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INVESTING IN OUR PLANET



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GEF-7 PROGRAMMING DIRECTIONS AND POLICY AGENDA
(PREPARED BY THE GEF SECRETARIAT)

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LIST OF ACRONYMS

ASGM: Artisanal and small-scale gold mining

ABS: Access and benefit sharing protocol

ASL: Amazon sustainable landscapes program

ABNJ: Areas beyond national jurisdiction

AFD: French development agency

Bn: Billion

BUR: Biennial update report

BSDC: Business and sustainable development commission

BRT: Bus rapid transit

BRS: Basel Rotterdam Stockholm

BD: Biodiversity

BIOFIN: Biodiversity finance initiative

CO₂: Carbon dioxide

CO₂ eq: Carbon dioxide equivalent

CWR: Crop wild relatives

COP: Conference of the parties

CPB: Cartagena protocol on biosafety

COP-MOP: The conference of the parties serving as the meeting of the parties

CTCN: Climate technology center and network

COP 21: The 21st yearly session of the conference of the parties to the 1992 United Nations framework convention on climate change

CSO: Civil society organisation

CSP: Country support program

CDM: Clean development mechanism

C2E2: Copenhagen center for energy efficiency

CPI: Climate policy initiative

CGIAR: Consultative group on international agricultural research

CPIC: Coalition for private investment in conservation

CBNRM: Community based natural resources management

CBIT: Capacity-building initiative for transparency

CW: Chemicals and waste

CCM: Climate change mitigation

CSIRO: Commonwealth scientific and industrial research organization

CITES: Convention on international trade in endangered species of wild fauna and flora

DFID: United Kingdom department for international development

DDT: Dichlorodiphenyltrichloroethane

E-waste: Electrical and electronic Waste

FAO: Food and agriculture organization

FSIP: Food systems impact program

FI: Finance initiative

FINTECC: Finance and technology transfer center for climate change

FReSH: Food reform for sustainability and health

FSP: Full size project

GHG: Greenhouse gases

Gt: Gigaton

GDP: Gross domestic product

GOLD: Global opportunities for long-term development in the artisanal scale gold mining sector

GCF: Green Climate Fund

GEB: Global environmental benefit
GEF: Global Environmental Facility
GPFLR: Global partnership on forest landscape restoration
GRC: Global restoration council
GIZ: German *development* agency
GAA: Global agribusiness alliance
GPSC: Global platform for sustainable cities
GEAP: Gender equality action plan
GSIA: Global sustainable investment alliance
HCVF: High conservation value forests
HCFC: Hydrochlorofluorocarbons
IPEEC: International partnership for energy efficiency cooperation
IIASA: International institute for applied systems analysis
IEA: International energy agency
IFAD: International fund for agricultural development
iNDC: Intended nationally determined contribution
IUCN: International union for conservation of nature
ICA: International consultation and analysis
IAP: Integrated approach pilot
IDH: Sustainable trade initiative
IAS: Invasive alien species
IPES FOOD: International panel of experts on sustainable food systems
IP: Impact Program
IFI: International finance institution
ICCA: Indigenous and community conserved area
IW:LEARN: International waters learning exchange & resource network

ICLEI: International council for local environmental initiatives
IPLC: Indigenous peoples and local communities
IEO: Independent evaluation office
IW: International waters
JICA: Japan International Cooperation Agency
KBA: Key biodiversity area
KM: Knowledge management
LDN: Land degradation neutrality
LD: Land degradation
LDCs: Least developed countries
LME: Transboundary large marine ecosystems
MDB: Multilateral development bank
MEA: Multilateral environmental agreement
MPA: Marine protected area
MSP: Medium size project
MA: Millennium ecosystem assessment
MAT: Mutually agreed terms
NDC: Nationally determined contribution
NBSAP: National biodiversity strategy and action plan
NAP: National action programme
NCCD: National coordination committee for desertification
NCA: Natural capital accounting
NC: National communication
NCSA: National capacity self-assessment
NCIP: Natural capital impact program
NYDF: New York declaration on forests
NICFI: Norway's international climate and forest initiative

NIP: National implementation plan
NGI: Non-grant-instrument
NBF: National biosafety framework
OECD: Organization for economic co-operation and development
ODS: Ozone depleting substances
OPS6: Sixth comprehensive evaluation of the GEF
OPS5: Fifth overall performance study
PPM: Parts per million
PADDD: Protected area downgrading, downsizing, and degazeting
PCB: Polychlorinated biphenyl
POP: Persistent organic pollutant
PSMA: Port state measures agreement
PIC: Prior informed consent
RBM: Results based management
RMI: Rocky mountain institute
RFMO: Regional fisheries management organizations
RAF: Resource allocation framework
REDD plus: Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
Solar PV: *Solar* photovoltaic
STAR: System for the transparent allocation of resources
SIDS: Small island developing states
SDGs: Sustainable development goals
SAP: Strategic action program
SEforALL: Sustainable energy for all
SME: Small medium enterprise
STAP: Scientific technical advisory panel
SAICM: Strategic approach to international chemicals management

SFI: Sustainable forestry initiative
SBN: Sustainable banking network
SADC: Southern African development community
SFM: Sustainable forest management
SGP: Small Grants Program
SLM: Sustainable land management
SDSN: Sustainable development solutions network
SEEA: United Nations system of environmental-economic accounting
TFA 2020: The tropical forest alliance 2020
TDA: Transboundary diagnostic analysis
TEEB: The Economics of Ecosystems and Biodiversity
TFCA: Transfrontier Conservation Area
TWAP: Transboundary water assessment program
UNCCD: United Nations convention to combat desertification
UNDP: United Nations development program
UNFCCC: United Nations framework convention on climate change
UNCBD: United Nations Convention on Biological Diversity
UCLG: United Cities and Local Governments
UNITAR: United Nations institute for training and research
UNCLOS: The United Nations convention on the law of the sea
USAID: United States agency for international development
UNECE: United Nations economic commission for Europe

VSSFG: Voluntary small-scale fisheries guidelines

WRI: World resources institute

WBCSD: World business council on sustainable development

WAVES: Wealth accounting and the valuation of ecosystem services

WWF: World wildlife foundation

EXECUTIVE SUMMARY

A Defining Moment

1. **We are at a defining moment for the future of the planet and for human well-being.** The Global Environmental Commons—the ecosystems, biomes and processes that regulate the stability and resilience of the Earth system—are being stretched to a breaking point. According to science, several “Planetary Boundaries” have been breached, namely (i) biodiversity, which is being lost at a rate not seen in the past 65 million years, (ii) land-use change, where—largely driven by agricultural expansion¹—global forest cover continues to decline, and (iii) climate, where atmospheric CO₂ concentrations now exceeds 400 ppm, making it increasingly urgent to reverse global emissions trends.
2. **A radical transformation of key economic systems will be required in order to reduce our environmental footprint.** Looking ahead, four systems are of particular importance for the prospects of the future of the planet and its peoples: (i) the food system, as population growth and dietary changes are projected to increase global demand for food by 70% in 2050, (ii) the energy system, which represents 68% of GHG emission today and will see a 30% increase electricity demand by 2040, (iii) cities, which are projected to be home to two-thirds of the global population by 2050, up from slightly more than half today, and (iv) the global production/consumption system, where the current “take-make-waste” model has nearly quadrupled global waste creation since 1970.
3. **Nations of the world have recognized the seriousness and urgency of the situation.** In the past couple of years, several significant global agreements have been reached. First, in September 2015, Agenda 2030 with its Sustainable Development Goals (SDGs) was universally agreed by all UN member states setting ambitious targets for the world. Implicit in the SDGs is the recognition that social and economic development will not be achievable in the absence of a stable and healthy Earth system. Moreover, the historic climate agreement adopted in Paris in 2015 brings all countries together under a common global framework to reduce emissions and build resilience to climate impacts.
4. **The private sector is ramping up sustainability initiatives.** The formal, multilateral processes are being underpinned by a number of multi-stakeholder initiatives focusing on delivering concrete progress in specific areas, from tropical forest protection, to renewable energy expansion, to local government action. There is significant pent-up demand, including in the private sector, for collaborative platforms, in which networked leadership offers the

¹ The related Planetary Boundary for biogeochemical cycles has also been transgressed, as agricultural fertilizer use has dramatically altered the global phosphorous (P) and nitrogen (N) balance.

opportunity to help bring about new ways of thinking and long-lasting transformational change in our key economic system. Environmental issues dominate the global risk landscape as perceived by businesses, while the drive to sustainability at the same time opens up significant global business opportunities—in the order of US\$12 trillion annual for the SDGs as a whole.

5. **The international landscape for environmental finance is evolving rapidly.** Climate finance illustrates just how rapidly the landscape can shift: private investment in renewable energy grew by 26% in 2014, reaching US\$243 billion. Public climate financing from developed countries to developing countries is also expected to grow, from US\$44 billion in 2014 to US\$67 billion in 2020. The Green Climate Fund has already committed US\$1.5 billion in climate-related finance, and is expected to be an important channel for multi-lateral climate finance going forward. In addition, private conservation finance is gradually emerging as an important source of funding for investments in conservation of ecosystem system services, and could reach US\$200 billion in the medium term.

GEF-7: Aiming high

6. **The GEF cannot afford to stand still.** In the face of the scale and the urgency of the threats facing the planet, the emerging global momentum for change, and the evolving global financial landscape the GEF needs to seize opportunities to make a bigger difference. Going forward, building on its strengths, the GEF will strategically focus its investments in areas where it can help catalyze the necessary change in key systems, and leverage multi-stakeholder coalitions in alignment with countries' demand and commitment under the various conventions for which the GEF serves as financial mechanism.

7. **The GEF has a unique mandate across multiple multilateral environmental agreements.** 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. GEF support has been critical in allowing countries to translate these agreements into action, and in ensuring transparency of action through effective reporting from countries to conferences of the parties. The GEF is uniquely placed to harness synergies across the different MEAs in line with a more holistic, systems approach. A growing body of recent GEF guidance coming from various MEA COPs request the GEF to foster integration as well as promote synergies among actions and strategies, and with the GEF's role supporting SDG planning and implementation as recognized in multiple conventions.

8. **The GEF can play a key role supporting SDG implementation.** The GEF's mission is closely aligned with the SDGs. Specifically, goals number 13, 14, and 15—on climate action, life below water, and life on land—capture to a large extent the GEF's core mission. Moreover, the GEF's investments in areas like forests, cities, oceans will help support the achievement of a number of economic goals as well as social goals like equity and gender.

Programming for Impact

9. In GEF-7, programming should further emphasize tackling major drivers of environmental degradation to achieve systems change. This would require the GEF to adjust to evolving global context and emerging opportunities in several ways. In particular, GEF programming should:

- ***become more focused, in order to deploy resources where GEF can support transformation of key systems, so that impacts can be maximized.*** Aligned with country priorities, GEF-7 programming should be focused on a limited number of “Impact Programs” that hold the potential to support systems change. The Impact Programs will enhance synergies and deliver multiple benefits across the GEF’s thematic priorities. Collectively, they address major drivers of environmental degradation, promote a more effective use of resources, and crowd-in the private sector. The proposed Impact Programs are listed in the table below.
- ***respond more effectively to country priorities consistent with countries’ commitments to MEAs.*** Countries report on their intended actions in support of the conventions’ goal in a variety of ways: for the UNFCCC in the form of “Nationally Determined Contributions” as part of the Paris Agreement, for the UNCBD in the form of National Biodiversity Action Plans, and as commitments to land degradation neutrality targets under UNCCD. The proposed Impact Programs cover key priorities expressed by most countries in their communications to conventions.
- ***mobilize and strengthen diverse coalitions of actors, especially the private sector.*** Many Impact Programs build on, and strengthen, existing multi-stakeholder platforms. Country priorities are often supported by global or regional platforms that are attracting a multitude of stakeholders and resources in response to political commitments—an example being the Bonn Challenge that brings together 40 countries, the private sector and civil society around commitments to restore about 150 million hectares of land. Several Impact Programs are aligned with such coalitions, which helps leverage GEF’s impact.

10. **The GEF will also provide support that responds to specific guidance from MEAs.** Some elements of guidance from conventions can best be dealt with through distinct complementary investments directed at objectives not fully reflected within the set of proposed Impact Programs. These elements are addressed through programs specific to each GEF focal area.

11. **The GEF’s results is made up of Impact Program outcomes, and outcomes from focal areas complementary investments.** A central feature of the Impact Programs is that they deliver results—global environmental benefits—across the different focal areas of the GEF. Aggregate results will be tracked based on a relatively small number of indicators closely aligned to convention and global environmental benefit priorities, as tentatively illustrated below.

Table 1. Illustrative GEF-7 Results Framework

GEB Categories	Biodiversity		Sustainable Land and Water Management	GHG Emissions Reductions		Pollution/Waste
	Terrestrial	Marine		Carbon sinks	GHG Avoidance	
Impact Programs						
Landscape Restoration						
Transforming Energy Systems						
Food Systems						
Sustainable Cities						
Environmental Security						
Sustainable Fisheries						
Natural Capital						
Green Finance						
Green Infrastructure						
Agriculture Commodities Supply Chains						
Amazon Landscapes						
Wildlife for Sustainable Development						
Inclusive Conservation: Engaging Indigenous People						
Circular Economy						
Integrated Planning for MEAs/SDGs						
Focal Area Complementary Investments						
Biodiversity						
Climate Change						
Land Degradation						
International Waters						
Chemicals and Waste						
Primary		Impact Program contributes directly to the GEBs				
Secondary		Impact Program contributes indirectly to the GEBs				

Adapting the GEF delivery model

12. **The level of ambition set out in the proposed strategy for GEF-7 calls for a more effective, responsive and agile delivery model.** In particular, building on efforts in GEF-6, the GEF needs to take steps to 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 also needs to strengthen operational and institutional effectiveness and efficiency across a range of domains. Implementation of such a policy agenda would provide a stronger foundation to support GEF programming, and to better achieve GEF's mission and mandate. Three broad objectives emerge as priorities in this respect.

13. **First, the GEF should seek ways to concentrate its resources on the issues and opportunities where it can achieve the highest impact.** The GEF has experienced a long-term trend of growing fragmentation of resources across themes, programs and projects, which inhibits a move towards more focused programming. Reversing this trend entails reviewing the way in which resources are allocated and programmed. Importantly, rather than treating the GEF's focal areas as the organizing principle for funding allocations and investments, the proposed programming strategy views those focal areas increasingly as result areas where global environmental benefits will be pursued through integrated, systems approaches that address key drivers of environmental degradation. In support of this shift, the GEF needs a more flexible resource allocation framework that eases thematic constraints and allows funding to target maximum impact, while maintaining a system of resource allocations to countries.

14. **Second, the GEF needs to maximize its engagement with the broad range of actors that are critical for systems change.** In line with the proposed programming directions for GEF-7, the GEF needs more broad-based, upstream and issue-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.

15. **Third, the GEF should promote management for impact as well as greater accountability through a fit-for-purpose results architecture.** To deliver the proposed strategy, the GEF will seek to strengthen its approaches to capturing, applying and communicating information on expected and achieved results. The GEF's results architecture will need to embrace a closer integration across focal areas and introduce a sharper focus on the most relevant results, while promoting the improved availability, accessibility, quality and timeliness of information for decision-making, accountability and transparency.

16. **There are a range of additional areas where the GEF should pursue institutional and policy change during GEF-7.** These include: further enhancing operational efficiency and transparency, added emphasis on gender aspects in GEF programming, building on progress already made, further steps to leverage GEF knowledge and experience, and improved climate

and disaster risk screening of GEF-funded activities. Considerations could also be given to adjusting the balance of grants and concessional loans for GEF resources.

