0.5% of global spending on nature conservation, and less still on climate change). Thus, it is critical that official development assistance (ODA) required for the fulfillment of GEF's mandate—perhaps in multiples of past replenishment cycle funding levels—is made available. (Figure 5).

[14] Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)

Figure 5. Nature Funding Gap



Source: Paulson Institute and TNC 2020. Financing Nature

ODA funds have been traditionally relied upon to close the Nature Funding Gap, and must continue to play a significant role in this effort. However, it is increasingly recognized that global funds to the environment, while impacting the size of the gap, may never be enough to completely close it. Beyond traditional ODA assistance, there are several private and public sources of funds that must be further mobilized, including national governments, private sector, conservation NGOs, and philanthropic organizations. In particular, without the active participation of private capital, markets, and their agents, the GEF will not accomplish its mission. Happily, in December 2020 the GEF Council approved a Private Sector Engagement Strategy (PSES)[15] that will facilitate the insertion of this sector into GEF-funded initiatives and help support the needed transitions of key economic systems. Another way to achieve this goal is to expand the non-grant instruments (NGI) window of the GEF designed to unlock and scale-up private financing. The GEF's early experience with private sector engagement and blended finance will serve as a springboard for expanded work in GEF-8 with the private sector and the financial sector. Recent findings of the Independent Evaluation Office (IEO) indicate that projects involving the private sector tend to deliver greater value added and are also most likely to lead to transformational change.[16]

Narrowing the gap involves increasing the flow of funds to the environment whilst simultaneously reducing the need for these funds: this can be achieved through the creation of regulatory and policy environments at the national scale that both discourage/eliminate harmful practices and encourage large-scale finance for nature. Policy coherence, traditionally defined as

GEF/C.59/Inf.18
GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

"*the systematic promotion of mutually reinforcing policy actions across government departments and agencies creating synergies towards achieving the agreed objectives*",[17] is therefore key to reducing the funds needed for nature-financing. Additionally, through these domestic enabling environments, countries can help to further catalyze the impact of the nature funding flows; alternatively, misaligned domestic policies can also serve to lessen the impact of the very funds to the environment that are being increasingly required from ODA and other sources. Building on the recommendations of the Dasgupta Review, the GEF, if adequately financed, could start to more directly assist developing countries that are committed to internalize the value of their natural capital in national and state plans and budgets. This would be complemented by work to promote enabling policy environments for expanded domestic resource mobilization by making use of innovative finance mechanisms, and address perverse subsidies and other financial drivers of environmental degradation across the dimensions of biodiversity, climate change, land, and oceans, along with toxic chemicals and pollution.

The importance of policy coherence is being progressively recognized and mainstreamed in global dialogues as a critical mechanism which, if left unattended, can hamper the world's ability to reverse the current environmental trends and to reach its crucial nature-positive targets. SDG Target 17.14 of the 2030 Agenda speaks to the enhancement of policy coherence for sustainable development, seen an essential implementation component for all of the SDGs.[18] The G7 2030 Nature Compact in June 2021[19] explicitly recognized the need to reform national policies with recognized negative impacts on nature, and for an integrated approach or a "whole of government" basis as a necessary condition for world that is nature-positive. This point is also made in other recent reports including *The Little Book on Investing in Nature,*[20] the *World Economic Forum Global Risks Report,*[21] *Financing Nature: Closing the global biodiversity financing gap* from the Paulson Institute,[22] the *First Draft of the post-2020 Global Biodiversity*

Anita Breuer, Hannah Janetschek and Daniele Malerba (2019), Translating Sustainable Development Goal (SDG) Interdependencies into Policy Advice, Sustainability 2019, 11, 2092; doi:10.3390/su11072092, file:///C:/Users/wb407482/Downloads/sustainability-11-02092%20(1).pdf

OECD (2018), Policy Coherence for Sustainable Development 2018: Towards Sustainable and Resilient Societies, OECD Publishing, Paris, https://doi.org/10.1787/9789264301061-en

G7 2030 Nature Compact, https://www.g7uk.org/wp-content/uploads/2021/06/G7-2030-Nature-Compact-PDF-120KB-4-pages.pdf

Tobin-de la Puente, J. and Mitchell, A.W. (eds.), 2021. The Little Book of Investing in Nature, Global Canopy: Oxford.

The Global Risks Report 2021, 16th Edition, is published by the World Economic Forum

Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobinde la Puente, J. 2020. Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.

Framework, [23] and *Pulling Together - The Multilateral Response to Climate Change, Lessons in Multilateral Effectiveness* from MOPAN.[24]

Policy coherence is not a new concept to the GEF. A 1992 review of the GEF's pilot phase explicitly referenced the importance of the domestic policy environment,[25] and efforts to strengthen national environmental policies have been a progressively increasing feature of GEF strategies. In 2017, the Independent Evaluation Office (IEO) undertook an assessment of the GEF's impact in strengthening policy and legal frameworks in different countries,[26] and the IEO recently assessed that, while the GEF is making good progress on the policy front, additional efforts are needed.[27] The IEO's OPS-7 Report similarly underscores the importance of the GEF's expanding reach into the policy coherence space.[28] Policy coherence is therefore an essential component of maximizing the benefits of GEF investments, and in the sustainability of those benefits. Domestic policies that are inconsistent with each other and with national/global environmental goals work against the very global environmental benefits that need to be generated.

In the context of increasingly limited international and domestic funds towards nature conservation, it is vital to channel these funds to the organizations and the investments that can have the greatest impact. Financing to the environment must be increased through both ODA as well as through additional sources, new mechanisms, and innovative pathways. At the same time, the need for financing must be reduced through the creation of domestic policy environments that are harmonized internally as well as with national and global environmental goals. The GEF simultaneously impacts multiple aspects of the financing gap on both sides of this equation, and is therefore well-placed to take a leadership role in this space. In this context, it can be reasoned that ODA investments into the GEF undergo a multiplier effect, with these funds being amplified into a narrowing of the gap through several key features of the GEF's work such as (i) programming strategies that are placing an increasing focus on integration, (ii) rising levels of private sector engagement, (iii) the ongoing leveraging of co-financing from multiple public and private sources, and (iv) direct work with countries in their policy coherence agenda.

CBD/WG2020/3/3, First Draft of the Post-2020 Global Biodiversity Framework: Note by the Co-Chairs, https://www.cbd.int/doc/c/abb5/591f/2e46096d3f0330b08ce87a45/wg2020-03-03-en.pdf

Multilateral Organisation Performance Assessment Network (MOPAN), (2021), Pulling Together - The Multilateral Response to Climate Change, Lessons in Multilateral Effectiveness, Paris,

The Global Environment Facility: the Pilot Phase and Beyond, GEF Working Paper Series 1, May 1992

GEF/ME/C.52/Inf.05, Impact of GEF Support on National Environment Laws and Policies, https://www.thegef.org/council-meeting-documents/impact-gef-support-national-environment-laws-and-policies

GEF/E/C.60/Inf.01, Management Action Record 2021, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_Inf.01_Management_Action_Record.pdf

Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, Draft Report, Washington, DC: GEF IEO, 2021.

Figure 6. Multilateral Environmental Agreements Served by the GEF and their Various Commitments



Since the start of the GEF-7 cycle (July 2018), many international commitments (some mandated by the Conventions served by the GEF and other more voluntary) have arisen or are in the process of being negotiated (Figure 6). Among these are: the proposed post-2020 CBD Global Biodiversity Framework; commitments by 50 countries to protect at least 30 percent of the world's land and ocean by 2030;[29] the Bonn Challenge to bring 350 million hectares of degraded and deforested landscapes into restoration by 2030;[30] the post-2020 Global Apex Goal for nature and people; commitments for the UN Decade on Ecosystem Restoration; and Our Ocean commitments for significant and meaningful actions towards a clean, healthy, and productive ocean.

This background underscores the importance of GEF's role in the global financing architecture for sustainable development. The GEF has a formal mandate as a financing mechanism under CBD, UNCCD, UNFCCC, the Minamata Convention, and the Stockholm Convention, and it supports countries with economies in transition in their implementation of the Montreal Protocol. The GEF is making multi-faced contributions as a catalyzer of partnerships,

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This reference is included here and elsewhere in the document to demonstrate that there is an increased level of ambition globally to achieve higher levels of protection of land and ocean. We acknowledge that this is a negotiation position within the CBD process that is not yet agreed by the COP and for which we recognize there exists a diversity of opinions from a wide array of stakeholders including IPLCs. The inclusion of this statement does not infer GEF's support for this or any other negotiation position.

Also see https://www.pbl.nl/sites/default/files/downloads/pbl-2020-goals-and-commitments-for-the-restoration-decade-3906.pdf

promoter of policy coherence, supporter of national reports, Convention obligations, and transparency in all countries, as well as a mobilizer of finance.

In light of these agreements and commitments, GEF will develop a strategy that is relevant all the way to the end of this decade. These commitments are expected to mobilize global, national, and community action and to help raise the level of ambition for the MEAs. They will also contribute towards the achievement of the 2030 Agenda for Sustainable Development and the associated SDGs (Figure 7), along with other targets and plans for the coming decade that the international community is expected to deliberate upon in 2021. The GEF-8 replenishment emerges as an opportunity to position the GEF as a leader and a critical player in supporting this set of ambitious goals.

Figure 7. The Global Environment—a Foundation for the SDGs



In September 2015, all United Nations member states adopted the Sustainable Development Goals (SDGs). Implicit in the landmark agreement is the recognition that social and economic development will not be achievable in the absence of a healthy global environment. While not directly serving the SDGs, the GEF has articulated how its work continues to be directly relevant to their achievement.[31]

It is also important to properly place the GEF in the ambit of the international environmental finance architecture. According to the OECD, international finance for sustainable development amounted to $2 trillion in 2018. Fifteen percent of this amount, or $0.31 trillion, was attributed to official development finance, including support through multilateral development banks (MDBs) and bilateral sources.