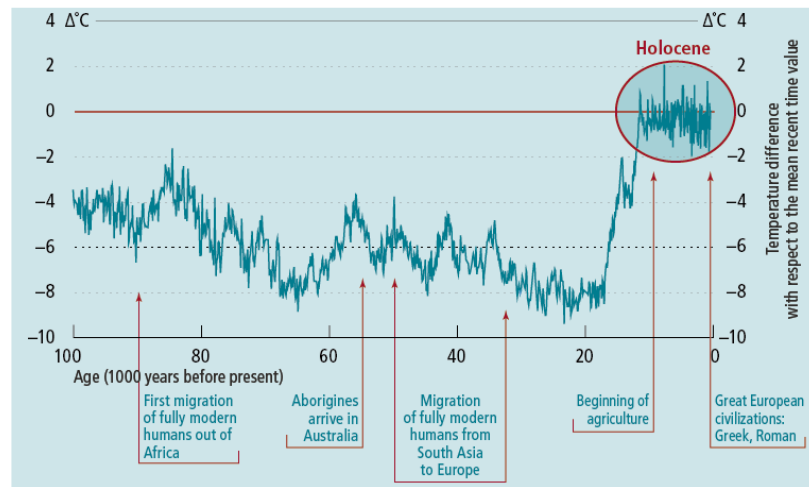
CHAPTER 1
A RAPIDLY CHANGING WORLD
OPPORTUNITIES FOR THE GEF

THE WORLD AT A DEFINING MOMENT

Transgressing Planetary Boundaries

1. We are at a defining moment for the future of the planet and for human well-being, as the Global Environmental Commons—the ecosystems, biomes and processes that regulate the stability and resilience of the Earth system—are being stretched to a breaking point. For the past more than 11,000 years, which scientists have named the Holocene epoch, the Earth system has been in an exceptionally stable and resilient state. Global average temperature has risen or fallen by no more than a 1°C (Figure 1.1.). This is in sharp contrast with the 100,000 years that preceded it, a period where temperatures regularly plunged and then rose rapidly. The Holocene stability enabled the adoption of agriculture and thus provided the vital foundation for human prosperity and world development as we know it today. The conclusion from this scientific insight is as basic as it is dramatic: the Holocene is the only state of the planet we know for certain that can support a world population of 7.4 billion, soon to approach nine to ten billion. This stable state is now at risk.

Figure 1.1. The Holocene—11,000 Years of Stability



Source: Nakicenovic, Rockstrom, Gaffney, Zimm (2016). *Global Commons in the Anthropocene: World Development on a Stable and Resilient Planet*. IIASA/SRC Working Paper

2. The past 60 years of “Great Acceleration” has pushed Earth into a new epoch, the Anthropocene—the epoch of Man— where the relationship between humans and the Earth system is fundamentally changed. The 1950s witnessed the beginning of what has become known as “the Great Acceleration” in human activity (Figure 1.2.). From population to economic output to energy use, the pace and scale of change has taken on an exponential trajectory. The Great Acceleration has delivered huge improvements in human wellbeing for parts of the world’s population, but this has come at a cost: Earth’s resilience—its ability to absorb shocks and remain stable—is declining rapidly. In short, by now human activity is the primary driver of change in the Earth system, and this is taking place at an unprecedented magnitude and speed.

Figure 1.2.a. The Great Acceleration: Socio-economic trends

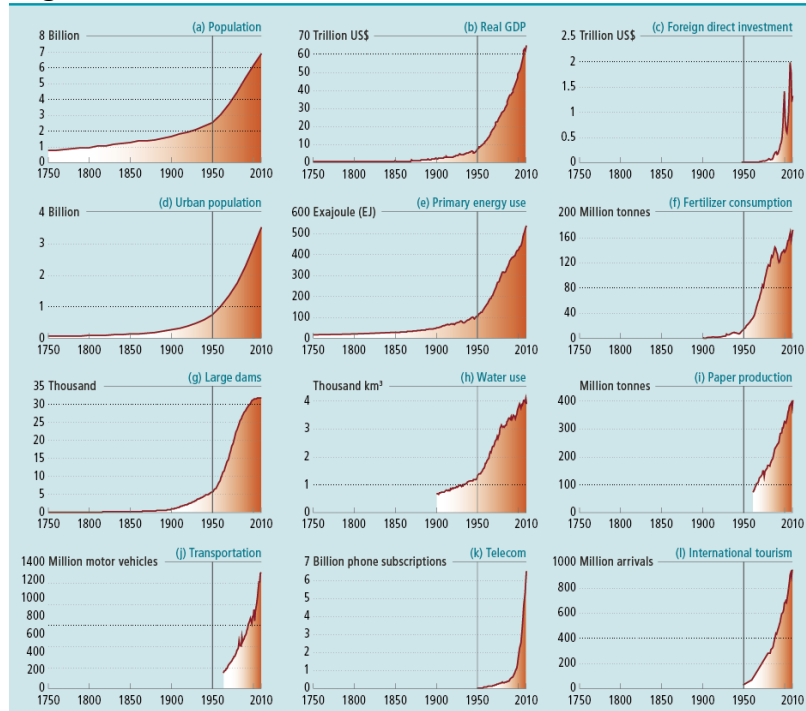
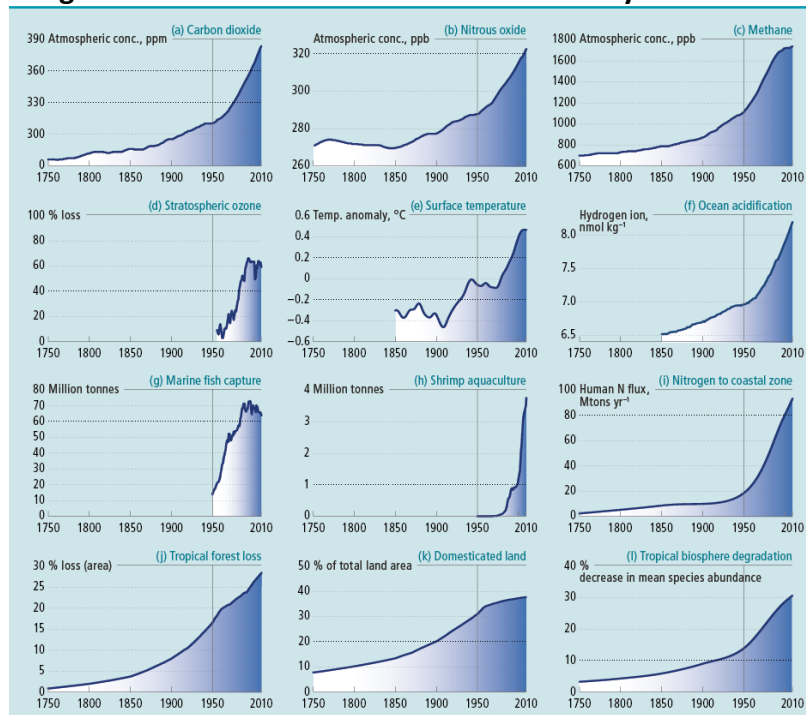


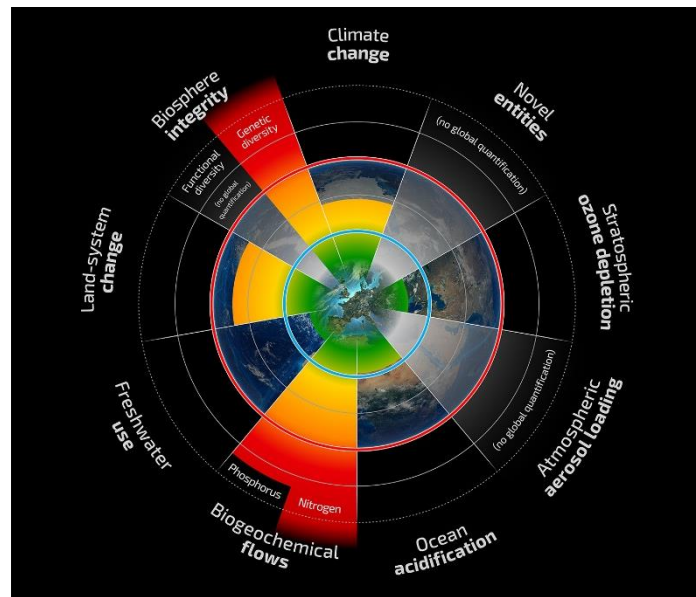
Figure 1.2.b. The Great Acceleration: Earth system trends



Source: Nakicenovic, Rockstrom, Gaffney, Zimm (2016). Global Commons in the Anthropocene: World Development on a Stable and Resilient Planet. IIASA/SRC Working Paper

3. As a result of human activity, the stability of the Earth system is at risk—we are in the process of transgressing key “Planetary Boundaries”. In recent years, much scientific progress has been made in terms of understanding the boundary conditions that keep the Earth system in a Holocene-like state—that is, with a stable global climate, abundant ecosystem services, rich biodiversity, fertile soils and oceans and a healthy atmosphere. In 2009, this work led a group of researchers to identify nine control variables, or Planetary Boundaries, which—if crossed—it could result in abrupt and irreversible change (Figure 1.3.). According to the latest assessment in 2015, four of these boundaries have already been breached, namely biodiversity, land-use change, climate, and biogeochemical cycles, while others are at increasingly at risk of being breached (Box 1.1).

Figure 1.3. Planetary Boundaries—A Safe Operating Space for Humanity



Box 1.1 Status of Selected Planetary Boundaries and Global Environmental Issues

Irreversible biodiversity loss is happening at an unprecedented pace, undermining biosphere integrity. Current estimates indicate that species loss is occurring at many times the natural background rate. More than 80% of all species in peril today are under threat from habitat loss, and 70% from overexploitation and unsustainable use. In parallel, the world continues to experience a net loss of productive lands due to degradation; that is, long-term loss of ecosystem function and productivity caused by disturbances from which land cannot recover unaided.

Land-use change and land degradation has reached critical levels. Land degradation is already affecting 2 billion hectares, or almost one quarter the total land area under human use. Land degradation interrupts the regulating and provisioning services of ecosystems, in particular nutrient cycling, the global carbon cycle and the hydrological cycle, thereby compromising the productivity of land, undermining food security and livelihoods.

Atmospheric concentrations of CO₂ are on a path towards exceeding the relatively safe threshold of keeping the global average temperature increase below 2 degrees Celcius. Despite efforts since the birth of the Climate Change Convention a quarter of a century ago the concentration of CO₂ in the atmosphere in 2016 exceeded the symbolic threshold of 400 ppm, driven by human-induced emissions. This is the highest level in at least three million years and up more than 40 percent from pre-industrial times. 2016 was also the warmest year on record, surpassing the previous record from 2015.

The health of oceans is deteriorating rapidly. Oceans cover 72% of the surface of the planet and are estimated to provide 63% of global ecosystems services, with a global market value of trillions of dollar per year. The world oceans are threatened by overfishing, pollution and habitat degradation, with direct and serious implications for

the well-being of populations dependent upon these resources. Estimates point to 60% of the world's major marine ecosystems having been degraded or used unsustainably. In addition, the chemistry of oceans is changing faster than at any point in perhaps 300 million years, due to the absorption each year of around 25 percent of human-induced greenhouse gas emissions, exacerbating other pressures on the oceans.

Contamination of the environment by toxic chemicals is a growing threat. Of particular concern is the prevalence of chemicals classified as persistent organic pollutants, including mercury, due to their ability to travel over large distances through air, migratory species or water currents. These chemicals have been found in high concentrations in extremely remote areas far from where they are used, such as the Arctic or deep in the oceans. It is estimated that more than 1 million tons of PCB (Polychlorinated biphenyl) have been produced over the years, while the annual production of mercury is estimated to exceed 2,000 tons. Moreover, the global volume of electrical and electronic waste (e-waste) containing harmful chemicals is growing rapidly.

4. **Planetary Boundaries are interdependent and interfere with one another.** Behavior of the Earth system is not characterized by stable equilibria, but by strong nonlinearities, where relatively small changes can push the system across a threshold and lead to abrupt changes in key aspects of system functioning. Analysis of the large-scale subsystems of the Earth system—ocean circulations, permafrost, ice sheets, Arctic sea ice, the rainforests and atmospheric circulations—indicates that these systems are prone to large-scale “tipping-points”. Moreover, science suggests that a collapse in one system may create feedback loops amplifying the change and triggering changes in other subsystems. For example, forest loss, which reduces global carbon sinks, increases global temperatures which may hasten arctic ice melt thereby further increasing global temperatures. The Planetary Boundaries do not define such tipping points, but are intended as early warning signs for possible system-wide change that require a holistic, integrated response.

5. **While the Planetary Boundaries are global by definition, “managing the boundaries” mostly happens at local and regional levels.** All of the processes operate locally: emissions of greenhouse gases have local sources, just as land use, freshwater use, and deforestation all occur locally, even though they have global consequences. With respect to freshwater, for example, scientists have defined the global boundary as the maximum amount of global runoff the world can use (less than 4,000 km³/yr). At the same time they added a boundary for each river basin in the world—defined as the minimum amount of water that needs to be retained in each river to safeguard water-dependent ecosystem functions and resilience. Such local-level scientific work can provide important guidance for policy makers.

6. **It is increasingly being recognized that a deteriorating global environment poses significant risks to the prospects for future economic growth and development.** In the World Economic Forum's 2017 Global Risk report, environment-related risks feature among the top-ranked global risks. Specifically, four of the top-five perceived risks in terms of impact identified in this year's Risk Report were environmental risks (Figure 1.4.). ten years ago, none of the top-5 risks were an environment risk. Moreover, environmental risks are also seen to be closely interconnected with other risk categories. This indicates a strong belief that ineffective management of the global environment—the oceans, atmosphere, and climate system—can have local and global consequences. For example, changing weather patterns or water crises can

trigger or exacerbate geopolitical and societal risks such as domestic or regional conflict and forced migration, particularly in geopolitically fragile areas.

Figure 1.4. Changing Global Risk Perceptions: From Economic and Social to Environmental

Top 5 Global Risks in Terms of Likelihood

	2007	2012	2017
1 st	Breakdown of critical Information Infrastructure	Severe income disparity	Extreme weather events
2 nd	Chronic disease in developed countries	Chronic fiscal imbalances	Large-scale involuntary migration
3 rd	Oil price shock	Rising greenhouse gas emissions	Major natural disasters
4 th	China economic hard landing	Cyber attacks	Large-scale terrorist attacks
5 th	Asset price collapse	Water supply crises	Massive incident of data fraud/theft

Top 5 Global Risks in Terms of Impact

	2007	2012	2017
1 st	Asset price collapse	Major systemic financial failure	Weapons of mass destruction
2 nd	Retrenchment from globalization	Water supply crises	Extreme weather events
3 rd	Interstate and civil wars	Food shortage crises	Water crises
4 th	Pandemics	Chronic fiscal imbalances	Major natural disasters
5 th	Oil price shocks	Extreme volatility in energy and agriculture prices	Failure of climate change mitigation and adaptation

■ Economic	■ Environmental	■ Geopolitical	■ Societal	■ Technological
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Source: Adapted from WEF (2017). *The Global Risk Report, 12th edition*.

Pressures on the Global Environment are set to Continue

7. **The Great Acceleration is set to continue, as the globe's growing population pursue their legitimate aspirations for social and economic progress.** From less than 4 billion in 1970 to just over 7.5 billion in 2016, the global population is projected to exceed 9 billion by 2050, with almost half of that growth taking place in Africa. Feeding a growing global population will likely lead to an increased conversion of natural landscapes to agricultural use, when croplands and pastures already occupy some 40% of the land surface of the planet. The co-location of human population growth and biodiversity hotspots may aggravate the situation.

8. **The world economy and the global middle class will expand significantly.** The world economy is projected to almost double in size in the next two decades and at the same time, the global middle class—those with a daily consumption between US\$10 and US\$100—is expected to grow by 5 billion people by 2050. This change will drive an increase in global consumption that could accelerate global environmental degradation, unless consumption is shifted toward more sustainably produced goods and services.