In the climate finance landscape, the GEF has been working with major funds, such as the Green Climate Fund (GCF), Climate Investment Funds (CIF), and Adaptation Fund, to help facilitate coordination. The recently agreed GEF/GCF Long Term Vision[32] will further define specific areas of cooperation where complementarity of action may be more efficient and effective, as well as possible modalities to generate long-lasting outcomes and outputs. Such collaboration has become increasingly relevant for a wide range of themes and entry points: the GCF results areas, such as forests and land use, and ecosystems and ecosystem services, health,

GEF (2015). The GEF and Sustainable Development Goals. http://www.thegef.org/publications/gef-and-sustainable-development-goals

GEF/C.60/08

food, and water security, encompass themes that are addressed across the GEF portfolio beyond climate change.

Framing the GEF-8 Strategy

The challenges outlined in the previous section calls for the GEF to evolve a compelling vision and strategy that is consistent with global aspirations for transforming systems, help countries achieve a green and blue post-COVID-19 recovery, and harness the GEF's comparative advantage as "integrator" across multiple dimensions.[33] This section addresses each of these priorities in detail and concludes with an emphasis on gender responsiveness as a key principle underpinning the GEF-8 strategy.

C.1 The Vision and Framework

The vision for GEF-8 is the achievement of a healthy, productive, and resilient environment that underpins the well-being of human societies (Figure 8). This vision is inspired by the fact that challenges facing the planet are intertwined with human development needs. Achieving this vision requires the GEF to anchor its overall approach on a framework that reflects the interdependency between people and the planet. This link between nature, the environment, and human health has been promoted over the past decade around the concept of One Health and embraced by several groups.[34] The CBD also recognizes this link and the importance of the health of the environment for people's well-being.[35] Over the last decade, the multiplicity and complexity of linkages between biodiversity and human health have been increasingly recognized, as reflected in the findings of the State of Knowledge Review on Connecting Global Priorities: Biodiversity and Human Health[36] jointly produced by CBD, WHO, and UNEP. In 2018, the Parties to the CBD welcomed a Guidance on integrating biodiversity considerations into One Health approaches, among other holistic approaches.[37] In line decision 14/4, a draft global action plan for biodiversity and health will be considered by the Parties at their 15th conference meeting.[38] Concurrently, a similar concept of Planetary Health[39] has been put forward and that expands the interconnections between human health and nature. The mandate and scope of the work of the GEF encompasses all of these concepts, but there are several areas of the GEF's mission and mandates that do not fit neatly within either one.

Early findings from the IEO's ongoing evaluation on "The GEF's comparative advantage in supporting a greener future" highlight the GEF's ability to foster multi-stakeholder alliances as one of the top three areas of comparative advantage of the GEF. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

https://www.oie.int/en/for-the-media/onehealth/

https://www.cbd.int/health/

https://www.cbd.int/health/SOK-biodiversity-en.pdf

https://www.cbd.int/doc/c/501c/4df1/369d06630c901cd02d4f99c7/sbstta-21-09-en.pdf

https://www.cbd.int/doc/c/76f9/1b75/42e360ab3ae6e53d0762c449/sbstta-24-09-en.pdf

https://www.planetaryhealthalliance.org/

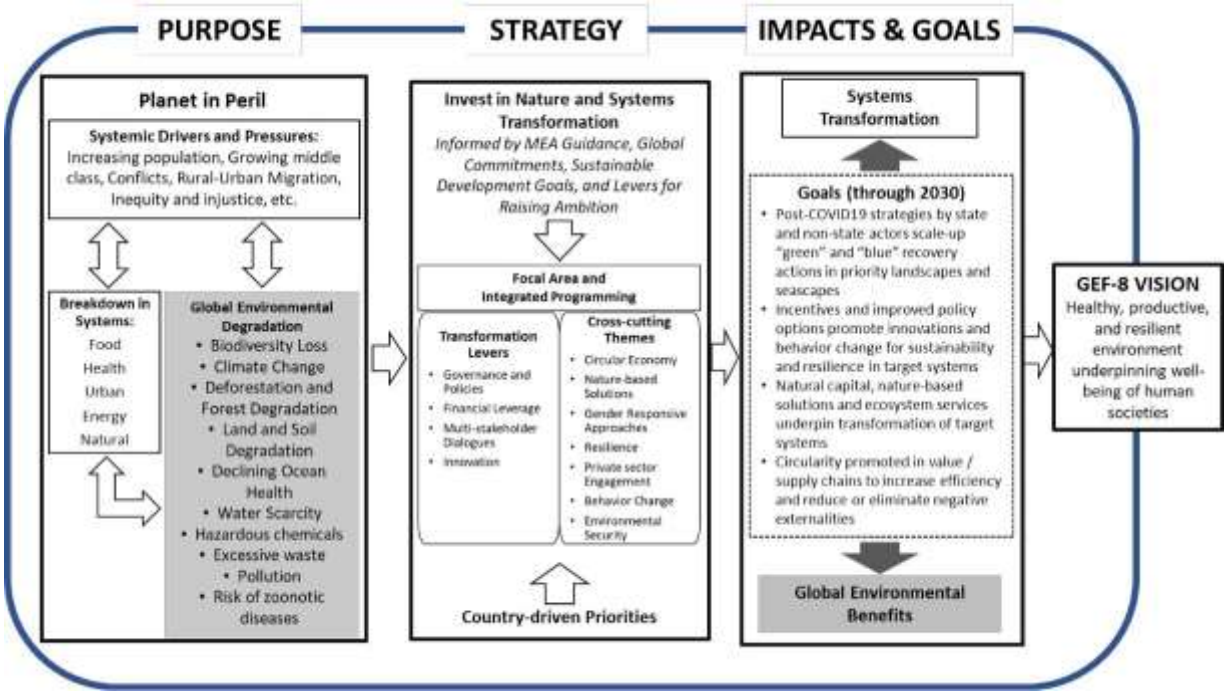
Long-term solutions to address the risk of emerging diseases and pandemics such as the current COVID-19 pandemic are other such emerging infectious diseases is dependent on achieving transformative change to key economic systems. Such transformation can be promoted through priorities across all GEF focal areas. For this reason, we adopt the *Healthy Planet, Healthy People* framework, which explicitly recognizes the dependency of human health and well-being on a healthy environment. This framework relies on the linkages between biodiversity and ecosystem services with food security and human health; between abundant and clean freshwater and human health; the maintenance of a stable and livable climate and human health; a clean and hazardous-chemical free environment and human health; and healthy oceans that can provide sustainable and resilient livelihoods and food security for people. With this in mind, the work of the GEF is more critical than ever in restoring the health of the environment that underpins the health and well-being of people.

A healthy environment is the foundation for economic and social development. This foundation is now facing interrelated threats and nearing key tipping points that require urgent attention and action before negative trajectories get locked in. Without a healthy environment, human health and well-being will be inevitably compromised. The GEF's mandate and expertise make it uniquely well-suited to pursue the most ambitious goals that have been recently embraced by countries, the international community, the private sector, and CSOs. The next two GEF investment cycles, from 2022-2026 (GEF-8) and 2026-2030 (GEF-9) will be critical to the achievement of global environmental ambitions and needs over the coming decade, with a focus on systems change and environmental restoration at scale.

C.2 Theory of Change

The *Healthy People, Healthy Planet* framework helped with the formulation of a Theory of Change outlining the purpose, strategy, impacts and goals underpinning the GEF vision through 2030 and beyond (Figure 8). The Theory of Change identifies the pervasive environmental challenges confronting the global community, and how the GEF invests to tackle them and generate global environmental benefits. This logic, which has been at the core of the GEF's strategic planning for many years, is further elaborated to acknowledge the urgency to address breakdowns in key economic systems that are exacerbating global environmental threats. The following paragraphs outline how the Theory of Change supports the overall GEF-8 programming.

Figure 8. Theory of change for GEF-8



C.2.1 Purpose and Rationale

As described in previous sections, the planet is in peril because of the declining state of biodiversity, climate, land and soil health, ocean health, freshwater resources, fisheries, and the presence of hazardous chemicals. With increasing population, growing middle class, armed conflicts, rural-urban migration, inequality, unsustainable consumption patterns, and other stressors, it is inevitable that the declining trends will be further worsened by the breakdown in food, energy, urban, health, and natural systems that in turn underpin human development. The COVID-19 pandemic has reinforced and further validated this concern and has encouraged the acceleration of the needed transitions. In addition to addressing the threats to the global environment, the Theory of Change highlights the urgent need for GEF to help transform key systems, specifically the "economics" that presently drive these systems, toward sustainability, resilience, and positive outcomes for nature. Below is a brief description of how transformational change in each of the systems will be supported through integrated programming.

Natural Systems. Human impacts on nature are increasing, as reflected in the growing trends in biodiversity loss, deforestation, and oceans pollution and overfishing. Securing these natural systems is the core of the GEF's mandate as the financial mechanism for the global environment and reflected through three decades of investing in the creation and effective management of protected areas around the world. Adherence to the ambitious goals of protecting 30 percent of land and oceans should be at the forefront of the GEF's

efforts over the next decade. But the scale and magnitude of challenges facing the world also calls for radical shifts in how natural capital is factored into decision-making processes by governments and business. As noted in the Dasgupta Review, such a shift is necessary to protect and avoid degradation of nature, a key priority for preventing future emergence of infectious diseases and pandemics. Since natural systems are interlinked, solutions must be integrated: supporting ecosystem restoration through habitat management, rewilding, allowing natural regeneration, and creating sustainably productive lands and seas.

Food Systems. Food systems globally are a major driver of environmental degradation, including loss of forests and biodiversity, degradation of lands, depletion of freshwater resources, agricultural nutrient pollution, and GHG emissions. During the GEF-6 and GEF-7 cycles, the GEF took important steps to support ongoing efforts by countries in transforming agriculture through investments in sustainable practices for safeguarding natural capital (land, soil, water, and biodiversity), promoting deforestation-free supply chains for globally important commodities, and reduction of negative externalities (GHG emissions and nutrient pollution). The GEF-8 strategy will build on this experience, with explicit focus on sustainable, regenerative, nature- positive production systems and efficient value/supply chains covering food crops, commercial commodities, livestock, and aquaculture. The UN Food Systems Summit is creating momentum for transformation of the global food systems, which presents a timely opportunity for the GEF to strengthen its support to countries for this important agenda.

Urban Systems. Cities are global drivers of economic growth, contributing an estimated 80 percent of global GDP. Yet, urbanization in most countries is also a major driver of global environmental degradation including loss of natural habitats, 70 percent of global GHG emissions, and coastal pollution from solid waste (including plastic pollution). As countries work toward a green and blue recovery from the COVID-19 pandemic, transformation of urban systems will be front and center. The GEF launched the Sustainable Cities program in GEF-6 and further expanded it in GEF-7 to strengthen potential for investing in global environmental benefits through integrated urban planning and implementation as our societies become more urban. The program has now created space for the GEF to crowd-in diverse entities including international financial institutions, city-based organizations, and technology providers that are well- placed to provide expertise, technical assistance, investment, and knowledge resources to cities aspiring to transformational change leading to net-zero carbon, nature positive, resilient, and inclusive cities.

Energy Systems. Globally, the production and consumption of energy account for an estimated 78 percent of GHG emissions and have a large impact on biodiversity, which includes use of fossil fuels in transportation, non-renewable electricity production, oil and

gas production, and heating and cooling of buildings. Therefore, the transformation of the energy system will be vital to promote climate change mitigation at the required levels, in turn requiring changes in governance, policies, institutions, technologies, and markets. Since its inception, the GEF has supported diverse projects in the energy space, focusing on GHG benefits from both development of renewable sources and options for increasing efficiency across different sectors. The growing momentum for accelerating transformational change in the energy systems and the adoption of net -zero objectives, can maximize GHG mitigation gains. The GEF-8 strategy will seek to accelerate action towards decarbonization in the energy sector and aligning diverse sectoral policies towards a unified vision to reach net-zero by mid-century.

Health Systems. According to the World Health Organization, a health system comprises "all activities whose primary purpose is to promote, restore, and maintain health".[40] With the *Healthy Planet, Healthy People* framework, the GEF is well-positioned to influence transformation in health systems by targeting initiatives that incorporate the shared costs and benefits of integrating human and environmental health. This approach will create opportunities for countries to use GEF resources effectively and efficiently toward green and blue recovery efforts in the context of generating global environmental benefits. In this regard, the *Healthy Planet, Healthy People* framework offers the following value-addition for GEF programming: addressing the drivers of environmental degradation, and reducing future risks; creating linkages across scales and sectors to foster collaborative action; adopting an upstream, preventive approach to health and work to mitigate both infectious and pollution-related diseases.

By targeting these systems, the GEF-8 strategic plan recognizes the existence of barriers, opportunities, and solutions at the country level that must be taken into consideration. Among these are: a) country development trajectories not being compatible with GEF outcomes; b) inadequate recognition of the roles of Indigenous Peoples and Civil Society Organizations; c) existence of institutional and sectoral silos; d) lack of policy coherence; e) misalignment of GEF expectations between local and national levels; f) decision-making based on poor quality or outdated data; g) lack of adequate funding for environmental stewardship, and h) weak governance capacity to implement and enforce regulations. These important considerations call for a "whole of government" approach in GEF engagement with recipient countries.

C.2.2 Strategy

At the heart of the Theory of Change is the GEF-8 investment strategy, which includes both global "top down" and "bottom-up" dimensions. At the global level, the strategy is informed by guidance from the MEAs, the Sustainable Development Goals, and the emerging

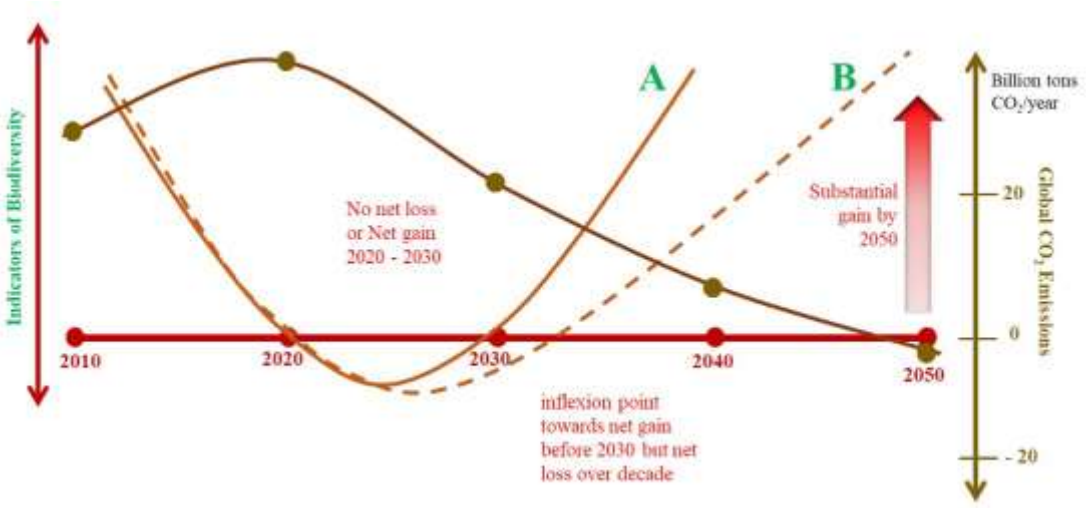
[40] WHO (2020) Key components of a well-functioning Health System https://www.who.int/healthsystems/EN_HSSkeycomponents.pdf?ua=1

levers for raising ambition on financing and targets, along with commitments and pledges described above. The strategy recognizes the global context and the rationale for the proposed programming directions and provides the justification for a robust replenishment needed to meet the demands and expectations of recipient countries.

In raising the ambition for the GEF, the end goal should be to halt nature loss and to ensure a nature-positive and climate-neutral pathway by the end of the decade, with a vision for bending the curve by 2030 and for substantial gains by 2050 (Figure 9). Raising the ambition of the GEF will require a significant increase in environmental action and funding levels, as documented in all Conventions' obligations and strategies. Raising the GEF's ambition will also require a strong focus on transformational change of key economic systems, as the GEF has started to do in GEF-7.

Figure 9. Raising ambition to bend the curve for biodiversity loss and GHG emissions

(*Note: This schematic is a slightly modified version of one under discussion and included in the CBD SBSTTA paper from 5th Feb 2021*)



The "bottom up" dimension affirms the GEF's commitment to country ownership and ensures that investment priorities established for GEF-8 will be aligned with and responsive to demands from countries. The overall focus on a blue and green recovery is expected to generate considerable interest as countries seek to invest in sectors most affected by the COVID-19 pandemic. Food and agriculture, energy, health, and urban sectors will likely be the most important in this regard, all of which will benefit from investments in pathways to recovery that are nature-positive, carbon-neutral, and pollution-free. Hence countries will have the opportunity

to program GEF resources in a manner that best suits that national interest and priority, and contribute multiple global environmental benefits.

C.2.2.1 Focal Area and Integrated Programming

As previously highlighted, the COVID-19 pandemic has reinforced the urgency for transformation of key systems that are sources and drivers of global environmental degradation. The GEF-8 programming strategy is responsive to the need and the architecture described in detail in the next section, includes focal area and integrated program investments to maximize potential for impactful outcomes, in line with expected country priorities for a green and blue recovery. Since GEF-6, the GEF has focused on demonstrating the importance of systems transformation as a powerful approach for delivering global environmental benefits by promoting integration across GEF focal areas. The IAP programs launched in GEF-6 were designed to proactively address the underlying drivers of global environmental degradation through committed multi-stakeholder coalitions. Building on emerging lessons and recommendations from the IEO Formative Review of the programs,[41] the GEF-7 programming further emphasized tackling major drivers of environmental degradation to achieve systems change, with three Impact Programs: Sustainable Cities, expanding the global city coverage and innovations; Food Systems, Land Use and Restoration covering all major commodities and important staples; and Sustainable Forest Management covering the Amazon, Congo Basin, and important Dryland landscapes.

Through the Impact Programs, the GEF has evolved a variety of influencing models towards delivering results across multiple geographies, sectors, and markets. In addition to responding to country-specific needs, the programs enabled the GEF to better crowd-in other stakeholders, including the private sector, enhance knowledge sharing and learning, promote south-south knowledge exchange, and ensure more effective use of GEF resources. Experience from both GEF-6 and GEF-7 also showed strong country demand for the GEF to offer platforms where countries can come together around common challenges. These platforms, which were considered innovative features of the IAP programs by the IEO, provide a variety of services, from knowledge sharing to lessons learned to technology transfer, to name a few. These platforms also bring together expertise from within the network of participating countries and agencies, as well as from the wider community of practice in specific technical areas relevant to the program.

The GEF-8 strategy builds on this experience to support and influence transformational change in the five systems targeted. To further strengthen opportunities for transformational change, the GEF-8 strategy identifies seven cross-cutting themes as priority for programming:

GEF IEO (2017). OPS6 Formative Review of the Integrated Approach Pilot (IAP) programs. https://www.gefieo.org/signposts/formative-review-integrated-approach-pilot-iap-programs

gender responsive approaches; private sector engagement; Nature- based Solutions; circular economy; resilience; environmental security; and behavior change. In addition, the strategy also targets four specific levers as critical for creating desired transformations in the target systems: *governance and policies; financial leverage; innovation and learning;* and *multi-stakeholder dialogues*. Integrating these priorities will be a key feature of the GEF- 8 programming for a blue and green recovery. Governments, development partners, civil society, and the private sector are all vital for forging pathways through programming that embraces these cross-cutting themes and transformative levers. Hence, using an integrated and coordinated approach that builds on lessons learned is essential for ensuring impactful outcomes at scale.