9. **The extraordinary urbanization that has happened in the past 100 years is set to continue.** In 1900, about 13 percent of the world's population (about 220 million people) lived in cities, and only 12 cities worldwide had more than 1 million inhabitants. Today, more than half the world's population live in cities, and about 1,000 cities worldwide have more than 1 million inhabitants, of which more than 30 are “mega-cities” with more than ten million inhabitants. By 2050, about 2/3 of the world's population is expected to be living in cities. A growing population, and a burgeoning, increasingly urbanized middle class are major factors in a projected increase in demand for a number of key resources including food, energy, buildings and transport.

Urgent, Transformational Change in Key Economic Systems is Required.

10. **To stay within Planetary Boundaries, a radical transformation of key economic systems will be required to significantly reduce their environmental footprint.** Four systems are of particular importance, the food system, the energy system, the urban system, and the global production/consumption system:

- **The food system:** The world will require about 70% increase in food production to meet dietary demands from a world population of nine to ten billion by 2050 (and those of the approximately 700 million malnourished people today). Producing sustainable food while dealing with land use and degradation will be essential. A concentrated focus on global commodities with a significant deforestation footprint, on food security goals in areas of rapid agriculture expansion, restoration of fisheries, and to a certain extent, expanded efforts on land restoration, will contribute significant environmental gains while reversing the negative effects of land and coastal habitat degradation.
- **The energy system:** Decarbonization of the global energy system is of critical importance for a 1.5–2 °C future global temperature increase, in line with the Paris Agreement. The

energy system represents 68 percent of global GHG emissions, and despite recent improvements only 23 percent of energy is provided by renewables as of today; and 1 Billion people still lack access to electricity. By 2040 energy demand is projected to increase by 30 percent. In the face of these trends, Deployment of renewable energy needs to accelerate sharply, as do energy efficiency improvements, all while increased energy demand—including from what is needed to close the electricity gap, especially in Sub-Saharan Africa and South Asia—is being met.

- The urban system: During the coming decades the planet will face the largest and fastest urban growth in human history. In the next 15 years, 70% of new infrastructure to be built will take place in urban areas. Currently, cities emit more than 70% of global GHGs and are also particularly vulnerable to climate change (rising sea levels, storms, floods, heat waves). Low-carbon and resilient infrastructure could make a significant contribution to the global reduction of GHG emissions while enhancing urban development. Such investments could generate annual GHG savings of 3.7 Gt by 2030; a significant share (perhaps 15%- to 20%) of the overall contributions to the Paris Agreement. Also, low carbon infrastructure—particularly in the buildings efficiency, public transportation and waste management sectors—could save cities an estimated US\$17 trillion globally by 2050.
- The production/consumption system. Today's economies are dominated by linear approaches to the way products are manufactured, used and disposed of, which means we extract natural resources, process them into products and packaging, and sell the products to consumers who ultimately dispose of them in the trash. With the expansion of production and consumption globally, our rates of extraction of resources have grown accordingly. In the last four decades, global materials use has tripled, from 23.7 billion tonnes in 1970 to 70.1 billion tonnes in 2010. What results from our linear “take-make-waste” industrial production and consumption systems is immensely unsustainable material resource use and productivity waste that are leading to widespread degradation and accumulation of waste and toxic materials in the environment. Solid waste generation has increased exponentially in the last decades and has now reached an alarming rate of 1.3 billion tonnes per year and it is expected to double by 2025. Waste is an important main driver of GHG emissions, public health diseases and pollution. For example, it has been estimated that plastics in the ocean will outweigh fish by 2050.

The World Has Been Responding

11. **The Agenda 2030 sets out ambitious targets for the world in the form of the Sustainable Development Goals.** In September 2015 all United Nations member states adopted the Sustainable Development Goals—the SDGs. Implicit in the landmark agreement is the recognition that social and economic development will not be achievable in the absence of a stable and healthy Earth system. That is, social and economic development aspirations are entirely dependent on us remaining within the safe operating space defined by the planetary boundaries.

Figure 1.5. The Global Environment—a Foundation for the SDGs



12. **The historic climate agreement adopted in Paris in 2015 brings all countries together under a common global framework to reduce emissions and build resilience to climate impacts.** The Paris Agreement, which was adopted at COP 21 in December 2015 and entered into force in November 2016 aims to keeping global temperature rise this century to below 2°C and aims for 1.5°C above pre-industrial levels. 99% of global GHG emissions are covered by the 190 countries that submitted an INDC. The Agreement also aims to increasing the ability to adapt to impacts of climate change, and making finance flows consistent with a low GHG emissions and climate-resilient pathway.

13. **Other global landmark agreements focusing on the global environment have recently been concluded, underscoring the global momentum.** These agreements include for example the Sendai Framework for Disaster Risk Reduction and the Kigali Amendment to the Montreal Protocol. In addition, the imminent entry-into-force of the Minamata Convention on Mercury represents another important development in the multilateral architecture supporting healthy Earth Systems.

14. **The formal, multilateral processes are being underpinned by a number of multi-stakeholder initiatives launched in recent years focusing on delivering concrete progress in specific areas.** In recent years, there has been a rapid proliferation of multi-stakeholder

sustainability initiatives—see Box 1.2 for a few examples. Their emergence has been spurred by the strong presence of the private sector at Rio+20 in 2012, the 2014 Climate Summit convened by the UN Secretary general, and the Lima-Paris Action Agenda that created momentum ahead of the 2015 Paris COP. These various initiatives—and the myriad of others established in recent years—offer platforms for action, for exchange of ideas to accelerate progress, and for private-public collaboration. Their emergence—fueled by profound advances in digital processing power, technology capabilities and ubiquitous connectivity and communication—suggests that there is significant pent-up demand especially in the private sector for these types of collaborative platforms, in which networked leadership offer the opportunity to help bring about new ways of thinking and long lasting transformational change in our key economic system.

Box 1.2. Examples of Recent Multi-Stakeholder Platforms

The Bonn Challenge is convened by Germany, Norway and IUCN, and brings together 40 countries, the private sector and civil society around commitments to restore around 150 million hectares of degraded land; it is underpinned by several regional initiatives like the 20x20 initiative in Latin America.

The New York Declaration on Forests, which grew out of the Secretary general's 2014 Climate Summit. It commits a 179-member strong coalition of national government, subnational governments, companies, indigenous peoples groups and CSOs to work to cut forest loss in half by 2020, and strive to end it by 2030.

The Tropical Forest Alliance 2020 (TFA 2020) was established on the margins of Rio+20 in 2012 as a global public-private partnership in which almost 100 partners take voluntary actions, individually and in combination, to reduce the tropical deforestation associated with the sourcing of commodities such as palm oil, soy, beef, and paper and pulp.

RE100 is an energy-related collaborative, global platform in which leading businesses are encouraged to set a public goal to procure 100% of their electricity from renewable sources of energy by a specified year.

The Trash Free Seas Alliance, launched in 2012 by the Ocean Conservancy brings together business, science and civil society leaders to identify opportunities for cross-sector solutions that drive action and foster innovation in support of healthy oceans free of trash.

C40 was established in 2005 as a network of the world's megacities committed to addressing climate change. C40 supports cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change.

15. **The global energy system shows signs of having reached a tipping point for transformation.** Market transformation has perhaps been most visible in the areas of renewable energy. 2015 was a record year for renewable energy. For the first time ever, in 2015 new installed renewable energy generation capacity, at 118GW, represented the majority (53.6%) of total new installed energy generation capacity. It is significant to recognize that non-OECD countries are leading the way. 2015 was the first year ever in which investments in renewable energy projects in developing countries (\$156 billion) exceeded investments in developed countries (\$130 billion). In part as a result of these trends, global, energy-related CO₂ emissions have shown little or no growth over the last three years, despite global GDP has grown by more

than 3 % per year—a possible first indication of the necessary decoupling of Earth system trends from socio-economic trends.

16. **The international landscape for environmental finance is evolving rapidly.** Climate finance illustrates just how rapidly the landscape can shift: private investment in renewable energy grew by 26 % in 2014, reaching US\$243bn. Public climate financing from developed countries to developing countries represents a small share of global investment in climate change mitigation and adaptation, but it is also expected to grow, from US\$44 billion in 2014 to US\$67 billion in 2020. Of this, some 44 % would be provided through multi-lateral channels. The Green Climate Fund (GCF) has already committed US\$1.5 billion in climate-related finance, and is expected to be an important channel for multi-lateral climate finance through 2020. In addition, privately-driven conservation finance is gradually emerging as an important source of funding for investments in conservation of ecosystem system services, compatible with generating financial rates of return. It is estimated that privately-sourced conservation finance could potentially help quadruple the current level of conservation finance of about US\$50 billion per year, although there remains significant work among a broad set of stakeholders to do to unlock these opportunities.

17. **Regulatory and institutional aspects of the financial system are changing.** The growing recognition that the response to environmental challenges cannot be delivered by international agencies and governments alone is also reflected in developments in the financial sector. For example, the Financial Stability Board’s Taskforce on Climate-related Financial Disclosure is developing recommendations for managing the physical, liability, and transition risks of climate change. Rating agencies S&P and Moody’s have announced plans to assess the climate risks facing both companies and countries. Investor groups have called for greater disclosure of companies’ exposure to climate risks. These initiatives illustrate that new approaches that take a wider “systems view” of the interconnected environmental challenges, and that involve a larger and more diverse set of actors, are required.

18. **The “business case” for sustainability is growing stronger, underscoring the importance of the private sector in achieving global sustainability goals.** In January 2017, the Business and Sustainable Development Commission (BSDC) released their report “Better Business, Better World”. It argued that the achievement of the SDGs is crucially dependent on the business sector: unless private companies seize the market opportunities that the SDGs will open up, the goals will not materialize. At the same time, the BSDC also argues that business really needs the SDGs because the SDGs offer a compelling growth strategy for businesses, by opening up new opportunities and big efficiency gains; driving innovation; and enhancing business reputations. To provide an order of magnitude of the business opportunities, the BCSD analyzed 47 fast-growing market opportunities within four major systems—food, cities, energy, and materials production and consumption—that would open up by achieving the SDGs. BCSD’s analysis suggests that globally these opportunities could be worth more than US\$10 trillion a year for the private sector by 2030, equivalent to close to 10 percent of forecast global GDP in 2030. Box 1.3 summarizes some examples analyzed by the BCSD.

Box 1.3. Selected Business Opportunities from Global Sustainability Goals Across Key Economic Systems

Examples of Food System Opportunities:

Improved smallholder farms (US\$75–105 billion). Some 1.5 billion people are dependent on smallholder farm production (defined as farms with less than two hectares of land). Helping these farmers to raise yields is important for food security, environmental stewardship (given they account for 30 percent of cropland), and for tackling rural poverty. The scope for improvement is large. For example, smallholder Indonesian palm oil producers account for one-third of production and achieve yields that are approximately 50 percent lower than large plantations. The range of levers for achieving this yield improvement include extension services, new technology for greater connectivity, improved access to capital (to fund acquisition of necessary equipment), aggregation mechanisms (to achieve economies of scale among smallholders) and better links to markets.

Sustainable aquaculture (US\$20–125 billion). Overfishing of wild caught fish combined with increasing demand for food mean that aquaculture is a growing industry, projected to almost double in size in the next 15 years. At the same time, aquaculture is a relatively immature practice with large scope for technological improvement. Compared to livestock production, the feed, disease control, waste management and other farming techniques are underdeveloped in aquaculture. The increased productive capacity that will be enabled through technological improvements and improved waste management systems alone implies a US\$20 billion supply opportunity. There is also strong potential for growth in the sustainable aquaculture market to accelerate if consumers adopt more sustainable diets.

Forest ecosystem services (US\$140–365 billion). The business opportunity in forest ecosystem services is a combination of sustainable forestry management approaches and payment mechanisms for ecosystem services. The further development of payment for ecosystem services, including climate change mitigation, watershed services and biodiversity conservation, will increase the value, and also be important for enabling private sector participation in this opportunity, particularly as many sustainable forestry approaches have long payback periods.

Restoring degraded land (US\$70–85 billion). Research indicates that soil degradation could reduce the yield of soils currently in agricultural production by about 30 percent by 2050. The net rates at which land degradation is occurring can be reduced either by preventing ongoing degradation through more conservation-oriented farming practices, such as no-till agriculture, or restoring degraded land through such practices as terracing and topsoil replacement. Key challenges include the capital-intensive nature of the process (particularly for severely degraded land), lack of clear land ownership and the need for significant behavioral change and capability building among smallholder farmers to adopt practices such as no-till or low-till agriculture.

Examples of Urban System Opportunities:

Buildings energy efficiency in cities (US\$555–770 billion). There are large opportunities to improve building energy efficiency through two main channels. Firstly, heating and cooling performance can be improved by retrofitting existing buildings and installing more efficient technology in new buildings. An alternative approach is to shift from building-level installations towards the expansion of district heating and cooling, which can deliver operational efficiency gains of up to 90 percent by linking electricity and heating sectors through cogeneration. Secondly, switching to efficient lighting, appliances and electronics can reduce demand. A range of levers could be applied to help accelerate this transition, including enacting energy-efficiency standards in new construction and developing innovative financing mechanisms to help overcome capital constraints.

Public transport in urban areas (US\$170–205 billion). In modern, denser cities with medium- and high-density housing, public transport is the most effective solution to urban mobility needs. The spread of bus rapid transit (BRT) to over 160 cities since the first system was introduced in the 1970s indicates the potential of lower-cost systems in enabling greater access to public transport, particularly in developing countries where cities' fiscal

capacities are more limited. There is an opportunity for the private sector to both build and operate public transport systems, in close partnership with government.

Example of Energy System opportunities

Expansion of renewables (US\$165–605 billion). Increasing the share of renewables in the power sector creates a significant business opportunity. Annual global investment in solar PV has been between US\$100 billion and US\$150 billion over the last five years. IRENA's REmap scenario forecasts that renewables' share of generation could be increased to 45 percent by 2030, against a reference case of 30 percent. Under this scenario, wind would more than quadruple from 3 percent of global generation in 2013 to 14 percent in 2030, and solar PV from less than 1 percent to 7 percent in 2030. This represents a massive opportunity for renewable generators and equipment manufacturers.

Examples of opportunities in circular production and consumption:

Circular Economy of electronics (US\$210–365 billion). Electronic devices offer large potential for increased circularity, with huge volumes and large numbers of parts that can be reused and refurbished. For example, annual shipments of smartphones now exceed 1.4 billion devices per annum. Secondary markets involving a degree of refurbishment are already established, but collection rates are generally 15 percent or less and there were still 3 million tonnes of small IT e-waste globally in 2014. While some countries have regulated e-waste systems, industry-wide collection and treatment systems need further development. To further sustainable circularity, manufacturers will also need to move from highly integrated product designs to more standardized and modular component design.⁸⁵

Green chemicals (US\$75–130 billion). Green chemistry is an emerging collection of techniques and approaches that reduce the use and generation of hazardous substances in the manufacture of chemical products, including bio-based chemicals, renewable feedstocks, green polymers and alternative low-toxicity chemical formulations. Green chemicals have environmental benefits throughout their life cycle. For example, use of biomass feedstock as an alternative to petroleum in polymer production has been found to reduce GHG emissions by 30–50 percent and ensure safe recyclability of products. Further investment in product innovation and talent development will be required to increase adoption of green chemistry.

Source: *Valuing the SDG Prize—Unlocking Business Opportunities to Accelerate Sustainable and Inclusive Growth*. Background paper commissioned by the Business and Sustainable Development Commissions

UNPRECEDENTED OPPORTUNITIES FOR THE GEF

19. **The GEF cannot afford to stand still.** In the face of the scale and the urgency of the threats facing the planet, and the emerging opportunities to significantly accelerate and scale up its positive impacts, the GEF cannot afford to stand still. The GEF needs to seize opportunities to make a bigger difference. Going forward, the GEF must strategically focus its investments in areas where it can help catalyze the necessary change in key systems, and leverage multi-stakeholder coalitions in alignment with countries' demand and commitment under the various multilateral environmental conventions for which the GEF serves as financial mechanism.