C.2.2.2 Cross-cutting Themes

Through its programming over three decades, the GEF has gained considerable experience with each of the cross-cutting themes. In addition, it has established explicit policies and guidelines for gender mainstreaming and private sector engagement. Furthermore, STAP has contributed technical guidance GEF on Nature-based Solutions,[42] circular economy,[43] resilience,[44] environmental security,[45] and behavioral change.[46] The experiences and available resources will inform and guide entry points for focal areas and integrated programs. Because of the strategic focus on systems transformation, the cross-cutting themes will also be considered in evaluating country interests during operationalization of the integrated programs. In the global context, this consideration will ensure that participating countries will play a critical role in advancing the *Healthy Planet, Healthy People* approach. Below is a brief description of the themes and rationale for their consideration in GEF programming.

Nature-based Solutions - Nature-based Solutions (NbS) are defined by IUCN as *"Actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges, effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.*" The framing of NbS to address multiple societal challenges has gained political currency and broad awareness. The contribution of the GEF to this momentum is not insignificant and should increase according to the recent report from STAP.[47] By integrating NbS as a cross-cutting priority, the GEF can help deliver co-benefits to other sectors, particularly human health, traditionally viewed as outside the GEF's sphere of influence. This approach will also build on the growing efforts by the GEF to mainstream environmental priorities into all public and private sector activities to ensure that nature underpins all socio-economic actions. There must

https://www.stapgef.org/resources/advisory-documents/nature-based-solutions-and-gef
https://www.stapgef.org/resources/advisory-documents/circular-economy-and-climate-mitigation
https://www.stapgef.org/resources/advisory-documents/rapta-guidelines
https://www.stapgef.org/resources/advisory-documents/environmental-security-dimensions-and-priorities
https://www.stapgef.org/resources/advisory-documents/why-behavioral-change-matters-gef-and-what-do-about-it
https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.59.STAP_.Inf_.06_Natured_Based_Solution_GEF.pdf

also be a growing emphasis on regional collaboration for shared ecosystems as well as addressing common linked threats across national borders, as well as paying special attention to fragile and conflict-affected states.[48] Finally, the NbS focus will also embrace the growing opportunity for harnessing technological innovations, and the critical need for mobilizing youth through entrepreneurship.

Gender responsiveness for inclusive and sustainable impacts - Gender inequity challenges are deeply embedded in the socio-economic systems that the GEF needs to transform to effectively support countries in their efforts to build back bluer and greener. Despite promising political commitments and policy reforms, gender inequalities and gaps continue to hamper equal opportunities for women to contribute to and benefit from environmental policies and programs. Women in much of the world still do not have the same control over natural resources as men, and they commonly face more barriers than men to accessing markets, capital, training, and technologies, and remain unrepresented in natural resource governance and decision-making at all levels. Addressing these inequalities and more effectively engaging women to increase opportunities to benefit and contribute, has the transformative potential to address the complex drivers of pressures on environmental resources and improving long-term environmental sustainability globally, nationally, and locally.[49] It will also help include the unique skills, knowledge, and experiences of women that can change the causal chain of environmental degradation, including their involvement in public and private sector governance, their role in productive sectors, and their choices as consumers and investors. The GEF-8 programming direction will build on progress and lessons learned in GEF-7 addressing gender gaps and women's empowerment.

Private sector engagement - The GEF's private sector engagement strategy[50] considers private sector entities (business, small and medium enterprises, and financial institutions) as essential agents of systemic transformation. Hence the GEF places high priority on the need to effectively engage with the private sector, as this will help accelerate and scale - up actions that deliver lasting global environmental benefits. As a cross-cutting theme,

GEF/E/C.59/01, Evaluation of GEF Support in Fragile and Conflict-Affected Situations, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C59_01_Evaluation_of_GEF_Support_in_Fragile_and_Conflict-Affected_Situations_Nov_2020_0.pdf

UNEP (2021). Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies (https://www.unep.org/resources/making-peace-nature); Ghasemi, et al (2021) The mediation effect of rural women empowerment between social factors and environment conservation (https://link.springer.com/article/10.1007/s10668-021-01237-y); Collantes et al (2018) Moving towards a twin-agenda: Gender equality and land degradation neutrality (https://www.sciencedirect.com/science/article/pii/S1462901118306713); Cela, B., I. Dankelman, and J. Stern, eds.
(2013). Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability. New York: United Nations Development Programme; Food and Agriculture Organization of the United Nations (2011), The State of Food and Agriculture 2010-2011: Women in Agriculture — Closing the Gender Gap for Development. Rome.

GEF/C.59/07/Rev.01, GEF's Private Sector Engagement Strategy, https://www.thegef.org/council-meeting-documents/gefs-private-sector-engagement-strategy-0.

GEF-8 programming will seek to promote engagement with private sector actors at all scales, to tackle the key drivers of environmental degradation, to reverse unsustainable global trends, and to extend the delivery of global environmental benefits so that they occur faster and at a broader scale; are delivered more efficiently; and are more durable than could otherwise be achieved.

Circular economy - The current take-make-waste linear economy is a large contributor to the stressors on the global environment, including undermining the stability and resiliency of Earth's systems. Hence the GEF promotes the circular economy model as a unique opportunity for advancing the integrated approach, based on the key principles that underpin the model: designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. The GEF has unparallel experience in cross-cutting, integrated programming, which will be essential for catalyzing the transformation to a circular economy across multiple economic sectors. Building on circular economy-based initiatives from GEF-7, the proposed GEF-8 programming will incorporate circular economy principles to foster sustainability of the planet while securing economic opportunities. Circular economy reinforces the need for public-private sector partnerships to catalyze a closed loop approach to production and consumption. As developing country governments are pursuing circular economy roadmaps, the GEF financing can foster the enabling environments for such partnerships and promote effective regulations and public services, while helping to understand the short-term and long-term benefits as well as costs of transitioning economies from linear to circular models.

Resilience – GEF investments are mostly anchored in social-ecological systems. Hence the resilience of such systems—their capacity to deal with change and continue to develop—is an important consideration for GEF programming. STAP has developed several advisory and guidance documents on resilience, including a methodological approach for use in designing and implementing projects. [51] The GEF recognizes that building resilience at local or national levels is dependent on capacity to anticipate, plan, and take action to respond to a wide range of risks. Furthermore, resilience is neither good nor bad, since a system can be in an undesirable state yet still be resilient to shocks, e.g. a grassland that has been invaded by unpalatable shrubs. Hence GEF programming emphasizes the interconnectedness within and between systems, including the functional attributes that are critical for advancing transformational change in the face of shocks and risks.

Environmental security – As described by STAP, environmental security underpins the rationale for investment in global environmental benefits and is essential to maintain the earth's life-supporting ecosystems generating clean air, food and water. Furthermore,

O'Connell, D., Abel, N.,Grigg, N., Maru, Y., Butler, J., Cowie, A., Stone-Jovicich, S., Walker, B., Wise, R., Ruhweza, A., Pearson, L., Ryan, P., Stafford Smith, M. (2016). "Designing projects in a rapidly changing world: Guidelines for embedding resilience, adaptation and transformation into sustainable development projects. (Version 1.0)". Global Environment Facility, Washington, D.C

reducing environmental security risks depends fundamentally on improving resource governance and social resilience to natural resource shocks and stresses. Hence GEF investment to achieve global environmental benefits depends on effective management of environmental security risks as an element of human security. Because the proposed GEF-8 strategy addresses a wide range of social, economic, and environmental priorities, considering conflict risks in integrated and programs and focal area investments will be critical for ensuring long-term durability of outcomes.

Behavioral change - The STAP Advisory Document on Behavioral Change notes that GEF investments in general involve some form of change in behavior at the individual level or at the institutional level (e.g., in policies, government agencies, and sometimes both). To ensure that GEF seizes on opportunities for achieving durable global environmental and socio-economic benefits, behavior change is considered a cross-cutting theme for GEF-8 integrated programs and focal areas. The focus will be on explicitly identifying whose behavior needs to change and how the change is to be achieved as part of the overall approach to design and implementation.[52]

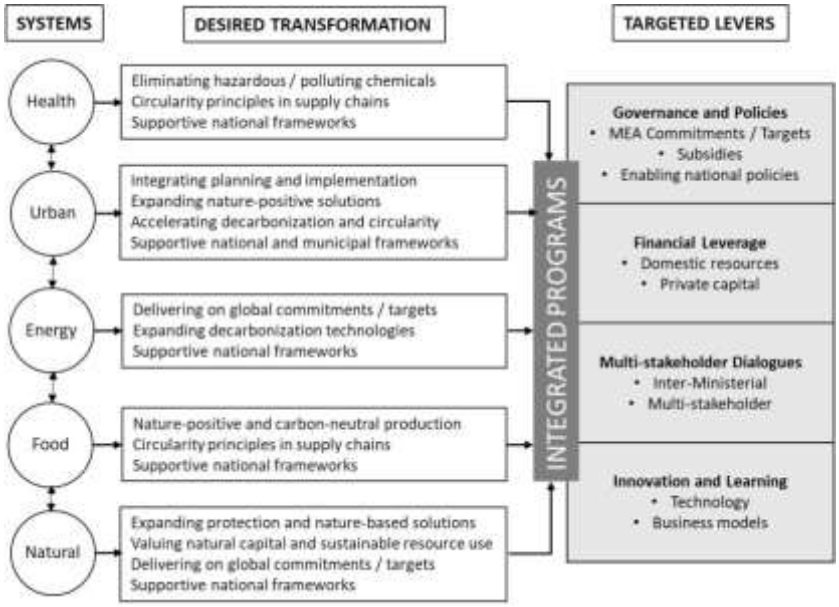
C.2.2.3 Levers for Systems Transformation