20. **GEF can play a key role supporting the implementation of the SDGs.** GEF's mission is closely aligned with the Sustainable Development Goals. Specifically, goals number 13, 14, and 15—on climate action, life below water, and life on land—capture to a large extent the GEF's

core mission. The inclusion of these three goals among the SDGs reflects the view, as expressed in Agenda 2030 that “planet Earth and its ecosystems are our common home” and that “the survival of many societies, and of the biological support systems of the planet, is at risk”. The SDGs are highly inter-related, and through GEF’s investments aimed at transforming key economic systems, the GEF will help support the achievement of a number of other goals. For example, GEF investments in sustainable intensification of agriculture can contribute to achieving Goal 2 on No Hunger, our investments supporting the energy transformation can help achieve Goal 7 on access to energy, and GEF investments in sustainable commodity supply chains and circular economy could contribute to goal 8 on sustainable production and consumption.

21. The GEF has a unique mandate across multiple MEAs. 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. 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’s broad responsibilities under various MEAs may add complexity to the GEF’s work, these responsibilities are often mutually supportive, and make the GEF uniquely placed to harness synergies across the different MEAs in line with a more holistic, systems approach. This is also in line with a growing body of recent GEF guidance coming from various MEA COPs requesting the GEF to foster integration as well as promote synergies among actions and strategies, and with the GEF’s role supporting SDG planning and implementation as recognized in multiple conventions, reflecting the integrated and indivisible nature of the SDGs (*Box 1.4*).

Box 1.4. Rio Conventions Guidance to Promote Integration

At the **UNCBD’s** most recent COP13, held in December 2016, the value of synergies among MEAs and for the SDG implementation was recognized. It was included in guidance to the GEF as follows: “The framework recognizes the opportunities for synergy, inherent in the unique institutional design of the Global Environment Facility, with related multilateral environmental agreements, as well as synergies with the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, in particular Sustainable Development Goals 14 and 15.” The recent CBD COP guidance also includes firm support for developing integrated approaches and collaboration among national focal points of different MEAs: “...framework encourages integrated approaches to project design as well as global and regional projects, noting that regional approaches are indispensable for addressing certain elements of the biodiversity agenda...”. It encourages collaboration at the national level among national focal points of the Convention and its Protocols, of related environmental agreements, and of GEF, including through GEF-supported projects.”

In the **UNCCD**, COP parties have made key decisions that underscore the cross-cutting nature of the land and desertification agenda. For instance, the CCD COP adopted a new organizing principle of land degradation neutrality (LDN) in 2015. As the LDN concept encompasses trends in carbon stocks above and below ground, land productivity, and land cover, its adoption as the Convention organizing principle signaled the readiness of the Convention and Parties to address the land issue together with biodiversity and climate agenda. The GEF was also invited by the COP to continue its support for the implementation of the Convention in light of the

2030 Agenda for Sustainable Development. With COP guidance to support the national target setting exercise for the LDN, the GEF has been entrusted with additional mandates to support activities that facilitate synergy.

Finally, with the **UNFCCC's** Paris Agreement going into effect, the UNFCCC COP in 2016 provided various guidance to the GEF to help countries towards implementation of action. Specifically, the GEF was encouraged to continue its efforts to facilitate countries to align their GEF programming with priorities as identified in their nationally determined contributions (NDC), which in the vast majority of countries include actions that cut across all three Rio Convention's objectives.

22. GEF2020 and its emerging implementation experiences during GEF-6 provide a strong platform on which to move forward. GEF2020 places emphasis on the importance of the GEF to focus on addressing key drivers of environmental degradation. GEF-6 has produced a number of interventions, including the Integrated Approach Pilots (IAPs), that proactively address the underlying drivers of global environmental degradation through committed multi-stakeholder coalitions. To overcome multiple barriers, in the context of increasingly complex environmental challenges, a variety of influencing models are being used, which are often working towards delivering results across multiple geographies, sectors and markets. At their core, these interventions seek to achieve market or behavioral transformations, and in many cases to integrate focal area and convention priorities into a broader set of policies, strategies, programs and actions.

23. Experiences from GEF-6—including from the IAPs—suggest strong country demand for GEF to offer platforms where countries can come together around common challenges. There has been very high demand from countries to join both the Sustainable Cities and the Food Security IAPs, both of which are built on the inclusion of country-specific child projects. The Food Security IAP had a pre-determined geographic scope to focus on dryland countries in Sub-Saharan Africa, and quickly attracted 12 countries. Similarly, the Sustainable Cities IAP, which has a global reach, was rapidly programed to capacity. The demand from countries towards joining the IAPs suggests not only that these Pilots are well-aligned with country priorities, but also that countries see value in being part of a bigger, coherent program that may not be as easily realized through single, free-standing projects.

24. In GEF-7, programming should further emphasize tackling major drivers of environmental degradation to achieve systems change. This would require the GEF to adjust to evolving global context and emerging opportunities in several ways. In particular, GEF programming should:

- ***become more focused, in order to deploy resources where GEF can support transformation of key systems, so that impacts can be maximized.*** Aligned with country priorities, GEF-7 programming should be focused on a limited number of “Impact Programs” that hold the potential to support systems change. The Impact Programs will enhance synergies and deliver multiple benefits across the GEF’s thematic priorities. Collectively, they address major drivers of environmental degradation, promote a more

effective use of resources, and crowd-in the private sector. The proposed Impact Programs are listed in the table below.

- ***respond more effectively to country priorities consistent with countries' commitments to MEAs.*** Countries report on their intended actions in support of the conventions' goal in a variety of ways: for the UNFCCC in the form of "Nationally Determined Contributions" as part of the Paris Agreement, for the UNCBD in the form of National Biodiversity Action Plans, and as commitments to land degradation neutrality targets under UNCCD. The proposed Impact Programs cover key priorities expressed by most countries in their communications to conventions.
- ***mobilize and strengthen diverse coalitions of actors, especially the private sector.*** Many Impact Programs build on, and strengthen, existing multi-stakeholder platforms. Country priorities are often supported by global or regional platforms that are attracting a multitude of stakeholders and resources in response to political commitments—an example being the Bonn Challenge that brings together 40 countries, the private sector and civil society around commitments to restore about 150 million hectares of land. Several Impact Programs are aligned with such coalitions, which helps leverage GEF's impact.

25. **The level of ambition set out in the proposed strategy for GEF-7 calls for a more effective, responsive and agile delivery model.** In particular, building on efforts in GEF-6, the GEF needs to take steps to 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 also needs to strengthen operational and institutional effectiveness and efficiency across a range of domains. Implementation of such a policy agenda would provide a stronger foundation to support GEF programming, and to better achieve GEF's mission and mandate. Three broad objectives emerge as priorities in this respect.

26. **The two subsequent chapters in this document elaborate on the proposed programming directions for GEF-7 (Chapter 2), and the GEF-7 Policy Agenda (Chapter 3), respectively.**

CHAPTER 2

GEF-7 PROGRAMMING DIRECTIONS FRAMEWORK

INTRODUCTION

1. **The aim of GEF-7 programming is to become more focused and impactful.** Given the pace of global environmental degradation and the magnitude of the threat, the world has started to recognize the need for transforming the key economic systems to stay within the planetary boundaries. The GEF, with its mission of safeguarding global environmental commons, cannot afford to standstill, and rather should join hands with stakeholders towards the shared goal. The GEF will focus on resources on areas where the GEF can help catalyze more effectively transform the key economic systems. In doing so the GEF will more effectively help countries fulfill their commitments under the respective MEAs. The drivers-based themes are starting to be identified, offering the opportunity to further shape them into more impactful and integrated investments. A more selective set of country-driven priorities holds the potential to enhance synergies, integration, and impact of GEF investments, and to promote a more effective use of resources. Many country priorities are leveraging an increasing number of global or regional platforms that are attracting a multitude of stakeholders and resources in response to political commitments. In sum, the higher level principles guiding the identification of GEF-7 programmatic priorities consist of their (a) contribution to transformative systems change, (2) capturing emerging multi-stakeholder platforms that enjoy political support and significant financial prospects, (3) responsiveness to country demand as expressed in their commitments to MEAs.

Assessing Country Priorities

2. **The starting point for GEF-7 programming is countries' priorities as expressed in their communications to the MEAs.** Countries that are signatories to the Conventions for which the GEF serves as financial mechanism report on their intended actions in support of the conventions' goal in a variety of ways. For the UNFCCC, a total of 195 countries, including 138 GEF eligible countries, submitted "Nationally Determined Contributions" as part of the Paris Agreement. Under the UNCBD, a total of 140 GEF recipient countries have prepared NBSAPS, outlining how national actions contribute to convention's goals. And under UNCCD, 105 GEF recipient countries have expressed their commitment to land degradation neutrality targets.

3. **Country priorities can be summarized in a limited number of strategic thematic areas (Table 2.1).** While it was a growing body of research that has first pointed to the need to address the key economic drivers of degradation as a more effective way to deal with deteriorating global environmental commons (e.g., Hosonuma et al, 2012), developing countries themselves are rapidly starting to reflect these priorities in their respective commitments to MEAs, including through the Paris Agreement and the CBD. This suggests that countries are increasingly starting to pivot their attention towards dealing with drivers of degradation, as oppose to only responses to them, and to other priority actions that are more impactful and integrated by nature.

Table 2.1. Thematic priorities from countries by region.

Thematic Priorities	AFR	ASIA	ECA	LAC	SIDS	Total
Landscape Restoration	47 (98%)	17 (100%)	23 (96%)	20 (100%)	33 (97%)	140 (98%)
Transforming Energy Systems	47 (98%)	17 (100%)	21 (88%)	18 (90%)	33 (97%)	136 (95%)
Food Systems	47 (98%)	17 (100%)	20 (83%)	20 (100%)	31 (91%)	135 (94%)
Sustainable Cities	46 (96%)	16 (94%)	20 (83%)	16 (80%)	32 (94%)	130 (91%)
Environmental Security	45 (94%)	17 (100%)	14 (58%)	19 (95%)	31 (91%)	125 (88%)
Healthy Oceans for Sustainable Fisheries	40 (83%)	14 (82%)	19 (79%)	19 (95%)	30 (88%)	122 (85%)
Natural Capital	35 (73%)	13 (76%)	12 (50%)	17 (85%)	24 (71%)	101 (71%)
Green Finance	29 (60%)	11 (65%)	12 (50%)	16 (80%)	19 (56%)	87 (61%)
Green Infrastructure	19 (40%)	9 (53%)	6 (25%)	12 (60%)	10 (29%)	56 (39%)
Agriculture Commodities Supply Chains	3 (6 %)	3 (18 %)	0 (0 %)	10 (50 %)	1 (3 %)	17 (12 %)
Amazon Landscapes	0 (0 %)	0 (0 %)	0 (0 %)	8 (89 %)	0 (0 %)	8
Wildlife for Sustainable Development						
Inclusive Conservation: Engaging Indigenous People						
Circular Economy						
Integrated National Planning for MEAs/SDGs						
Grand Total Distinct Countries	47 (98%)	17 (100%)	24 (100%)	20 (100%)	34 (100%)	

4. **The analysis suggests a relatively high degree of consistency across countries.** Some priority themes have been identified by a large majority of GEF-eligible countries—e.g. food, land restoration, and energy—while others reflect some countries particular circumstances, e.g. as producers of major agricultural commodities or shared biomes, e.g. the Amazon.

5. The key findings of the individual themes can be summarized as follows:

6. **Landscape restoration and reforestation emerge as top priorities for 140 (98%) GEF-eligible countries** in their INDCs, NBSAPs, and UNCCD NAPs. Further, of these countries, 99 have signed the UNCCD commitment for land degradation neutrality. A total of 34 GEF countries have signed the Bonn Challenge to restore 150 million hectares by 2020. Restoration of land and reduction of deforestation is vital for protection of biodiversity, as reflected in the NBSAPs of more than 100 countries.

7. **Almost all countries recognize that without transformation of our energy we cannot achieve the Paris Agreement or the Sustainable Development Goals.** Among the GEF-eligible countries, 136 (95%) have identified priorities for energy efficiency, renewable energy, and energy access (see below). Considering all the INDCs available for analysis, 133 (100%) GEF

countries identified energy systems as a priority for their GHG emissions reductions.² Transformation of energy systems to protect biodiversity is also recognized in 57 NBSAPs; and resilience of energy systems is identified in 48 countries as a priority for climate change adaptation.³

8. **135 or 94% of all countries have commitments dealing more comprehensively with food system issues.** This reflects the critical role that food systems play in the global environment, and reinforces the priority for climate smart and sustainable agricultural practices. Countries identified agriculture as a top adaptation priority, with a significant number also identifying mitigation benefits. Further, more than 50% of countries identified agriculture in their NBSAPs as a key sector for protection of biodiversity.

9. **Priority action on environmental security** is included in 126 (88%) of GEF-eligible countries, in both INDCs and NBSAPs. Water scarcity is expected to be exacerbated by climate change, leading countries to identify issues related to water including 100% in Asia, 94% in Africa, 95% of Latin America, 91% of SIDS, and 95% of LDCs.

10. **Transformation of urban systems is a top priority for nearly all GEF-eligible countries.** 130 (91%) GEF countries identified a critical role to invest in sustainable urban systems, as reflected in the INDCs and NBSAPs. Within the urban sector, key sub-sector priorities identified include: transport in 100 countries; waste in 92 countries; and buildings in 40 countries.

11. **112 GEF countries (78%) identified priorities aligned to action on the fisheries sector.** Fisheries provide food for more than 3 billion people globally (FAO, 2013) and are a major source of jobs and income in developing countries. Notably, 101 GEF countries identified protection of fisheries in their NBSAPs as an essential element for protection of biodiversity.

12. **95 (66%) GEF countries identified action on the oceans and coastal areas as key priorities for protection of biodiversity,** as contained in their NBSAPs and for adaptation and resilience in their INDCs. Waste from rapidly growing urban centers is a key contributor to decline of oceans and coastal systems, and waste reduction is identified as a priority for almost 100 countries.

13. **101 (71%) GEF countries have identified priorities aligned with the promotion and mainstreaming of natural capital approaches** and frameworks, such as national accounting, payments for ecosystem services and protection of watersheds. Most countries in Latin America, Africa, and SIDs identified natural capital in their NBSAPs.

² The INDCs for the following 10 GEF countries were not available for this analysis: Iraq, Kazakhstan, Kyrgyz Republic, Libya, Nicaragua, Serbia, Syria, Timor-Leste, Ukraine, and Uzbekistan.

³ WB INDC adaptation analyses.

14. **87 (61%) GEF-eligible countries identified the need for innovative financing options, including Green Financing.** Lack of financing is recognized as a critical barrier to accomplishment of the Paris Agreement and the Sustainable Development Goals. Many countries identified the importance of green financing to meet mitigation agreements and adaptation needs. Latin American countries in particular identified the need for green financing to support implementation of the NBSAPs.

15. **Developing countries are the drivers of infrastructure growth globally, concentrated in rapidly growing economies.** Construction of roads, rail, dams, mining, and buildings are having impact in rural and urban areas, and have significant impacts on emissions and biodiversity loss. 56 (39%) GEF countries identified priorities in both INDCs and NBSAPs which are aligned with a broad area that could be called green infrastructure.

16. **The production of global commodities can have a disproportionate impact on the global environment.** While just 17 countries (equivalent to 12% of all GEF-eligible countries) are aligned with the priorities dealing with sustainable production of global commodities with high environmental footprint, these 17 GEF countries concentrate the top palm oil, soybean, and beef production systems that are leading to large-scale deforestation. The countries are concentrated in Latin America and Asia, and a small number of African countries.

17. **Protecting the Amazon is vital to global environmental health.** The Amazon is home to one in ten known species on Earth; it spans 1.4 billion acres of dense forests, representing half of the planet's remaining tropical forests; and includes 4,100 miles of rivers⁴. Although the Amazon is confined to only 9 countries⁵, all of the 8 GEF-eligible countries identified priorities in their INDCs and NBSAPs related to conservation, forest management, carbon sequestration, freshwater and ecosystem services.

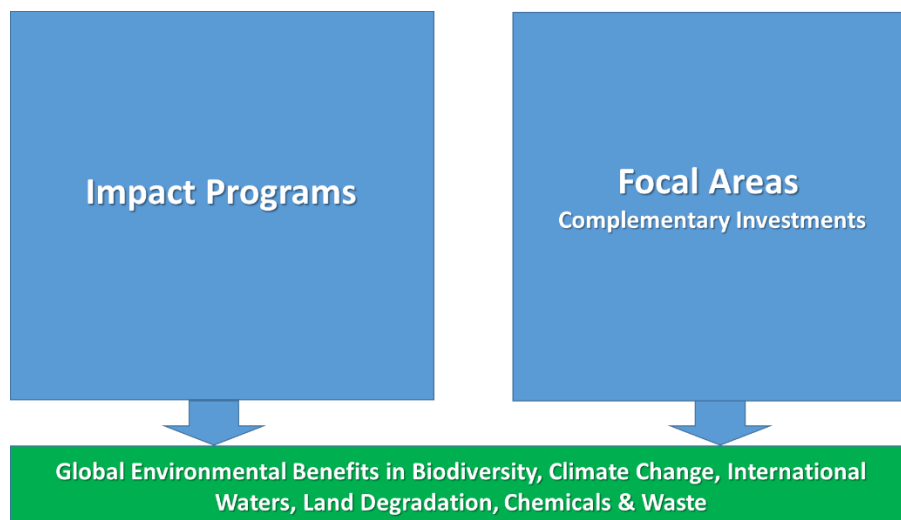
GEF-7 Programming Structure and High-Level Results Framework

18. The GEF-7 programming strategy was designed along two major axes (Figure2.1.):

⁴ <http://www.worldwildlife.org/places/amazon>

⁵ Amazon countries and territories include: Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Venezuela. Of these, all are GEF countries except French Guiana.

Figure 2.1. Proposed GEF-7 Programming Structure, comprised of 16 Impact Programs and 5 focal area complementary investments that address guidance from MEAs.



19. **The first axis clusters programming around a relatively small number of “move-the-needle” Impact Programs**, corresponding to country priorities. Through these, the GEF would be better positioned to help countries pursue holistic and integrated approaches for greater transformational change in the economic systems, and in line with their national development priorities. The focused set of country-driven priorities hold the potential to enhance synergies, integration, and impact of GEF investments, and to promote a more effective use of resources and crowd-in private sector funding.

20. **The impact 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. In addition to the themes summarized in Table 2.2 below, some ongoing and emerging areas of action have been proposed focusing on emerging platforms that hold the promise of greater impact with GEF involvement: Circular Economy and Wildlife for Sustainable Development, in addition to an initiative on Integrated National Planning that also builds on the CBIT initiative coming from the Paris Agreement.

Figure 2.2. Contributions of Impact Programs to Delivering Priorities of GEF’s Multilateral Environmental Agreements and the SDGs (red is direct contribution, yellow is indirect contribution).

Impact Programs	Multilateral Environmental Agreements (MEAs)				
	Biodiversity	Climate Change	Land Degradation	International Waters	Chemicals and Waste
Landscape Restoration SDGs: 12, 13, 15	Red	Red	Red		
Transforming Energy Systems SDGs: 9, 11, 13		Red			Red
Food Systems SDGs: 2, 12, 13	Yellow	Red	Red	Yellow	Yellow
Environmental Security SDGs:			Red	Red	
Sustainable Cities SDGs: 7, 9, 11, 13	Yellow	Red			Red
Healthy Oceans and Sustainable Fisheries SDGs: 2, 6, 14, 15	Red	Yellow		Red	
Natural Capital SDGs: 14, 15	Red	Red	Yellow	Red	
Green Finance SDGs: All	Red	Red	Red	Red	Red
Green Infrastructure SDGs: 2, 5, 6, 7, 9, 11	Red	Red	Red	Red	Red
Agriculture Commodities Supply Chains SDGs: 12, 13, 15	Red	Red	Red		
Amazon Landscapes SDGs: 6, 12, 13, 15	Red	Red	Red	Red	Red
Wildlife for Sustainable Development SDGs: 1, 5, 8, 10, 15	Red		Red		
Inclusive Conservation: Engaging Indigenous Peoples SDGs: All	Red	Red	Red	Red	
Circular Economy SDGs: 12, 14		Red		Yellow	Red
Integrated National Planning for MEAs/SDGs SDGs: All	Red	Red	Red	Red	Red



21. The second programming axis encompasses focal area-specific investments that respond to certain specific guidance from the different multilateral environmental agreements. The Impact Programs have identified and mapped the substantial global benefits expected from each of them across the different focal areas of the GEF (see Figure 2.2.). The same logic is presented in the preliminary results framework (see Table 2.3). However, some elements of guidance from conventions can be best dealt with through distinct complementary investments directed at objectives not fully reflected within the set of proposed Impact Programs. These are addressed in the second axis of resource programming in GEF-7 (see Figure 2.1.). 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.

22. A central feature of the Impact Programs is that they deliver results—global environmental benefits--across the different focal areas of the GEF. To ensure that Impact Programs and complementary investments address benefits under the GEF mandate, results will be tracked using focal-area specific frameworks (see Annex 4), along with selected indicators to adequately monitor progress with impact programs. The intent is to reach a relatively small number of higher level corporate indicators closely aligned to convention and global environmental benefit priorities. The expected benefits are presented in more detail in the description of individual impact programs in subsequent sections of this document.

Table 2.2. Impact Programs and Focal Area Complementary Investments and their contribution to an integrated set of GEBs, and their relationships with the MEAs.

GEB Categories	Biodiversity (Land and Water)		Sustainable Land and Water Management	De-Carbonization/Reduced Emissions		Reduced Pollution/Waste
Results Area	Species with improved status (#), Protected Areas created in Landscapes / Seascapes (HA)	Proportion of Fisheries Managed Sustainably, Basins with Enhanced Water-Food-energy Ecosystem Security (#/HA)	Area of Sustainably Managed Landscapes (hectares); Freshwater Resources Managed Sustainably (%)	Areas with Deforestation Reduced (Hectares), Forest Stocks Conserved (Tons)	Emissions avoided or reduced (Tons of CO ₂ e)	Quantity of Pollutants, Waste Reduced or Eliminated (Tons)
Impact Programs						
Landscape Restoration						
Transforming Energy Systems						
Food Systems						
Sustainable Cities						
Environmental Security						
Healthy Oceans for Sustainable Fisheries						
Natural Capital						
Green Finance						
Green Infrastructure						
Agriculture Commodities Supply Chains						
Amazon Landscapes						
Wildlife for Sustainable Development						
Inclusive Conservation: Engaging Indigenous People						

Circular Economy						
Integrated Planning for MEAs/SDGs						
Focal Area Complementary Investments						
Biodiversity						
Climate Change						
Land Degradation						
International Waters						
Chemicals and Waste						

Primary  Impact Program contributes directly to the GEBs
Secondary  Impact Program contributes indirectly to the GEBs

23. The GEF works to conserve the Global Environmental Commons by delivering Global Environmental Benefits (GEBs) that respond to national priorities and international commitments made within the realm of the MEAs. Additionally, in GEF-7 GEBs should also prove directly relevant to the foundational SDGs (13, 14 and 15) that underpin the health of the biosphere (see Figure 2.2.). Most other SDGs depend on adequate stewardship of these in order to be attainable. One of 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 UNFCCC), along with the Stockholm and Minamata Conventions, while acting on other global environmental dimensions including forests and oceans. Science and environmental practice are indicating that the integration of environmental actions towards addressing common drivers of degradation is not only feasible but desirable. A Results Framework for the GEF that clearly focuses on a core set of common indicators of environmental change and the GEF's contributions to delivering GEBs is therefore essential.

24. The GEF-7 approach will build on past Results Frameworks and also serve several purposes including:

- Defining realistic expected results that match with country identified needs and align with the mandate of the GEF;
- Monitoring portfolio progress toward results and resource use, by means of appropriate indicators and targets;
- Reporting on the results achieved and resources disbursed.

25. In this context, we need to define clear and robust GEBs, design indicators that can be tracked and reported on, as well as setting ambitious, yet realistic corporate targets for these GEBs. As we move into a more integrated set of programs in the next replenishment, it is clear that a simple unified set of GEBs can and should be developed to represent the numerous benefits along the variety of environmental themes that the GEF operates on with each MEA. For example, investing in Climate Change Mitigation has multiple benefits and these need to be captured and matched against each MEA goals. Likewise, land use investments will produce GEBs along a series of MEAs from Biodiversity to Land Degradation to Climate Change. The table below attempts to link our existing GEBs to the different MEAs and their associated National Plans and commitments (INDCs, NBSAPs, etc.).

Table 2.3. Global Environmental Benefits of GEF-6

Global Environmental Benefit in GEF-6	Convention Link	MEA – National Commitments
Sustainable Biodiversity Landscapes and Seascapes	CBD, UNFCCC, UNFCCC	NBSAPs, LDN, INDCs, NAPs
Sustainable Land Management	CBD, UNFCCC, UNFCCC	NBSAPs, LDN, INDCs, NAPs
GHG Mitigation	UNFCCC, UNFCCC	LDN, INDCs
Enhanced water-food systems	CBD, IW-related conventions	SAPs
Globally over-exploited fisheries restored	CBD, IW-related conventions	SAPs
Chemicals and Waste POPs removed	BRS Conventions	n/a
Chemicals and Waste Mercury removed	Minamata Convention	n/a

26. **We will need to refine the GEBs and GEF-7 indicators so they can serve and map back to all our MEAs and Convention targets and outcomes as well as make explicit links (whenever possible) to the numerous SGD indicators.** The added value of this integrated proposal lies with the synergies that each Impact Program is providing to many MEAs simultaneously, as well as the delivery of GEBs along each MEAs by many Impact Programs.

27. The subsequent sections in this chapter present first in more detail each Impact Program, followed by each Focal Area Complementary Investments.

IMPACT PROGRAMS

Landscape Restoration Impact Program

Introduction

28. Poor land use practices and inadequate soil management are negatively impacting ecosystems and biodiversity, productivity and carbon stocks. Global estimates suggest that nearly 2 billion ha (22.5%) of agricultural land, pasture, forest and woodland are degraded (Gibbs and Salmon, 2015). This has negative impacts on ecosystem services, including the provision of freshwater, food, fuel and fiber, air and water purification, climate regulation, and on habitats for wildlife.

29. Consequently, land and ecosystem degradation are posing serious obstacles to the achievement of the SDGs, the Paris Agreement, the Aichi Targets, and the land neutrality targets being set by parties to the UNCCD. Land degradation also increase the vulnerability of millions of people, specifically the poor, women, and children. It also triggers competition for scarce resources, resulting in local and regional conflicts while exacerbating inequalities among vulnerable groups, including women and children.

30. Global environmental policy increasingly embraces the restoration of degraded agricultural land, and terrestrial ecosystems as a key focus of natural resource management. The global community has realized that besides conserving forests and ecosystem services, we need to start restoring landscapes for ensuring those services in the long run as part of a sustainable development equation.

GEF-7 Impact Program

31. The GEF is proposing a dedicated Impact Program on the restoration and maintenance of a global network of resilient landscapes either transboundary or subnational in scope. A realistic target is the restoration of 15 – 25 selected landscapes, with a total area coverage of 60 – 100 million hectares, including three main categories of land:

32. Degraded land (formerly productive land), through investments in sustainable land management, including agro-silvo-pastoral models and agro-ecological intensification;

33. A wide range of ecosystem types, including savannah, shrub and grasslands, wetlands, watersheds, estuaries, and mangroves using best practices for ecological restoration, which may include targeted eradication, management or control of Invasive Alien Species;

34. Forest landscapes, applying a range of best practices and focusing on, but not limited to, cost-effective interventions such as natural regeneration, assisted natural regeneration, and forest protection to restore ecosystem functions.

Objectives, Key Interventions, and Selection Criteria

35. The main objective of the Impact Program is to generate multiple environmental benefits through the restoration of degraded land, and important ecosystems including forests. A landscape approach will help to tailor implementation packages to a wide range of landscapes and facilitate scaling up. It will also address the interactions and trade-offs between different land uses and thereby avoiding further degradation of land and ecosystems.

36. Realizing global targets on restoration requires urgent GEF support in the following areas:

- Embedding planning for restoration into the existing planning frameworks and participatory land-use planning to meaningfully involve local governments, local communities, indigenous peoples, and women into the restoration work;
- Policy work at national levels leading to the resolution of land tenure issues that are obstacles to restoration objectives;
- Promoting good governance especially in view of land tenure and securing livelihoods of smallholders informally occupying degraded land;
- Crowding-in private sector investments in land restoration using financial incentives including non-grant financial instruments that can reduce the risk of investors and helping to create the economic underpinning of restoration to sustain impact in the long-run;
- Providing the technical assistance required to bring bankable projects to the investment phase – this could be tackled through supporting a technical assistance facility;
- Supporting smallholders through special lending and through extension systems, with special attention to women smallholders;

- Building capacity at all levels required to restore and maintain functional landscapes;
- Lessons learning and Knowledge exchange and south-south cooperation within regions;
- Developing monitoring and information systems and targeted research on impacts, trade-offs, costs-benefit analysis of restoration, and identifying incremental synergies.

37. Selection of landscapes will be done jointly with GEF eligible countries and implementing agencies taking into account strong baselines for success of the Impact Program, such as established platforms and partnerships, demonstrated success at pilot scale, and potential leverage of public and private sector funding. Selection criteria will take into account drivers of degradation and potential for restoration, and the prospects for multiple benefits to support sustainable developments and secure livelihoods, and potential for scaling up.

38. Table 2.4 serves to structure preliminary thoughts for selection of potential landscapes (please note that Bonn Challenge pledges are an entry point, but not an exclusive selection criteria).

Table 2.4. Selected regions with national pledges towards the Bonn Challenge

Regional focus of GEF interventions	Bonn Challenge pledges (in million ha)	High Profile Landscapes to be considered (<i>list not exhaustive</i>)
Meso-America	Mexico (6.5), Guatemala (1.2), Costa Rica (1), Honduras (1), El Salvador (1), Panama (1), Nicaragua (2.7)	Mesoamerican Corridor, Yucatan Peninsula
South America	Brazil (12), Argentina (1), Peru (3.2), Chile (0.5), Colombia (1), Ecuador (0.5)	Atlantic Forest, Cerrado, Dry central Andes (Altiplano-Puna Plateau), Patagonian Grasslands
West Africa	Guinea (2), Liberia (1), Cote d'Ivoire (5), Ghana (2), Benin (0.5)	"Cocoa Belt", Mole, de la Comoe, Mt. Nimba, and Fouta Djallon National Parks
East Africa & Horn of Africa	Madagascar (4), Malawi (4.5), Mozambique (1), Uganda (2.5), Burundi (2), Rwanda (2), Ethiopia (15), Kenya (5.1)	Madagascar, Miombo landscapes, Ethiopian Mountains, East African Park corridors
Tropical Africa	DRC (8), CAR (3.5), Congo (2), Cameroon (12.1)	Congo Basin
Sahel Zone	Niger (3.2)	"Great Green Wall"
South Asia	India (21), Pakistan (0.4)	Himalayas, Terai Arc Landscape, Dryland landscapes
Southeast Asia	Indonesia (APP) (1), <i>Gol pledge under preparation</i>	South Sumatra, West Kalimantan, Greater Mekong Sub-region
Mediterranean / Middle East	<i>Pledges under preparation</i>	Atlas Mountains, Eastern Mediterranean Forests
Boreal region	<i>None so far</i>	Siberian Taiga
Central Asia	<i>None so far</i>	Cold Winter Deserts, Altai (Golden Mountains)
Eastern Europe	<i>None so far</i>	Eastern Europe Steppe
SIDS	<i>None so far</i>	Mangroves / coastal landscapes
Caribbean Islands	<i>None so far</i>	Cuban/Hispaniolan forests
Total pledges above: 130.4 million ha		

Existing Platforms and Potential Partners

39. The Bonn Challenge is a global effort to restore 150 million hectares of the world's deforested and degraded land by 2020 and 350 million hectares by 2030. The Bonn Challenge is not a new global commitment but rather a coherent umbrella for the different existing international commitments that have been made. Up to date 35 GEF countries have signed the Bonn Challenge to restore 130.4 million hectares by 2020 and additional pledges are being prepared.