Systems transformation depends on specific entry points and levers that drive actions and decision-making.[53] The GEF-8 strategy includes four specific levers considered as critical for creating desired transformations in the target systems: *governance and policies, financial leverage, innovation and learning,* and *multi-stakeholder dialogues* (Figure 10). Building on GEF experience with programming in developing countries, these four levers will undoubtedly play an invaluable role for the post-COVID-19 agenda on a green and blue recovery. The GEF-8 programming directions will therefore prioritize these levers as criteria and entry points for GEF investments at scale, including for selection of countries to participate in the integrated programs. In this regard, the levers will not be treated in isolation, but rather taken together as a set that will be defined by and applicable to each of the GEF-8 integrated programs.

https://www.stapgef.org/resources/advisory-documents/why-behavioral-change-matters-gef-and-what-do-about-it

Independent Group of Scientists appointed by the Secretary-General, Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development, (United Nations, New York, 2019). https://www.un.org/development/desa/publications/global-sustainable-development-report-2019.html

Figure 10. Levers for Systems Transformation



Governance and Policies: For the GEF to proactively influence and support recipient countries as they embark on a green and blue recovery from the COVID-19 pandemic, it is critical that the programs and projects be anchored in a whole-of-government framework as well as key transboundary governance models for the global environment. This will create opportunities to foster coherence and cross-sectoral institutional integration in formulating policies and ensure that environmental priorities are mainstreamed at all levels. This lever will consider three key priorities: a) commitments and targets relevant to MEAs the GEF serves; b) the need to eliminate, reduce, or repurpose subsidies that negatively impact global environmental benefits, and to promote subsidies that speed the transition to nature-positive solutions; and c) enabling policies to attract investments that benefit the global environment.

Financial leverage: Evidence from co-financing provided to GEF projects and several recent reports on biodiversity finance suggests that countries have considerable capacity to mobilize financing for investment in initiatives that generate global environmental benefits. The GEF is also aware that the potential for such resource mobilization is considerably higher than is being realized through projects alone. However, mobilizing resources at scale requires systemic change, which will be influenced through the set of transformational levers targeted for GEF-8. Financial leverage will consider a) domestic resources mobilized through national planning budgets and public development investments; and b) private capital catalyzed from businesses, financial institutions, and

foundations. Through this lever, the GEF will promote natural capital accounting, green procurement practices, Nature-based Solutions as a requirement in government tenders, and financing tools such as Conservation Trust Funds, Payment for Ecosystem Services (PES), and blended finance. With COVID-19 generating a severe debt crisis, the GEF will also consider the possibility of greening likely upcoming sovereign-debt relief packages (e.g., green sovereign debt relief facility).

***Innovation and Learning*:** As previously noted by STAP, incremental progress is inadequate to deliver transformational change.[54] By targeting innovation as a lever for systems transformation, the GEF will explicitly push for new opportunities and options that deliver much needed shifts. STAP also noted that although this entails risk and the possibility of poorer outcomes or even failure, falling back on proven solutions will not deliver transformational change. The GEF-8 strategy will consider the following aspects of innovation and learning: a) technology options that are potential game-changers; b) business models that require multi -stakeholder collaboration, including between public and private sectors and that speed the transition to nature- positive solutions; and c) institutional innovations that shift consumer behaviors or societal norms, increase capacity for implementation (including among public, civil society, and private sector actors) or create new coalitions for change.

Multi-Stakeholder Dialogues. Enduring, transformational change will require consideration of new stakeholders, new partnerships, and multi-stakeholder platforms in order to build coalitions for change.[55] As defined by STAP, *multi-stakeholder dialogues refer to the processes and platforms that can be built to bring together different groups of stakeholders into an arena with a shared goal and distinct responsibilities* . The GEF has increasing experience of the principles of multi-stakeholder processes and platforms. The GEF also continues to enhance the enabling environment for engagement with stakeholders through a series of key policies and strategies. Multi-stakeholder dialogues will be considered on two dimensions: a) national level policy design and implementation, involving relevant line ministries within countries as well as other policy stakeholders; and b) cross-scale coalitions engaging government, private sector, and civil society across different scales as appropriate to pursue the goals of programs or projects. All Integrated Programs and projects submitted to the GEF will be required to explicitly describe planned strategies and processes for such dialogues.

Toth, F., 2018. Innovation and the GEF: Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.STAP_.C.55.Inf_.03_STAP_Innovation.pdf

Suggested citation: Ratner, B.D. and Stafford Smith, M. 2020. Multi-stakeholder dialogue for transformational change. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.STAP_.C.58.Inf_.02_Multi_Stakeholder_Dialogue_For_Transformational_Change_0.pdf

C.2.3 Impacts and Goal

The GEF-8 strategy as outlined in the Theory of Change focuses on addressing major drivers of environmental degradation while creating opportunities for multiple global environmental and development benefits and on complementary focal area investments to respond to guidance from the different MEAs served by the GEF. While the focus is on the next four-year (2022–2026) cycle, the strategy will position the GEF to accommodate priorities being established by the MEAs through 2030 (and hopefully accelerated in the 2027-2030 cycle). The best available models suggest we must take significant steps towards sustainability and resilience by that date if we are to embark on a trajectory towards a healthy planet for humanity.

In accordance with the vision and *Healthy People, Healthy Planet* framework, the GEF has established the following specific goals through 2030:

Post-COVID19 strategies by state and non-state actors scale-up "green" and "blue" recovery actions in priority landscapes and seascapes

Incentives and improved policy options promote innovations and behavior change for sustainability and resilience in target systems

Transformation of target systems promoted by maintaining and enhancing natural capital and ecosystem services through Nature-based Solutions

Circularity promoted in value/supply chains to increase efficiency and reduce or eliminate negative externalities

These goals will serve as basis for setting targets for global environmental benefits as reflected by core indicators, which are mapped to the different GEF focal areas for reporting to the MEAs. In addition, they will also contribute to monitoring and assessment of desired transformations in target systems as well as socio-economic benefits. The approach to monitoring and reporting on results is the subject of a separate document.

C.3 GEF as the Uber-Integrator

The Leaders' Pledge for Nature, endorsed by close to 90 countries, has called on the world to "*…re-double our efforts to end traditional silo thinking and to address the interrelated and interdependent challenges of biodiversity loss, land, freshwater and ocean degradation, deforestation, desertification, pollution and climate change in an integrated and coherent way, ensuring accountability and robust and effective review mechanisms, and lead by example through actions in our own countries."*

The GEF's unique mandate across multiple MEAs enables it to bring an integrated approach to most of its work. GEF support has been critical in allowing parties to translate these agreements into national action, and in ensuring transparency of action through effective reporting from countries to conferences of the parties.

While the GEF is not a financial mechanism of the SDGs, recent GEF guidance coming from various MEA COPs has requested that the GEF foster integration as well as promote synergies among actions and strategies. The GEF's indirect role in supporting SDG planning and implementation as recognized in multiple conventions reflects the integrated and indivisible nature of the SDGs.

C.4 Improving GEF's Operational Efficiency, Stakeholder Engagement, and Learning

The GEF-8 strategy represented in the Theory of Change calls for some important shifts in key areas to increase operational efficiency and support to recipient countries. Table 1 summarizes some of the priority areas where such shifts will be needed, and include adjustments to the STAR, results and monitoring, focal area programming, integrated programming, and approach to private sector engagement and investment. These shifts will enable the GEF to pursue a more effective, responsive, and agile delivery model that will reduce fragmentation of GEF resources and interventions, strengthen its results focus, and enhance upstream engagement on strategic programming with a broad set of stakeholders, including the private sector.

The GEF will continue to work with our partners to implement a coherent set of policies adopted in GEF-7 and earlier. Together they raise our standards of delivery by increasing the speed and quality of project preparation and implementation for greater results.[56] They also ensure projects adhere to high fiduciary standards and integrity. The partnership enables the GEF to tap this knowledge and strengthen capacity for effective delivery of global environment benefits. The GEF is steadily increasing its co-financing across GEF phases.

From its inception, the GEF has been committed to ensuring transparency and inclusion, as reflected in the evolution of its policies and guidelines encompassing stakeholder engagement and civil society participation. In GEF-7, the GEF scaled up its efforts to provide stakeholders such as civil society, IPLCs, women, youth, and other non-state actors with the means to engage throughout the program and project cycle and to access relevant information and learn from each other.

[56] These ongoing efforts to improve efficiency also address one of the areas for improvement identified by the MOPAN Assessment of the GEF - MOPAN 2017-18 Assessments, Global Environment Facility, http://www.mopanonline.org/assessments/gef2017-18/

Finally, the GEF-8 agenda will also maintain and advance GEF's core commitments to transparency, integrity, and accountability in its work. The updated policies on Gender and on Fiduciary Standards and Monitoring Agency Compliance with GEF Policies will be applied fully, and the Secretariat will continue its work to monitor and report on a key metrics of progress and issues that arise during project implementation.[57]

Table 1. How the GEF will evolve under a Healthy Planet, Healthy People Approach

Strategy	Business-as-Usual	Approach for GEF-8
STAR	• STAR structure (indices, weights, floors and ceilings) as well as flexibility rules remain unchanged.	• Increasing flexibility to further facilitate the mainstreaming of integrated programming principles • Adjusting the STAR structure to increase support to vulnerable countries • Closing the financing gap using non-grant instruments for resource mobilization Creating a competitive space to increase effectiveness and efficiency and maximize the impact of limited resources
Results	• Core indicators and targets remain unchanged	• Updated targets for Core indicators highlighting the level of ambition for GEF-8 • The GEF-8 Results Measurement Framework to help monitor systems transformation • Enhanced tracking of how GEF investments improve people's well-being and livelihoods • Strengthened project and program monitoring, learning and adaption • Sharing emerging lessons of transformative changes in GEF investment
Focal Area Programming	• Responsive to MEA guidance	• Responsive to MEA guidance • Proportionally allocated between single focal area and integrated programs • Explicit links to 2030 targets and commitments by State and non-state actors • Systematic learning from science and past investments

[57] These elements will also be detailed in a subsequent document for the Replenishment discussions.

Integrated programming	• Limited to programmatic approaches only • Incentive mechanisms for countries maintained at 1:2 ratio	• Principles of integrated programming mainstreamed in GEF portfolio • Both Programmatic approaches and stand-alone full-sized projects • Incentive mechanisms diversified • Systematic learning from science and past investments
Private Sector Engagement and Investment	• New private sector engagement strategy approved • Blended finance attracted investment in frontier areas such as biodiversity and Nature-based Solutions	• Increase emphasis on multi-stakeholder platforms to understand incentives and pathways to behavioral change that will drive systems change, including private sector engagement in Integrated Programs • Expand and streamline blended finance to support innovation and attract private sector investment at scale

GEF-8 PROGRAMMING ARCHITECTURE

A. Integrated Programing

Findings of the GEF-6 and GEF-7 programming cycles indicate that programs addressing the drivers of environmental degradation using an integrated framework result in more impact per unit of investment than comparable GEF investments, and create the conditions for transitions towards lasting systems transformation The recent MOPAN Assessment of the GEF underscored this outcome and highlighted the need for the GEF to continue to use its limited resources in the pursuit of transformational change. That assessment found integrated programming to be more relevant to the type and complexity of global environmental challenges.[58]

As a general rule, GEF investments should be designed to produce lasting and transformative impacts. Several guiding principles have been identified and articulated with the support of STAP:[59]

Integration across sectors, thematic areas and drivers:

> *Address ecological, economic, and social drivers and outcomes.* This includes consideration of factors such as cultural norms, consumption patterns, economic demand, and incentives, as well as the distribution of costs and benefits from investment activities. For example, how well do investments in fisheries

MOPAN 2017-18 Assessments, Global Environment Facility, http://www.mopanonline.org/assessments/gef2017-18/.

https://www.stapgef.org/resources/advisory-documents/achieving-transformation-through-gef-investments

management also address associated livelihood improvements, or the incentives driving illegal fishing?

Avoid leakage (displacing negative impacts elsewhere). This includes displacement of destructive production practices as well as flows of toxins and waste. For example, are efforts to halt deforestation in one region diverting this pressure to other intact forest landscapes? How to deal with leakage if it happens?

Work across sectors and scales. This includes the linkages between biodiversity conservation, habitat protection and restoration, food systems, transportation, energy production, and supply chains. For example, how well does urban planning integrate wastewater treatment, biodiversity conservation, green infrastructure, and green energy for sustainable cities development?

Transformative Investments:

Credibly address one or more transformation levers identified in GEF strategy. For GEF-8, these levers are provisionally identified as governance and policy, financial leverage, innovation, and multi-stakeholder dialogue.

Take purposeful programmatic risk to achieve impact at scale. This recognizes that transformational change requires novel approaches in the domains of policy and finance, technology, and management practices, as well as institutions and cultural norms. For example, in addition to testing technological innovations in sustainable mariculture, are there complementary efforts to shift policy regimes and consumer demand?

Durable Investment:

Design for resilience in the face of multiple, plausible future scenarios. This includes explicit consideration of climate risk along with other dimensions of environmental change.

Build institutional and financial mechanisms to sustain impact. This recognises that the greatest opportunities to scale impact typically come after the period of GEF investment. For example, what kinds of capacity building and strengthening measures will enable the effectiveness of transboundary governance institutions for Large Marine Ecosystems?

Integrated approach programming will be further strengthened and build on progress made in GEF-6 and GEF-7 (see Box 1). In GEF-8, we propose to continue to mainstream integration across GEF investments as the main delivery mechanism to ensure the most

impactful and efficient use of GEF resources. For the purpose of GEF-8, integrated programs are defined by sharing several of the following characteristics:

Integration of actions across sectors (e.g. agriculture and conservation); or

Integration of resources across GEF focal areas; or

Integration across supply chains; and

Deliver multiple global environmental benefits; and

Address drivers of environmental degradation at global or regional scales; and

Complement country-level investments with transboundary action and impact at regional or global scales; and

Mobilize diverse coalition of stakeholders from relevant sectors for system transformation; and

Promote greater private sector engagement; and

Foster knowledge sharing and learning.

A central feature of integrated programming is the drive to deliver global environmental benefits across several GEF focal areas in a more impactful and efficient manner. These approaches also focus on the drivers of environmental degradation, rather than dealing with the symptoms of degradation itself.

GEF-8 Architecture

The GEF-8 programming framework builds on the successful dual approach in GEF-7 of investing in integrated programming and associated focal area commitments. In GEF-8, we intend to encourage countries to move more of their programming through large-scale, integrated programs that address most of the major environmental needs of the planet for which the GEF has a mandate. This will be complemented with more targeted GEF-8 investments along focal area-specific entry points to ensure that all Convention commitments are also addressed (Figure 11). Eleven Integrated Programs will deliver global environmental benefits across multiple focal areas, and this will be complemented by focal area specific investments for priorities that are best suited to single focal area investments.

Figure 11. GEF-8 Programming Architecture



Box 1. Evolution and Lessons Learned of Integrated Programming in the GEF

GEF invests in projects designed by countries to address specific focal area objectives, which are developed in accordance with guidance from the relevant conventions that the GEF serves as financial mechanism. The use of GEF grants has evolved over the years from multi-focal area to integrated approaches, depending on country-specific needs reflected in the design of projects and programs. The evolution largely reflects the increasing need for GEF resources to harness better integration and opportunities for generating multiple global environmental benefits.

Multi-focal Area (MFA) Programming

Multi-focal area (MFA) programming involves the use of GEF financing from more than one GEF focal area to address a combination of GEF objectives and outcomes. MFA projects have increased over the years, accounting for 13 percent of GEF funding GEF-4 and 28 percent in GEF-5. MFA programming presents a myriad of opportunities for countries to harness GEF financing based on their own needs and priorities for generating global environmental benefits. MFA programming was also key to advancing the Sustainable Forest Management program, which was designed to incentivize countries toward harnessing cross-focal area synergies for safeguarding globally important forest landscapes. A major limitation of MFA programming is the inherent expectation that global environmental benefits from projects will be proportional to the amount of focal area resources invested. This is not only difficult to establish, but also undermines the potential for harnessing synergies and avoiding negative tradeoffs.

Integrated Approach Programs

The "integrated approach" was formally launched as a programming option during GEF-6 with three pilot programs that were structured around major emerging drivers of global environmental challenges: two were global programs on urbanization (Sustainable Cities) and commodity-driven deforestation (Commodities), and the third on sustainability and resilience for food security in the drylands of Sub -Saharan Africa. GEF financing for the programs was not "siloed" by focal area, but rather invested in a coherent manner to promote the sustained flow of multiple global environmental benefits, while ensuring that progress in any dimension of the global environment does not negatively affect other related objectives. The integration therefore creates opportunities for projects to harness synergies and avoid negative tradeoffs. The programs greatly enhanced the prospect for multi-stakeholder engagement because of the direct link with sectoral priorities underpinning economic growth and development in the countries. A formative evaluation of the pilot programs conducted by the IEO for OPS7 suggests that countries see integrated programming as a strategic innovation and that experiences with their design and implementation has helped to further improve the overall approach for GEF-7.[i]

Impact Programs

Building on the GEF-6 experiences, the GEF introduced a set of Impact Programs in GEF-7 to promote transformational shifts in key economic systems. These programs meet multiple convention goals and form an integral component of each focal area strategy. GEF financing closely matched key objectives and guidance received from the conventions and are complemented by priorities that can best be delivered as separate investments under each of the focal areas. This is consistent with the Leaders' Pledge for Nature which calls for better integration across the multi-lateral agreements. Through impact programs the GEF is helping countries pursue holistic and integrated approaches that deliver impactful outcomes, and in line with their national development priorities. The focused set of country-driven priorities enhances integration among GEF investments and creates opportunity to crowd-in private sector financing.

Integrated Programs

With growing urgency to turn the tide on pressures and threats facing the planet, integrated programming will be further harnessed as a means to scale up investments for global environmental benefits during GEF-8 and beyond. In GEF-8, integrated programs are being proposed to promote blue and green recovery from the COVID-19 pandemic. The programs are also responsive to global aspirations for development pathways that nature-positive, carbon-neutral and pollution-free pathways, including commitments by mulit-lateral environmental agreements to address interdependencies between human well-being and a healthy planet. The GEF-8 programming architecture specifically addresses the critical need for ensuring that GEF investments are targeted toward tackling the breakdown in food, energy, urban, health, and natural systems that underpin human development.

[i] GEF/E/C.60/04, Formative Evaluation of the GEF integrated Approach to Address the Drivers of Environmental Degradation, https://www.gefieo.org/sites/default/files/documents/reports/environmental-degradation.pdf.

The first axis of GEF-8 programming represents a key set of integrated program concepts that can "move-the-needle" towards systems transformations. This framework positions the GEF well in its work to help developing countries pursue holistic and integrated approaches directed at transformational change in key systems, and in line with their national development priorities.

The proposed integrated programs collectively address major drivers of environmental degradation and/or deliver multiple benefits across the many thematic dimensions the GEF is mandated to deliver. Many of the priorities are also making use of increasingly more relevant global or regional platforms that are attracting a multitude of stakeholders and resources in response to political commitments.

The second programming axis encompasses focal area-specific investments that also respond to specific guidance from the different multilateral environmental agreements. While the integrated programs will deliver substantial global benefits across the different focal areas (Figure 11), some elements of guidance from conventions can be best dealt with through distinct focal area complementary investments directed at objectives not fully reflected within the set of proposed integrated programs. These investments are presented in detail within the individual Focal Area Investment Frameworks for Biodiversity, Climate Change, Land Degradation, International Waters, and Chemicals and Waste.