40. The Bonn Challenge is an important platform supporting countries, sub-national government, and private sector companies in implementing and monitoring restoration pledges. It is steered by the actions of the Global Partnership on Forest Landscape Restoration (GPFLR), a worldwide network of restoration practitioners, scientists, policy-makers and key supporters from government, international and non-governmental organizations and businesses.

41. The Global Restoration Council (GRC), consists of public and private sector members, and civil society all aiming to catalyze and sustain a global movement for restoration. It is a voluntary, non-departmental entity supported by the World Resources Institute (WRI) on behalf of, and as a contribution to the GPFLR. Through the GRC, a close partnerships of the GEF Impact Program with the private sector can be initiated, e.g. with EcoPlanet Bamboo, the Sustainable Banking Initiative, and the Sustainable Trade Initiative (IDH).

Global Environmental Benefits and Links to Multilateral Environmental Agreements

42. The multiple global environmental benefits of this Impact Program will:

- Conserve biodiversity in the targeted 60 – 100 million ha of landscapes by increasing and enhancing habitats, reducing forest fragmentation, improving ecosystem integrity, and reducing deforestation in High Conservation Value Forests (HCVF);
- Mitigate climate change through sequestering carbon above and below ground and avoiding emission from further land and forest degradation;
- Contribute to Land Degradation Neutrality and combat desertification;
- Improve agricultural productivity, food and water security, create jobs in rural areas, especially for women, and secure livelihoods of local communities;

- Reduce vulnerability of agro-ecosystems and increase climate change resilience.

43. MEA commitments and targets dedicated to the restoration of degraded ecosystems include Aichi target 15 of the CBD, which calls for restoring 15% of the degraded ecosystems worldwide by 2020. Restoration through afforestation and reforestation has long been a part of the Clean Development Mechanism (CDM) of the UNFCCC and plays an important role in REDD+ efforts. Restoration of degraded lands is the underlying concept of Land Degradation Neutrality (LDN) of the UNCCD. Sustainable Development Goal 15 advances calls to “protect, restore, and sustainably use terrestrial ecosystems”.

44. Countries have begun to incorporate restoration targets within their MEAs and other international commitments. This Impact Program reflects a very high priority area for 140 GEF-eligible countries (98%) as contained in their INDCs, NBSAPs, and NCCD NAPs. Of these, 99 GEF-eligible countries have signed the commitment for land degradation neutrality. Restoration of land and reduction of deforestation is vital for protection of biodiversity, as reflected in the NBSAPs of more than 100 countries.

Transforming Energy Systems Impact Program

Introduction

45. Energy related carbon emissions are the major driver of climate change. Transformation of energy systems is vital to achieving the Paris Agreement and the SDGs. The GEF-7 impact program will use sectoral interventions and innovative business models to accelerate the transformation of energy systems.

46. Recent progress shows that transformation of global energy systems is already underway. Yet it is not happening fast enough nor is it happening in all the countries that need it. We also know that delayed action on transforming energy systems will greatly increase future costs and risks in climate change mitigation.

47. The unique value added of the GEF, working in complementarity with the GCF and other financing institutions, is to promote enabling conditions and foster innovative and risk-taking opportunities for accelerating the transformation of energy systems. Specifically, the GEF-7 program will address barriers which are limiting the growth in sustainable energy and causing an uneven adoption across GEF recipient countries. Upper middle income countries such as China, India, Mexico, Brazil, Indonesia, and South Africa, are rapidly expanding the use of renewable energy, but are struggling to efficiently integrate those growing energy supplies into existing infrastructures. On the efficiency side, many cost-effective technologies and processes are still not being deployed and managed at the scale needed. Further, many GEF recipient countries are struggling to deliver modern energy services. For example, many least developed countries (LDCs), especially those in the Sub-Saharan Africa region, show significant challenges in delivering electricity to all citizens. Small island developing states (SIDS) are particularly reliant on fossil fuels and pay some of the highest costs in the world for electricity, even while hosting significant renewable resources.

GEF-7 Impact Program

48. The interventions in this impact program will address these key barriers limiting the use of energy efficiency and renewable energy in the most energy intensive countries. The GEF has identified interventions that will: take advantage of technology advancements (e.g., smart grid, energy storage); blend policy and regulatory reform with linked investments; promote private sector engagement; demonstrate models that can be replicated and scaled-up; and strengthen the ability of energy intensive countries to

meet their NDCs. In addition, the GEF will support LDCs and SIDS to enhance energy access while still delivering global environmental benefits.

49. The proposed interventions will be implemented through strategic partnerships, such as thematic or regional accelerators, that will deliver these investments with high private sector leverage. The interventions will include an important global coordination effort to set targets; define best practices; and prioritize action supplemented with country level interventions for specific projects. In GEF-7, we will improve and expand on the global accelerators by pursuing shared leadership simultaneously with the targeted invitation of projects in countries with a potential for high impact.

Objectives, Key Interventions, and Targets

50. The GEF- priority interventions will address these critical barriers and lay the foundation for replication and scaling-up in partnership with other financial institutions. Recognizing that many types of interventions across multiple sectors will be required and that transformation of global energy systems cannot be expected to happen quickly, the GEF-7 program will deliver results in key sectors and regions that will jump-start this transformation:

- (a) *Grid modernization and integration to enable rapid integration of renewable energy and demand side management.* In numerous GEF countries, the rapid growth of renewable energy, and rapid changes due to climate change, are severely impacting the ability of the utility grid to provide reliable low-carbon electricity. Working with the multilateral development banks and leading private sector organizations, such as ABB, Siemens, and IBM, the GEF will support investments in countries where accelerated implementation of smart grid, demand-side management, grid modernization, and grid integration will lead to significant global environmental benefits through policy and technical capacity building interventions. Candidate countries include at a minimum, China, India, Mexico, Indonesia, and South Africa, to just name a few. Key technical partners include Rocky Mountain Institute (RMI), WRI, and SEforALL.
- (b) *Energy management systems and emissions control for industries.* In fast growing economies, energy intensive industries are a key opportunity for energy savings. Further, many highly energy intensive industrial processes, including industrial boilers, waste incineration, smelting processes in metallurgical sector and cement production, are the major sources of emission of unintentionally-produced POPs and mercury, listed under the Stockholm Convention and the Minamata

Convention. GEF recipient countries that can achieve significant impact include: China, India, Mexico, South Africa, and countries in Eastern Europe and MENA. Key partners include the Copenhagen Center for Energy Efficiency (C2E2) and industrial private sector stakeholders.

- (c) *Strengthen Energy Efficiency Accelerators.* Building on a successful GEF-6 partnership with SEforAll, the energy efficiency accelerators will be expanded by attracting more private sector engagement and enabling greater country participation. Each accelerator candidate, including for example, Buildings, District Heating and Cooling, Equipment and Appliances, Fuel Efficient Vehicles, and Financing will support global best practices; foster harmonization of testing standards and performance metrics; and identify specific countries needing targeted engagement. A new accelerator for addressing the need of energy efficiency retrofits in multi-family dwellings will be considered. Accelerator models based on the Finance and Technology Transfer Centre for Climate Change (FINTECC) model may be considered. Technical partners include WRI and C2E2. The GEF will also continue to engage with private sector partners such as Philips, Osram, Danfoss, International Copper Association, ABB and MABE.
- (d) *Sustainable Energy for SIDS and LDCs.* SIDS and LDCs are highly dependent on imported fossil fuels. The GEF intervention, in collaboration with national governments and SEforAll, will support sustainable energy development, including micro-grid systems, and provide the mechanism to aggregate these investments to attract broader financial support. This pillar will build on existing and emerging initiatives such as the LDC Renewable Energy and Energy Efficiency Initiative, IRENA's SIDS Lighthouse initiative, Carbon War Room Islands Energy Program, USAID's Power Africa program, among others. Key partners will include regional MDBs, as well as international development agencies such as GIZ, AFD, JICA, and DFID, among others.
- (e) *Fostering adoption of economy wide policies and alignment with NDCs.* In order to achieve sustainable energy goals, we must level the playing field and end subsidies for high-carbon technologies and fuels⁶. Countries also should be encouraged to adopt low-cost, high impact regulations, such as minimum energy performance standards and policies to incentivize low-carbon technologies, innovation,

⁶ Sustainable Infrastructure Report, New Climate Economy

entrepreneurship, and investment. Countries willing to engage the highest levels of policy engagement across Ministries of Finance, Industry, SMEs, and Urban, among others, will be supported. Key partners working on this issue include The Climate Policy Initiative (CPI), WRI, International Energy Agency (IEA), OECD, IPEEC.

Existing Platforms and Potential Partners

51. Work on low-carbon and sustainable energy systems has grown globally with the support of numerous organizations. In addition to the organizations listed above, the GEF will work with groups such as: SEforAll, WRI, IEA, and International Institute for Applied Systems Analysis (IIASA). Private sector engagement will be supported by working with the World Economic Forum, the World Business Council for Sustainable Development, along with additional private sector partners.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

52. UNFCCC: Accounting for more than two-thirds of global GHG emissions, the transformation of the global energy system is imperative to reach the Paris Agreement.

53. SDGs: This impact program is fully aligned with SDG7 to focus on: (1) ensure universal access to modern energy services; (2) double the global rate of improvement in energy efficiency; and (3) double the share of renewable energy in the global energy mix⁷.

54. Stockholm and Minamata: This impact program will create synergies and opportunities to achieve multiple goals of the Stockholm Convention on persistent organic pollutants (POPs) and the Minamata Convention on mercury, for which the GEF is serving as the financial mechanism.

⁷ <http://www.se4all.org/our-ambition>

Food Systems Impact Program

Introduction

55. According to the International Panel of Experts on Sustainable Food Systems (IPES FOOD), it is estimated that food systems contribute between 19% and 29% of global anthropogenic greenhouse gas (GHG) emissions, which is attributed largely to fossil fuel-intensive production of chemical fertilizers and pesticides used in production systems, food processing and retail sectors, and transportation and distribution of processed foods. In addition, agricultural production accounts for 70% of all water withdrawn from aquifers, streams and lakes, and is a major cause of eutrophication due to excessive use of chemical fertilizers.

56. For developing countries and regions facing the challenges of food insecurity due to low productivity, efforts to increase crop and livestock production has largely focused on increasing access to inputs (e.g. fertilizers) and biotechnology (e.g. improved seeds). Yet the sustainability and resilience of the production systems depend largely on the natural capital (biodiversity, land, soil, water) and associated ecosystem services (supporting and regulating). Beyond the production landscapes, food value chains from post-harvest to consumption also contribute negative externalities, including loss and waste that has implications for the global environment. An estimated 1.4 billion hectares (30% of available agricultural land) is used to grow food that is never consumed.

57. With world population projected to reach 9.5 billion by 2050, food systems will need to be transformed in order to meet the 70% more food required without transgressing planetary boundaries. While efforts are underway by the business community to address sustainability in the agriculture sector, there is need for a coordinated approach with all major actors on actions toward transforming entire food systems. The GEF is well placed to influence and support a shift toward food systems that are sustainable and resilient, which will focus on helping countries to tackle drivers of environmental degradation, with multiple benefits across the major MEAs (CBD, UNCCD, and UNFCCC).

GEF-7 Impact Program - Advancing a “Safe Space” to Feed the World

58. Through the proposed Food Systems Impact Program (IP), the GEF will seek to influence large scale transformational change in agricultural production and food value chains, with major gains for the global environment. The food systems approach encompasses all activities associated with the production, processing, transport,

marketing, consumption and disposing of food, as well as the inputs, governance frameworks and infrastructure necessary to support these activities. With the growing demand for higher productivity of crops and livestock to feed a burgeoning population, there is the inherent risk of driving further expansion of production systems, erosion of genetic diversity, overexploitation of water resources, overuse of chemical fertilizers and pesticides, and inefficient practices (e.g. use of fossil fuel technologies, post-harvest storage, processing and packaging) in entire food value chains. The program approach is to foster *sustainable intensification*⁸ of entire food systems by tackling these drivers of environmental degradation and negative externalities. The GEF will deliver the program by engaging with a wide range of stakeholders (with special attention to strengthening women decision-making and representation) and initiatives focused on food value chains, including human well-being dimensions of food (health, nutrition, safety, etc.), which are all very essential for achieving a shift toward sustainability and resilient systems. Such a broad-based coalition will enable the GEF to support recipient countries in addressing policy and financing barriers, and influence agribusinesses and the food industry toward harnessing best practices and standards across entire food value chains. This will create opportunities for small and medium enterprises, including millions of woman and men smallholder producers, processors and retailers to invest in options that will meet the growing demand for diverse, high quality and nutritious food with global environmental benefits. As result, the impact program will contribute toward reducing or eliminating negative externalities associated with biodiversity loss, land and water degradation, GHG emissions, and nutrient pollution.

Objectives, Key Interventions, and Target Geographies

59. Overall objective of the proposed Food Systems IP is to promote innovative tools and practices to reduce environmental degradation and negative externalities in food production systems and value chains. The Theory of Change is that *shift toward sustainable and resilient food systems can be achieved while ensuring a healthy, nutritious and diversified food base* by:

- (a) *Creating enabling environment for countries and industries to shift food production toward diversified agroecological systems* – Enabling conditions include appropriate policies (e.g. tenure, property rights, gender equality, youth,

⁸ **Sustainable intensification** is used here as defined by Rockström et al.: “...adopting practices along the entire value chain of the global food system that meet rising needs for nutritious and healthy food through practices that build social–ecological resilience and enhance natural capital within the safe operating space of the Earth system.” Rockström, J. et al. (2016). *Ambio*. DOI 10.1007/s13280-016-0793-6

etc.), innovative financing, market opportunities, and increased access to knowledge and decision-support tools;

- (b) *Increasing efficiency and effectiveness of food value chains* – Unlocking barriers to application of innovative practices and technology options for integrating environmental management in entire food value chains (with special attention to barriers that women may face in this area), and promoting a business model for improved standards, quality assurance, technical support and capacity building; and
- (c) *Monitoring and assessment of global environmental benefits and resilience* – Establishing a framework for measuring and quantifying all relevant components of food systems across multiple scales and agro-ecologies, to inform decision-making on synergies and tradeoffs.

60. Entry points and geographical targets for GEF financing will be based on priority areas for GEBs (Table 2.5) and potential for influencing private sector through collaborative engagement.