The table that follows describes the goals, GEF niche, and value added for each of the Integrated Programs. This is followed by a short description of each of the focal area strategies.

Table 2. Description of the Integrated Programs in GEF-8

	GEF Niche	GEF Added value
Food Systems	OBJECTIVE: To catalyze the transformation to sustainable and regenerative food systems that are nature positive, climate resilient and nutrient pollution.	
	The IP builds on GEF experience with the GEF-6 IAP program on Taking Deforestation out of Commodity Supply Chains and the GEF-7 Food Systems, Land Use and Restoration Impact Program. As with these past programs, the IP recognizes the need for actors across the supply chain to embrace best practices and sustainability principles, and for clear linkages among the production, demand, and financing sectors in order to contribute to food systems transformation. The Food Systems IP will focus on broadening the sustainable production and reduced deforestation goals of previous GEF food programs and seek outcomes in which food is produced in ways that restores habitat, protects biodiversity, and sequesters carbon.	The major food staples and agricultural commodities footprints occur in GEF recipient countries and their impacts on land use and global environment is significant. In this sense, there is a perfect nexus between working with these countries in making the supply chains more sustainable and managing land use in productive ways for food production and the environment. GEF value add lies in engaging with multiple countries in a multi-stakeholder platform, which increases the potential for transformational change. GEF engagement catalyzes new opportunities across spatial (landscapes) or vertical (supply chain) dimensions to help maximize potential impact. Fostering decision-making across scales is likely to induce effective adaptation to social

		and ecological change because feedback loops can relay information between levels and foster improved decision-making.
Ecosystem Restoration	OBJECTIVE: To generate multiple environmental and socio-economic benefits by applying integrated landscape approaches for restoration of degraded land and ecosystems.	
	GEF is the only global funding window for ecosystem restoration with a focus on *multiple* environmental benefits. Until now, GEF funding was made available for many different restoration-related activities in a rather fragmented way. The GEF-8 Program will bundle all efforts and elevate the theme of ecosystem restoration to a strategic level in response to global commitments and targets set under the conventions. Current restoration efforts are mostly funded either by bilateral aid or the private sector (e.g. LDN fund) with specific focus on target regions and/or land categories, with forest plantations and agroforestry intensification being the main activities. Further, the GCF funds a few selected restoration projects with specific climate change mitigation or adaptation objectives. The GEF-8 program will be more integrated and focused on ecosystems, closely aligned with the vision of the UN Decade to restore ecosystems for a healthy planet, supporting all 17 SDGs.	GEF is one of the 12 global partners of the UN Decade and can convene multiple stakeholders, mobilize financing, and catalyze a global movement with this program. The Integrated Program supports the global commitments towards restoration under the MEAs by mobilizing a diverse coalition of stakeholders from all relevant sectors, catalyzing finance, and fostering global cooperation. It responds to strong demand by GEF-eligible countries for financial, technical, and policy support to meet their restoration targets while ensuring multiple global environmental benefits.
Sustainable Cities	OBJECTIVE: To advance the integrated urban and territorial planning and implementation with a focus on developing innovative sustainability solutions and creating an enabling environment to deliver large scale climate, biodiversity, resilience, and inclusion benefits.	

	GEF takes an integrated and systems-based approach to address drivers of environmental degradation in cities compared to other programs which take a sectoral approach, or intervene downstream, or target a specific environmental outcome. GEF's approach of supporting integrated land use planning at urban and territorial scale; strengthening urban policies, governance and institutional capacity; tackling multiple environmental benefits (climate, nature, and chemicals) collectively; and facilitating knowledge generation and global collaboration makes it more holistic and different from other initiatives.	Cities are critical to drive the transformative action needed to achieve Paris Climate Goals, SDGs, and ecosystem restoration goals by 2030. They are at the center of the movement towards net-zero carbon emissions and have transformative power to halt loss of biodiversity and nature due their sheer influence on global supply and demand. GEF is well placed to build on this momentum and further strengthen city leadership in developing countries, leverage cities as engines of innovation, and build multi-stakeholder partnerships that can catalyze transformative action to deliver multiple global environmental benefits, human well-being, and a global green recovery. Furthermore, GEF engages directly with existing city networks and urban financing institutions to provide them with thought leadership and resources to advance their efforts and influence them to adopt integrated approach for urban transformation.
Amazon, Congo, and Critical Forest Biomes	OBJECTIVE: To invest in the protection and effective governance of critical forest biomes that sustain the health of the environment and flow of vital ecosystem services that underpin human well-being.	
	The GEF is in a unique position to champion the ecological integrity of intact forest landscapes both for climate, biodiversity, watersheds, and livelihoods. There is no other fund, aside from the GEF, that has a comprehensive approach to conserving intact forest landscapes with the goal of maximizing multiple global environment benefits, as well as ecosystem services for the benefits of indigenous people and local communities. The IP focuses specifically on the Amazon and Congo Basin, but also targets other biologically important regions such as Indo-Malaya, Meso-America, and Western Africa where forest protection will generate significant benefits for global biodiversity, climate, and people.	GEF value-add lies in ensuring that the program will address the drivers of forest loss and degradation through strategies aimed at creating a better enabling environment for forest governance by countries. This is achieved by supporting national and sub-national land use planning across mixed-use landscapes; strengthening of protected areas; clarifying land tenure and other relevant policies; supporting the sustainable management of commercial and subsistence agriculture lands to reduce pressure on adjoining forests; and utilizing financial mechanisms and incentives for sustainable forest utilization such as markets, REDD+, and other Payments for Ecosystem Services.
Circular Solutions to Plastic Pollution	OBJECTIVE: To catalyze circular economy approaches to reduce plastic production, consumption, and waste.	
	The GEF is uniquely positioned to tackle the breadth of threats associated with plastic production, consumption, and disposal, including GHG and harmful chemical emissions as well as impacts on marine biodiversity. An integrated program can ensure a holistic approach across the GEF's	Unlike existing funding by governments, foundations and investors, this program will invest in solutions along the entire value chain of plastic with particular attention to alternative materials, circular redesign and reuse options for extended life. Packaging, particularly single use related to the food and beverage sector, will

	International Waters, Biodiversity, Chemicals and Waste, and Climate Change investments addressing the full value chain of plastic. Further, tackling plastic pollution requires public-private partnerships, which is a priority commitment of GEF-8	be the priority for the Plastic IP since it is the main source of plastic waste in developing countries. As plastic pollution efforts tend to focus on waste collection, recycling, and clean-ups, the GEF will prioritize actions early in the plastic value chain, i.e. production and consumption. The IP will address the full value chain by aligning with existing the waste management efforts.
Blue and Green Islands	OBJECTIVE: To apply Nature-based Solutions in key ecosystems that support socio-economic development in SIDS countries. This will place nature at the center of human well-being and generate multiple global and local environmental and societal benefits.	
	The GEF has provided consistent support for environmental work in these small countries across the Conventions. The program is fundamentally about integration—across environmental issues as well as with development and economy.	This program will help create collective bargaining power and coordination for SIDS in negotiation such as with the cruise, fishing, and shipping industries. GEF value add lies in leveraging and supporting work of regional entities such as SPC, SPREP, OECS, and Caricom, to build capacity and strengthen the enabling environment for collective action and for mainstreaming environmental concerns into other areas.
Clean and Healthy Ocean	OBJECTIVE: To foster healthy blue economic development by curbing coastal pollution from agricultural and municipal sources through infrastructure investments combined with Nature-based Solutions.	
	The Clean and Healthy Ocean Integrated Program will offer a unique entry point for the GEF and its partners to raise the profile and importance on improved wastewater treatment, combined with data management to inform policy processes. Moreover, the IP will leverage substantial financing from IFIs, pension funds and private banking operations. On top of these financial actors, there are a number of NGO, CSO and private sector able to support knowledge generation through its investments. The GEF will built on 25 years of experience of doing successful regional invest, such as what has been funded in the Black Sea Danube, East Asian Sea, Pacific, Caribbean and Eastern and Northern Africa. Further the IP will also built upon knowledge and lessons learned from The ProBlue Partnership, EIBs investment platforms on curbing ocean pollution, The International Water Association (IWA), The Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA), The World Business Council for Sustainable Development Wastewater Zero Call for Action, EUs Horizon 2020 and the partners around the Sustainable Blue Economy Finance Principles.	A substantially financed IP, like this one, will be essential in raising the importance of proper wastewater treatment in the global discourse. GEF is uniquely positioned to do this through its strong partnership of IFIs, NGOs and UN agencies. Doing a quick search on “ocean pollution” plastic as a more visible pollutant is dominant. It is of course troublesome that more invisible sources of pollutants, that have devastating impacts on coastal ecosystems are not more recognized by the public. The massive shifts that are easy to visually recognize for professional and layman alike, by simply looking at corals, seagrasses, fish diversity and abundance have been occurring for decades. Moreover, the quality of the oceanwater for recreational purposes and habitats for larger iconic marine mammals or other indicators that the GEF and partners need to step up and invest. Technologies are there, what is needed is political willingness to support policy reforms and allocated financing to invest in proper infrastructure. We as a financing agency of global environment assets need to build on the momentum that the ocean ecosystem enjoys at this specific point in time and start curbing the inflow of nutrients to the ocean.