Table 2.5. Criteria and Potential Targets for GEF Investment

GEB priority	Criteria	Potential Target Geographies
Sustainable Land Management (including water and nutrient use)	Low productive crop areas due to degraded and depleted soils	Sub-Saharan Africa
	Smallholder livestock production areas with degraded grazing lands	
	Irrigated systems with excessive water and nutrient use	Asia (South and Southeast)
Avoided loss of biodiversity	High value biodiversity areas under threat from agricultural extensification	Multiple regions
GHG Emissions Mitigation	Intensive crop and livestock production areas	Asia (South and South East), Central Asia, Latin America

Existing Platforms and Potential Partners

61. A strong engagement with financial institutions, food companies (aggregators, processors and retailers) and the agribusiness Small and Medium Enterprises in the proposed impact program will create investment opportunities for scaling-up best practices and resilient options across entire food value chains. A strong engagement with

financial institutions, food companies (aggregators, processors and retailers) and the agribusiness Small and Medium Enterprises in the proposed impact program will create investment opportunities for scaling-up best practices and resilient options across entire food value chains. Among the coalitions and initiatives to engage with are the following:

- the Global Agribusiness Alliance (GAA) for harnessing the collective strengths of the global agri-business sector to tackle environmental, social and sustainability challenges to improve the resilience of farmers across the world;
- the World Business Council on Sustainable Development (WBCSD) and EAT Foundation joint program on 'Food Reform for Sustainability and Health' (FReSH), providing a platform for the private sector to accelerate transformational change in global food systems to reach healthy, enjoyable diets for all, produced responsibly within planetary boundaries.; and
- the Consultative Group on International Agricultural Research (CGIAR) for ongoing scientific work on assessment of ecosystem services (e.g. land and soil health, agrobiodiversity) and GHG mitigation in crop and livestock systems;

Global Environmental Benefits and Links to Multilateral Environmental Agreements

62. Outcomes and GEBs for the impact program will be in line with the MEAs and the SDGs, as follows:

- sustainable land and water management in existing production systems, including improved management of chemical inputs
- mitigation of GHG emissions through improved crop and livestock management, and efficient use of energy-based technologies - potential is estimated to be in the range of 1.1-4.3 Gt CO₂eq/yr, with 0.3-4.6 Gt CO₂eq/yr from supply-side measures
- conservation of agrobiodiversity by increasing on-farm diversification and managing genetic diversity of crops and livestock;
- contributing to Land Degradation Neutrality;
- removal or disposal of hazardous chemicals (especially pesticides) and waste associated with food value chains.
- Increasing sustainability and resilience of food value chains;

Sustainable Cities Impact Program

Introduction

63. Cities are a critical entry point to address drivers of three mega-trends of global environmental degradation: *urbanization, the rising middle class, and population growth*. More than half of the world's population lives in cities. Almost all of the global population growth in the next 20 years is expected to be in developing countries cities.

64. In much of the developing world, however, urban growth is characterized by urban sprawl - cities are expanding their territories faster than their populations; land use is poorly planned and unstructured; motorization rate is increasing rapidly.

65. Recognizing cities' critical roles for sustainable development and risks of not acting now, GEF-6 launched the Sustainable Cities Integrated Approach Pilot (SC-IAP) to directly support holistic urban planning and management in 27 cities across 11 countries. The SC-IAP also created a global knowledge platform, providing a suite of services to cities by leveraging existing networks including ICLEI, C40 and WRI. The platform is becoming a hub for north-south and south-south cooperation in sustainable urbanization.

GEF-7 Impact Program

66. Sustainable Cities IP will build on the SC-IAP to push the envelope further by enhancing policy and financing environments to increase the productivity of existing urban infrastructure and by incorporating innovations that are increasingly within reach to revamp how cities operate at all levels and for all stakeholders.

67. The long-term vision of the GPSC is to create access to cutting-edge knowledge and advocate good practices for sustainable urban development, and to give cities a single entry point to the network of city peers developed by the platform, to assist potential requesters of GEF grants (and other sources of financing eventually linked to the platform) in the preparation of their sustainability programs. The GPSC aims to provide a global convening space for dialogue and a 'clearing house mechanism' on issues, resources and expert needs that will help position cities as major hubs for global environmental and development benefits, including opportunities for financial leverage to advance the sustainability and resilience agendas for cities

68. The proposed impact program for GEF-7 will focus primarily on harnessing the GPSC to expand network of cities and municipalities applying the sustainable and

integrated city planning approach. This will further enhance opportunities for cities to integrate sectoral priorities that may include the following: green infrastructure and nature-based solutions, conservation of globally important biodiversity in urban landscapes, climate-smart urban and peri-urban agriculture and forestry, energy efficient transport systems, sound management of waste and cleanup of the production supply chain for safer and healthier cities, and tracking of resource use and consumption.

Key Interventions and Targets

69. Strengthen global support and coordination. Built on GEF-6 Global Platform for Sustainable Cities, GEF-7 will continue supporting a knowledge sharing platform through:

- Facilitating knowledge-sharing among cities on policy reform and innovation to inform and inspire action.
- Utilizing common platforms and standards to enable cities to make their commitment public, credibly record their energy use and GHG emissions, develop low-carbon strategies, and measure their results.
- Building the capacity of local governments, so that political leaders and municipal staff can effectively plan, design and execute low-carbon development plans and strategies.
- Improving cities' access to domestic and international financial markets, so that cities can finance green urban infrastructure.
- Supporting national governments to empower cities to invest and innovate.
- Aggregating the demand for green technologies to create market place for private investment.
- Enhancing the application of geospatial tools for sustainable and integrated city planning and management.

Existing Platforms and Potential Partners

70. The Global Platform on Sustainable Cities has engaged a major International networks and technology providers, including C40, ICLEI, UCLG, Compact of Mayors, 100 Resilient Cities, WRI, and others. The broad-based coalition will attract additional partners, including private sector entities to help increase opportunities for cities and local governments aspiring for sustainability. The network partners will increasingly

connect people who are tackling challenges and enable them to learn from others' experiences and adapt solutions to their own unique situations.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

71. Various Conventions are increasingly recognizing the role of cities both as drivers of environment degradation and as key players in addressing Convention objectives. Specifically, the Sustainable Cities IP will contribute to UNFCCC, CBD, UNCCD and Chemicals Conventions.

Environmental Security Impact Program

Introduction

72. Today's world is witnessing rapid change on multiple fronts -- environmental, socio-economic, and geo-political, and many socio-ecological systems are becoming increasingly stressed or fragile, so that ecosystems are no longer able to reliably deliver goods and services that communities depend on.

73. In many regions and countries, water and environmental crises, extreme weather events, and interstate conflict combine to exacerbate the status of livelihoods and human condition. These new combinations of threats have consistently ranked among the top five global risks in terms of likelihood and/or impact in the World Economic Forum's annual Risk Reports over the last five years and large scale involuntary migration ranked among highest risk for two years in a row⁹. While environmental insecurity per se is rarely the determinant factor in increasing fragility and social conflicts, climate change and increased climate variability, land degradation and water stress are considered compounding factors for loss of livelihoods, conflicts and displacement especially in dry areas, resulting in large-scale movement of people across borders and continents in the next decades.

74. The Impact Program will focus on preventive action that enhances environmental and water security at both national and regional levels as key to a stable and resilient planet. This could be pursued in a priority fashion in the context of national and regional conflict hotspots as a prevention to conflict, and in specific countries in the context of post-conflict reconstruction and peace-building, where the GEF incremental funding could enhance the impact of the larger flows of peace-building investment's both for enhancing environmental security and for generating Global Environmental Benefits.

GEF-7 Impact Program

75. The Impact Program will aim to maintain, enhance, and restore GEBs (biodiversity, land, transboundary waters) in fragile states that are under direct threat linked to conflict and the breakdown of governance. Also, in order to avoid this crisis situations in the future, monitoring environmental fragility and mainstreaming "Resilience Systems Thinking" across GEF investments will also be promoted. This can contribute to

⁹ <https://www.weforum.org/reports/the-global-risks-report-2017>

decreasing fragility, increasing human security and delivering substantial development co-benefits. Seeking integrated solutions across natural resources, water and environmental services in countries at risk is likely to produce more direct and indirect benefits than the total of direct and ancillary benefits emerging from separate sector specific efforts – in fact sector specific actions can be costly and lead to sub-optimal outcomes and tensions among countries.

Objectives, Key Interventions, and Targets

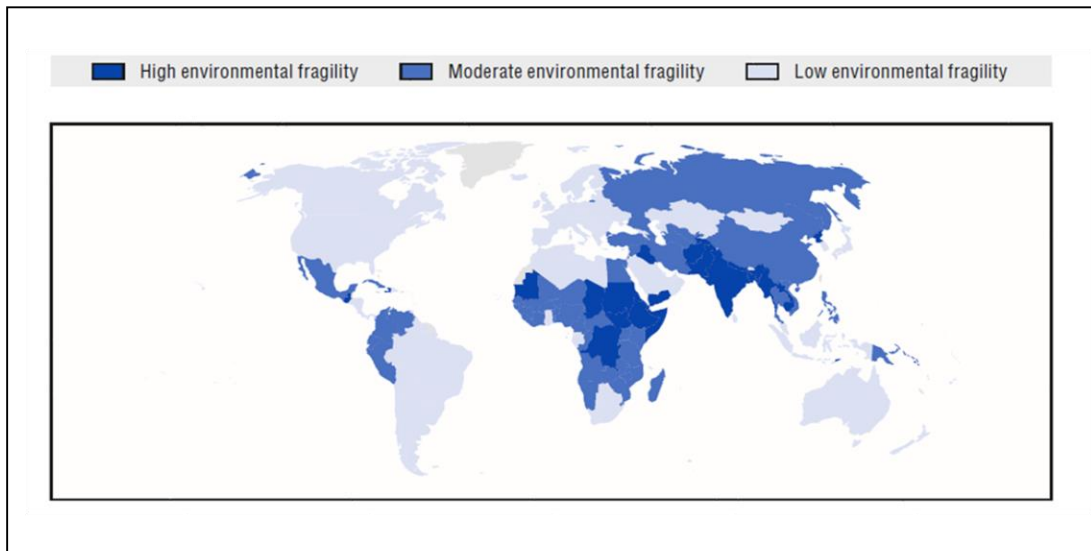
76. The Impact Program will focus on four kinds of interventions:

- (a) Identifying and monitoring global environmental fragility,
- (b) Protecting the environmental assets from potential harm,
- (c) Restoring the asset from impacts suffered during conflict,
- (d) Mainstreaming Resilience Systems Thinking across GEF investments.

77. One essential challenge will be rebuilding institutions and governance to maintain the global environmental benefit over time. The on-going peacebuilding process in Colombia offers an excellent example of different potential entry points for GEF projects that could both protect global environmental benefits and contribute to local environmental peacebuilding.

78. The Impact Program will focus on areas where the protection or restoration of global environmental benefits in fragile and conflict affected countries could also provide co-benefits that could support localized environmental peacebuilding and reduce fragility (potential source for country selection is seen in Figure 2.3.). This would either entail using shared interests in natural resources as an incentive for cooperation across lines of division, or securing immediate livelihood benefits that provide visible peace dividends and build local confidence in the peace process. Priority would also be given where projects could support the reintegration of ex-combatants, could support the return of displaced people, or could empower women through improved access to decision making and benefits sharing. GEF funds could be leveraged with peacebuilding funds in order to achieve the goals of the respective funding streams. In this regard, GEF could invest in four major work streams:

Figure 2.3. Environmental Dimensions of Fragility



Source: OECD (2016)

79. Focus countries will need to be carefully selected during the development of the IP and in consultation with partners and countries. An initial target of 4 – 6 countries could be a minimum and realistic initial set of countries for engagement in GEF 7.¹⁰ Criteria for country selection based on the opportunity for meaningful interventions and impact are to be developed in consultation with existing partners active in fragile countries.¹¹

80. Because of the growing importance of systems thinking in GEF programming, there is a clear need to institutionalize resilience as a cross-cutting priority. This will also contribute to the strengthening of environmental security in fragile and conflict-affected countries as well as many other GEF-eligible countries. Doing so will require the early-stage application of resilience frameworks or methodological tools, either existing (e.g.,

¹⁰ IP candidates/post-conflict countries will be considered based on being: among the list of g7+ group of “fragile states,” or among “‘very high’ or ‘high alert’ countries” according to the 2016 OECD Multidimensional Fragility Framework.

¹¹ Criteria to be developed

the RAPTA¹² framework, the resilience principles¹³), or adapted, or some other approved methodology that can be broadly applied. The proposed IPs for GEF-7 present a timely opportunity for advancing this in a consistent manner to further advance opportunities for learning.

Potential Partners and existing platforms

81. Impact Program support in fragile states and post-conflict countries is aimed to both prevent future potential conflicts as well as rebuild and restore environmental assets as part of the post-conflict development investments. This could be a powerful innovation as traditionally this work has been done in sequence instead of an integrated effort in conflict prevention and response and moving both fragile areas and recipient communities from a state of fragility to resilience. The Partnership Council of the Global Resilience Partnership, an initiative of USAID, SIDA and the Rockefeller Foundation, which has a broader coverage of systems for advance resilience will also be a potential platform to advance resilience thinking.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

82. UNCCD is addressing land security has a clear focus on fragility, e.g. within the '3 S' Initiative on Sustainability, Stability and Security in Africa. Environmental and Water Security are also prioritized in most INDCs and NBSAPs. The IP will contribute to the achievement of Aichi Target 14. The IP will also contribute to the implementation of Stockholm Convention on POPs and the Minamata Convention on Mercury.

¹² See more on the RAPTA framework at: <http://www.stapgef.org/the-resilience-adaptation-and-transformation-assessment-framework>

¹³ See the 7 Principles of Resilience here: <http://www.stockholmresilience.org/download/18.10119fc11455d3c557d6928/1459560241272/SRC+Applying+Resilience+final.pdf>

Healthy Oceans for Sustainable Fisheries Impact Program

Introduction

83. 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 ecosystems. Marine, open-ocean and coastal ecosystems health are fundamental to life on earth, providing critical ecosystem services for billions of people (as captured by SDG14). Moreover, healthy oceans are critical to restoring and maintaining robust, resilient, and sustainable fisheries on which both economic and social well-being depend on. However, oceans and fisheries lack sustainable governance resulting in continued degradation due to over- and destructive fishing, habitat loss and pollution compounded by climate change. GEF-7 will address the major stressors facing these valuable transboundary ecosystems by building on and furthering national implementation of identified stressors in transboundary Large Marine Ecosystems (LME) Strategic Action Programs (SAP) and in Areas Beyond National Jurisdiction (ABNJ) to ensure that fisheries, and other ecosystem services derived from healthy oceans, are restored and sustained in the future.

GEF 7 Impact Program

84. To further long-term sustainability of fisheries it is imperative to ensure the health and resilience of key habitats through improved governance. Well-functioning, transboundary, ocean governance mechanisms are crucial to avoid falling victim to the tragedy of the commons and to enable countries achieving long-term benefits and services from their ocean ecosystem and the resources within them. This Impact Program will focus on restoring and sustaining key fisheries by improving the health of key ocean and coastal ecosystems on which fisheries depend, as well as fostering policy and governance reform in the fisheries sector which should form the basis for better sustainability of this economic sector.

Healthy Oceans:

85. The sustainability of capture and aquaculture marine fisheries is ultimately linked to the ecosystems that sustain fisheries. Therefore, improved governance mechanisms need to be put in place to facilitate pollution reduction, restoration and conservation of habitats, that function as critical nursery and breeding grounds for many fish and crustacean species. In GEF 7, investments will be implemented within the framework of

the regionally agreed SAPs, ensuring they support existing commitments and country priorities.

86. Restoring degraded coastal ecosystems through increased marine protection coverage is an essential activity towards increasing marine ecosystem resilience, productivity and sustainable fisheries. Marine protected areas (MPAs) are areas of the oceans that are protected for a conservation or cultural purpose by local, national, native and regional authorities and differ substantially among nations. GEF support will contribute to the achievement of Aichi Target 11/SDG 14 to conserve 17% of terrestrial and inland water, and 10% of coastal and marine areas. However, new protected areas established with GEF support must be globally significant, as defined by the Key Biodiversity Area (KBA) Standard, in LMEs and ABNJs. GEF will support efforts to address the marine ecosystem coverage gap within national level systems, as identified in regional LME SAPs, through the creation and effective ecosystem based management of coastal and near shore protected area networks, including no-take zones, to conserve and sustainably use marine biodiversity. In addition, support will be provided for the effective management of these new areas, as well as existing MPAs that are globally significant.

87. Scaling-up conservation of critical habitats such as coral reefs, mangroves, saltmarshes and sea grasses are key to nurturing strong fisheries. These critical habitats cover a very small area of the coastal and ocean floor, but are essential in sustaining fisheries, promoting tourism, ensuring coastal protection, providing carbon sequestration, and other benefits. The GEF will continue to be invest in lowering the local, national and regional pressures on these fragile ecosystems, including supporting restoration, in SIDS and coastal nations.