Greening Transportation Infrastructure Development	OBJECTIVE: The objective of the program is to enable countries to develop country level portfolios of integrated biodiversity-positive transportation infrastructure projects at national or land/seascape levels.	
	This program focuses on what needs to be in place before an infrastructure project idea is developed. Neither governments nor bilateral donors fund this 'upstream' enabling environment work and it is not currently built into procurement practices in the way safeguards are. The IP fills this gap.	Future infrastructure development will have profound social and environmental consequences unless significant challenges in infrastructure planning and development are overcome. GEF value add lies in ensuring that proposed and planned infrastructure development are nature-positive by: 1) avoiding the placement of infrastructure in globally important and particularly sensitive ecological areas, thus significantly reducing negative impacts to ecosystems from essential infrastructure development; 2) enabling countries to recognize ecological services as infrastructure (nature-based infrastructure solutions) and put in place the necessary protections for nature to continue to provide these functions; and 3) striking a balance between investment in new infrastructure and maintaining existing assets to meet sustainable infrastructure service delivery requirements.
Net-Zero Accelerator	OBJECTIVE: To accelerate implementation of net-zero pathways in developing countries, pushing the ambition beyond that of existing NDCs and contributing to closing the emissions gap to meet the aspirational 1.5°C goal of the Paris Agreement. The program will support methodologies leading to transformational changes towards carbon neutrality at the national level.	
	Considering its role as entity of the financial mechanism of the UNFCCC, the GEF is uniquely positioned to build on the ambition framework of the Paris Agreement and to support Parties to enhance their contribution to its long-term temperature goals. Building on its experience on integration to date, the GEF can effectively support countries with financial and non-financial resources to ensure high level coordination of policy making actors as a precondition to effective climate action.	The rapid and deep decarbonization strategies that are needed to meet the net-zero targets by mid-century will require actions that are as broad as possible and that span all sectors and all stakeholders. Such long-term strategies will only be effective through whole-of-economy approaches designed to address tradeoffs and ensure policy coherence, by minimizing negative subsidies as well as unintended negative socio-economic consequences for communities. The GEF is ideally positioned to lead on a multi-country effort to generate lessons and best practice investments for this. Coupled with the flexibility of its financial instruments, mostly grants, and the three decade long experience in market transformations, the GEF's added value lies on its ability to leverage its broad partnership, with its 18 large Implementing Agencies and a wide spectrum of private sector partners, as well as its role as financial mechanisms for multiple environmental conventions.
Wildlife Conservation for Development	OBJECTIVE: To conserve wildlife and landscapes by transforming the drivers of species loss and ensuring that countries and communities are benefiting from these natural assets.	
	Effectively addressing the drivers of wildlife loss, including IWT and unsustainable	Achieving this requires an approach with both global and national dimensions. A global reach

	consumption demands coordinated action throughout global supply chains, across countries, regions and continents. The GEF is uniquely positioned to catalyze Global/Regional coordination and cross-sectoral partnerships. An Integrated Program is needed to supplement national projects in working across the supply chain including incentivizing behavior change for demand reduction for internationally trafficked species.	is critical to success given that the loss of wildlife in one place can be driven by forces with roots in international demand and illegal wildlife supply chains and global trafficking networks, while strong incentives for wildlife conservation are often tied to international industries including tourism. The GEF can convene multiple stakeholders, mobilize financing, and catalyze a global movement with this integrated program by targeting activities and areas that national projects cannot address, such as, international trafficking and transboundary issues; support for One Health approaches to reducing zoonotic spillover risks; and global and regional donor coordination and knowledge management, with emphasis in South-South collaboration. Not all drivers nor solutions are global, and distinctly national and local level approaches and actions will benefit from a globally integrated program to support information exchange, capacity building and networking.
Elimination of Hazardous Chemicals from Supply Chains	OBJECTIVE: To prevent chemical pollution from the supply chains of fashion and construction as well as significantly improve the sustainability of these sectors. The program also seeks to create circular and closed loop supply chains in fashion and construction	
	The control of hazardous chemicals is driven by the public sector, while action is largely required in the private sector. The GEF has a proven track record on spanning this divide in the chemicals and waste focal area where public funding has supported elimination of hazardous chemicals in the private sector including in textiles, manufacturing, chemicals in products and other sectors. This experience and network places the GEF in the ideal position to work on chemical issues in complex supply chains where work is required in public policy and in the private sector.	The GEF is the largest public source of funding for managing and eliminating hazardous chemicals. The GEF has built a reputation with the gold and luxury sector through its work on planetGOLD and through supporting the Fashion Pact and has convened public and private sector stakeholders to address chemicals in these supply chains and serves as an honest broker in this role. In supply chains that span geographies and jurisdictions, globally coordinated action is needed. The GEF is the only institution that can do so, specifically in addressing the use of hazardous chemicals in supply chains. A clear benefit of the GEF operating in this space is the ability to bring in other environmental dimensions including climate change and biodiversity so that the overall sustainability of the supply chains can be addressed holistically.

Biodiversity Focal Area. The goal of the GEF-8 Biodiversity focal area strategy is *globally significant biodiversity conserved, sustainably used, and restored.* To achieve this goal, the strategy will support the following three objectives: 1) to improve conservation, sustainable use, and restoration of natural ecosystems; 2) to effectively implement the Cartagena and Nagoya protocols; and, 3) to increase mobilization of domestic resources for biodiversity. Achieving the goal and objectives of the biodiversity focal area strategy requires a wide array of actions and while all are necessary none will be enough on their own. GEF's associated programming

investments that are channeled through other focal areas and Integrated Programs are critical to help achieve the focal area strategy goal and objectives while specifically supporting the goals of the Post-2020 Global Biodiversity Framework. The strategy will remain responsive to guidance emanating from the CBD processes. The recently released Dasgupta Review emphasized that nature and biodiversity are critical elements that support the sustainability of our economy, livelihoods, and overall well-being. The GEF-8 strategy embodies an integrated and multi-sectoral approach that fully recognizes the fundamental importance of biodiversity and nature to the well-being of our planet and its people.

Climate Change Focal Area. The GEF-8 period is demarcated by the ambition of the Paris Agreement. This will include the communication of new or updated NDCs and Long-Term Strategies prior to the start of GEF-8, the First Global Stock take to take place in 2023, and the communication of the next round of NDCs towards the end of GEF-8. The GEF-8 Climate Change strategy is designed to support and raise the ambition of climate action in developing countries, helping Parties to meet their Convention's obligations. To reach this goal, the strategy is built around two pillars and seven objectives. Pillar one will promote innovation, technology transfer, and transformational policies to shift economies to low-emission paths. Investments in this area will leverage private sector engagement to accelerate energy efficiency and renewable energy penetration, scale up zero-emission mobility, harness the full potential of Nature-based Solutions and support carbon pricing schemes. Pillar two will foster enabling conditions to mainstream mitigation concerns into sustainable development strategies, promoting transparency under the Paris Agreement and supporting Parties in meeting their convention obligations. As the world embarks in this crucial decade for the protection of nature and climate, the GEF-8 climate strategy is designed to provide developing countries with tools that enable their full participation to the global efforts to achieve the Paris Agreement's long-term temperature goals.

Land Degradation Focal Area. The UNCCD COP 14 held 2019 in India invited the GEF to continue its support to countries in programming GEF LDFA resources to combat desertification/land degradation and drought and achieve their voluntary land degradation neutrality (LDN) targets, including in the context of land degradation neutrality transformative projects and programs. COP 14 also invited the GEF, within its mandate, to support the implementation of relevant aspects of the national drought plans and other drought-related activities within the scope of the Convention. In response, the goal of the LDFA in GEF-8 is to avoid, reduce, and reverse land degradation, desertification and mitigate the effects of drought. The LDFA strategy will contribute to its goal through: 1) avoiding and reducing land degradation through sustainable land management (SLM); 2) reversing land degradation through restoration of production landscapes; 3)addressing desertification, land degradation, and drought (DLDD) issues, particularly in drylands, and 4) improving the enabling policy and institutional framework for LDN. GEF LDFA investments focus on addressing the drivers of land degradation in production landscapes where agricultural, forestry and rangeland management practices underpin the livelihoods of rural communities, smallholder farmers and pastoralists. With the current

pandemic and against the background of land degradation altering agroecosystems worldwide, the effects of land conversion and crop and livestock intensification increase the risk of emerging infectious diseases. In this context, the LDFA strategy aligns with GEF's vision to achieve healthy and resilient ecosystems by improving production systems and livelihoods of rural populations.

International Waters Focal Area. The GEF through its IW focal area is supporting cooperation in shared marine and freshwater ecosystems, to achieve long-term environmental status change. Complex transboundary water ecosystems deliver services to a wide variety of sectors that ultimately support societal cohesion and a healthy human development trajectory. While not responding directly to a convention, the IW Focal area fills a critical gap in the global management of transboundary fresh- and marine water resources. GEF IW interventions are built on best available science which informs an initial assessment of threats and opportunities through Transboundary Diagnostic Analyses (TDAs), which are followed up by the development and implementation of ministerial endorsed regional Strategic Action Programs (SAPs). Delivering ecosystem status changes in marine and freshwater systems, requires working at all scales, with a wide stakeholder group, in the public and private sectors and across the watershed from source-to-sea and beyond. The above will be delivered through the following three key objectives: 1) Accelerate joint action to support Blue Economic Development; 2) Advance management in the Areas Beyond National Jurisdiction (ABNJ), and 3) Enhance water security in transboundary freshwater ecosystems

Chemicals and Waste Focal Area. The elimination of hazardous chemicals controlled by the Chemical Conventions will lead to improvement of the health of people and prevention of harm to ecosystems thereby allowing for better resilience against future pandemics. As seen in this pandemic, humans with chronic diseases were disproportionally impacted. Some of these conditions are exacerbated or brought on by exposure to hazardous chemicals in the environment. The objectives of the Chemicals Conventions and the focal area are to eliminate these hazardous chemicals and guidance received from both the Stockholm and Minamata Conventions, most recently at COP 8 of Stockholm in 2017 and COP 1 of Minamata in 2013, require implementation of strengthened policy and regulations, phase out of hazardous chemicals in use and disposal of obsolete hazardous chemicals and stockpiles. To respond to these needs the three objectives of the CWFA contribute to this goal through: 1) creation, strengthening and supporting the enabling environment to transform the manufacture, use and sound management of chemicals and to eliminate waste and chemical pollution, 2) prevention of future buildup of hazardous chemicals and waste in the environment, and 3) elimination of hazardous chemicals and waste containing or that can emit hazardous chemicals from the environment.