88. Catalyze investment, policy reforms, public-private partnership to reduce land-based pollution. One of the most alarming signs of the negative effects of land-based sources of pollution on marine environments is the rising number of 'dead zones' occurring throughout the world's oceans. These dead zones have detrimental effects on the marine ecosystems resilience and health which in turn directly effects fisheries at multiple levels. The number of dead zones has doubled in each of the last four decades: approximately 500 dead zones have been officially identified (STAP, 2011) and this number is expected to rise. GEF will catalyze investment, policy reforms, public-private partnership to reduce land-based pollution, through supporting efforts targeted at prevention, reduction, and control of coastal point and non-point pollution caused by land-based activities along the coasts of the world's LMEs. The linkages between LMEs, deltas and river basins will be addressed, along the source to sea continuum through the

TDA/SAP process and implementation. Targeted activities dealing with plastic marine debris will be undertaken in coordination with the IP on Circular Economy.

Sustainable Fisheries and Aquaculture:

89. Fisheries provide food and nutrition to billions of people around the world. Sustainable fisheries depend on healthy oceans. They are also a significant provider of income, livelihoods and economic development. Unsustainable fishing practices is further compounded by high levels of illegal, underreported and unregulated fishing leading to massive economic losses. Ensuring adequate sustainably harvested seafood requires addressing marine capture fisheries as well as aquaculture practices with an emphasis on working with the breadth of stakeholders along the entire value chain, incorporating gender issues and including the private and public sectors. Given the migratory nature of some fish populations, marine capture fisheries in many instances requires to be dealt with through a regionally coordinated transboundary approach.

90. Marine and freshwater aquaculture combined, now provide half of all fish for human consumption demonstrating the need for measures to ensure the long-term sustainability of this industry that are forecasted to double over the next 15 years. This growing industry has significant environmental challenges, including eutrophication and hypoxia associated with wastewater discharge, the spread of disease and parasites, the introduction of invasive species, overuse of antibiotics to control disease, and promotion of over-fishing of feed fish and destruction of habitat to create aquaculture pens. Hence, there is an immediate need to limit the impact of marine aquaculture on the environment and the natural existing fisheries.

91. The program will catalyze sustainable governance of marine capture fisheries to end IUU and overfishing through financing marine fisheries governance through implementation of priorities identified in ABNJ and the LME SAPs. Initiatives, will support shared fisheries by supporting existing governance goals and targets established through Regional Fisheries Management Organizations (RFMO), Port State Measures Agreement (PSMA) and Voluntary Small-Scale Fisheries Guidelines (VSSFSG). Improving governance of capture marine fisheries, will also include promoting technology to support monitoring, compliance, surveillance, and efforts to end perverse incentive structures and subsidies in fisheries.

92. Finally, the program will stimulate investment in sustainable marine aquaculture to improve ecosystem health and food security, through the establishment of a multi-stakeholder platform to engage technology providers along with national and global

supply chain actors, including financial institutions and regulatory agencies, to foster sustainable aquaculture practices to prepare the aquaculture industry for stepping up production over the coming decades while lowering environmental impact.

Existing Platforms and Potential Partners

93. To achieve transformative and sustainable results ocean governance investments need to apply an integrated cross-sectorial approach, with a strong focus towards incorporating key private sector actors, non-governmental organizations and multilateral global and regional institutions. There are a range of existing and emerging networks from local to multinational, that may engage in this Impact Program.

Global Benefits and Links to Multilateral Environmental Agreements

94. Both UNFCCC and CBD have recognized the pivotal role that Healthy Oceans and Coastal Ecosystems play for delivering a multitude of ecosystems services. Notably, 44 SIDS and a total of 2/3 of all the INDCs submitted in relation to the Paris Agreement refer to oceans, many emphasizing Blue Economy opportunities. Furthermore, the IP will be assisting countries in delivering towards a number of the Aichi targets, such as 5, 6, 8, 9, 10, 11 and 14. The IP will assist countries to move from commitment to action implementing the Code of Conduct for Responsible Fisheries, VSSFG, support the 2009 PSMA and support countries in following UNCLOS guidance to conserve marine resources.

Natural Capital Impact Program

Introduction

95. The Millennium Ecosystem Assessment and The Economics of Ecosystems and Biodiversity (TEEB) global initiative demonstrated that biodiversity underpins the ecosystem goods and services that are required for the survival of human societies and for the future of all life on the planet. Biodiversity generates considerable economic value through the provision of goods such as food, water, and materials, and services such as climate regulation, pollination, disaster protection, and nutrient cycling.¹⁴ Both of these efforts were significant intellectual steps to make the “value” of nature (however that value may be defined) more visible, accountable, and measurable. Other related efforts to internalise environmental externalities into economic and development decision-making include the European Union’s “Beyond GDP” initiative and the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz-Sen-Fitoussi Commission). As part of this evolution of thinking about the value of nature to society and its essential contribution to sustainable development, the term “natural capital” was coined to define the *stock* of renewable and non-renewable resources, including biodiversity, (e.g. plants, animals, air, water, soils, and minerals) that combine to yield a *flow* of benefits (ecosystem goods and services) to people and society. Although a number of approaches are currently being used to recognize, measure, and account for natural capital and demonstrate its values, these exercises have too rarely influenced decision making and policy instruments to mitigate the drivers of natural capital degradation and biodiversity loss while enhancing finance for management of natural capital and biodiversity.

GEF-7 Impact Program

96. In order to bridge this gap, the GEF developed Program 10 in the GEF-6 biodiversity strategy (“Integration of Biodiversity and Ecosystem Services into Development and Finance Planning”) to support implementation of national-level interventions that aspire to integrate the value of biodiversity and ecosystem services into economic development policy and finance planning.

¹⁴ 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*.

97. In GEF-7, this program will be continued but with a revised approach which reflects advances in the practice of natural capital accounting as well as experiences of other organizations. GEF's Natural Capital Impact Program (NCIP) will be implemented amidst the backdrop of recent progress made with the United Nations System of Environmental-Economic Accounting (SEEA).¹⁵

98. The Program would prioritize working with countries where a baseline capacity has been built thus increasing likelihood of successful uptake and application. Countries that demonstrate the following would be considered ready to engage in the Program: 1) Statistical system and basic capacity in place with a system of national accounts; 2) Data for developing ecosystem accounts including science-based biophysical spatial information systems is available nationally or internationally or can be generated relatively easily; 3) Commitment to maintain and use the new accounts developed and institutionalize Natural Capital Accounting; and 4) Countries in which natural resources and biodiversity play an important, albeit often invisible, role in economic development and human welfare, thus incentivizing application of Natural Capital Accounting (NCA).

Objectives, Key Interventions, and Targets

99. The objective of the Natural Capital Program is to build the capacity of countries to measure and account for natural capital, including biodiversity, demonstrate its value, and integrate this value into decision making and policy instruments in order to mitigate or eliminate harmful incentives leading to the degradation of natural capital and enhance financing for sustainable management of natural capital. The NCIP aims to work in 25 countries during GEF-7 that meet the criteria above and will exploit opportunities to work with countries already engaged in relevant initiatives such as World Bank/WAVES, UNDP/BIOFIN, the Natural Capital Project etc. The program envisions a three-phase process as depicted in Table 2.6 below, which is indicative and will be tailored to country circumstances and existing capacities.

¹⁵ UN-SEEA contains the internationally agreed standard concepts, definitions, classifications, accounting rules and tables for producing internationally comparable statistics on the environment and its relationship with the economy. The SEEA framework follows an accounting structure equivalent to the traditional System of National Accounts (SNA) and uses concepts, definitions and classifications consistent with the SNA in order to facilitate the integration of environmental and economic statistics.

Table 2.6. Phased Implementation of Natural Capital Impact Program

Phase I: Natural Capital Accounting baseline diagnosis	<p>Review of Natural Capital-related legal, policy, and institutional framework to identify gaps and capacity needs.</p> <p>Review of expenditures on Natural Capital management building on the SEEA Central Framework's Environmental Protection Expenditure Accounts</p> <p>Assessment of finance needs for sustainable natural capital management and of appropriate finance solutions.</p>
Phase II: Natural Capital Accounting	<p>Bio-physical measurement (and where possible monetary valuation of) Natural Capital stocks and flows as per the SEEA Central Framework, Applications and Extensions and Experimental Ecosystem Accounts.</p>
Phase III: Institutional development and policy process for Natural Capital Accounting	<p>Establish the institutional framework and identify the steps for Natural Capital Accounting processes and statistics (Natural Capital Accounts) to be translated into information that can be considered in decision-making</p> <p>Identify specific policy issues to be addressed</p> <p>Extract key policy-relevant information, parameters, recommendations and arguments and identify what phase in the policy cycle NCA-based inputs can serve</p> <p>Undertake targeted advocacy to key supporters and audiences</p>

100. The Natural Capital Impact Program will deliver the following results within each participating country as depicted in Table 2.7 below.

Table 2.7. Results Delivered by the Natural Capital Impact Program

Short-term results	Medium-term results	Long-term results
Natural Capital Accounts established and collected on an annual basis and Natural Capital Accounting institutionalized.	Natural Capital harmful incentives identified, and removed/reduced.	Improved management of existing Natural Capital and restoration of degraded Natural Capital.
Natural Capital internalized in economic measurement and policy and development decision-making and investment, i.e. mainstreaming of Natural Capital in decision and policy-making on natural resources, including biodiversity, and development	Enhanced revenue generation and budget allocations for Natural Capital management, including biodiversity, and better delivery of existing resources.	

101. While the Natural Capital Impact Program is aimed at building national capacity for countries to undertake Natural Capital Accounting, the program will be implemented within a global context where businesses are increasingly recognizing that by including natural capital in their decisions, they can create greater value for themselves and protect the natural capital that they depend upon. For example, the Natural Capital Coalition and its members are using the Natural Capital Protocol to aid businesses in incorporating the assessment and valuation of natural capital in decision-making. The implementation of NCA processes under this program will aim to facilitate a dialogue between the public and private sector at the national level in order to create greater certainty for the private sector with regards to their operations and investment plans vis a vis natural capital. In this way, private sector interests can provide added impetus to governments to use NCA information in development planning and policy making while bringing needed durability to government-lead NCA approaches due to the long-term perspectives of business interests. In addition, NCA undertaken at national level will provide the opportunity to share best practice and information between the public and private sector and their approaches to natural capital accounting and valuation, and could, among other things, help streamline the process of using business statistics in the production of national statistics, reduce the reporting burden for businesses by aligning national business surveys with corporate reporting, and facilitate business reporting on contributions to the Sustainable Development Goals.

102. It would be expected that for many GEF investments, given the adoption of SEEA as the way forward to integrate environmental parameters into the measurement of national economic performance, that the UN Statistical Division would be a key partner in numerous initiatives of the Natural Capital Impact Program.

Existing Platforms and Potential Partners

103. The Natural Capital Impact Program will also include a global platform for capacity building and South-to-South technical exchanges among participating countries and would also enable structured engagement and ongoing outreach with other key global programs and partnerships such as WAVES, BIOFIN, Natural Capital Project, TEEB, and the Natural Capital Coalition to complement the national level coordination and collaboration envisioned as part of the program implementation strategy.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

104. The results of this program are essential for the long-term and sustained delivery of Global Environmental Benefits across the CBD, the UNCCD, and the UNFCCC, and in particular, in particular, Aichi Biodiversity Target 2. The fundamental transformation of economic policy and decision-making that applied natural capital accounting and valuation enables will facilitate the achievement of Sustainable Development Goals (SDGs) 14 and 15. The implementation of Natural Capital Accounting will generate global environmental benefits that will be measured by the area of globally significant habitat maintained, as measured in hectares, sustainably managed, conserved or restored as well as the tons of CO₂e mitigated.

Green Finance Impact Program

Introduction

105. Green finance is a broad topic that fosters strategic approaches to engage the financial sector in the transformation process towards low-carbon and sustainable economies, in the context of global financial system, national financial systems, financial institutions, and financial instruments (e.g., green bonds, blue bonds)¹⁶. Green finance seeks to support economic growth through policies and practices that internalize environmental externalities, thus encouraging markets to redirect investment flows from unsustainable and harmful investments to sustainable and environmentally beneficial investments.

106. Currently less than 1% of global bonds are categorized as green and less than 1% of holdings by global institutional investors are green assets. Only 5-10% of bank loans are green in those few countries where national definitions of green loans are available. The potential for scaling up green finance hence is significant. Green finance may provide growth opportunities while delivering environmental benefits, including by supporting high-potential green industries, technological innovation and business opportunities for the financial sector.¹⁷

107. Most of the investments that have been categorized as “green” are climate friendly, but only few sustainability criteria in areas beyond climate change have been applied so far. Innovative green finance such as blue bonds, forest bonds, conservation finance, new security regulations and corporate governance structures need to be validated and expanded.

108. There is also an inadequate recognition of the potentially significant financial risks of investment decisions where environmental factors have not been incorporated sufficiently, creating challenges for long-term financial stability and safety of financial institutions. Environmental risks have recently been reaching new scales and likelihoods of occurrence, however, this has not been adequately reflected in the financial system.

¹⁶ Drawn from G20 Green Finance Study Group. *Definitions and Concepts*, September 5, 2016.

¹⁷ G20 Green Finance Study Group, *Synthesis Report*, September 5, 2016.

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109. Harnessing the financial system is a pre-requisite to delivering the SDGs in a transition to a low-carbon, climate-resilient, biodiversity-friendly and land degradation neutral economy. The UN Environment's Inquiry on the *Design of a Sustainable Financial System*¹⁸ concluded that transformation requires a more systemic approach to scaling up ambitious national roadmaps, and ways to leverage these initiatives at the international level. The report also points to the opportunity afforded by disruptive innovations. The GEF is uniquely positioned to support initiatives that connect financial system reform with the broader environmental agenda, including climate, biodiversity, land degradation, international waters and chemicals and waste. GEF support for green finance can be critical to encourage international collaboration and cross-country learning as a pre-requisite for scaled-up impacts.

Objectives, Key Interventions and Targets

110. The GEF's intervention will build on existing platforms to foster and strengthen national-level support. The GEF will also support complementary activities for global support and innovating conservation finance.

111. National-level support. The UNEP Finance Initiative (FI) and Inquiry on the Design of a Sustainable Financial System, provide a sound foundation for partnership development and identification of priority financial and regulatory systems for reform. The GEF Green Finance program would fast-track initial implementation in UNEP Inquiry pilot countries, including Mongolia, Kazakhstan, Kenya, Nigeria, India, Argentina and Morocco. Other countries would then be added over time for maximum impact. The GEF will inform country recipients about innovations in green finance, tailor global financial innovation to local needs, and support fast-tracked implementation of country roadmaps. The GEF will also foster the broader adoption of national green finance instruments and support enhanced alignment of national financial regulation with environmental sustainability consideration. National green finance institutions and green banks would be supported, where appropriate, while ensuring that existing players and finance are not displaced/crowded out.

¹⁸ UN Environment. *The Financial System We Need: Momentum to Transformation*. Report launched at IMF/World Bank Annual Meetings in October 2016.

112. Global support. GEF will promote coordination and collaboration at the international level, including through North-South and South-South learning and sharing of best/good practices and approaches, and build or strengthen coalitions of impact investors and private sector partners to accelerate efforts in specific sectors, as appropriate. GEF will provide support for open-access and standardized systems for companies to report on environmental, climate and sustainability performance, enabling sustainability benchmarking.

113. Innovating conservation finance. Private sector investment in conservation is significant and growing, but still far lower than what is needed. The GEF will support sharing green finance ideas between sectors to promote replication and support the development, testing and validating of innovative conservation finance products. This includes demonstration of business models to capitalize and capture the value of natural assets. Through coalitions, the GEF will support translating innovative ideas into templates for project design, and enhance demand for and support conservation finance project pipeline development.

Integration across Impact Programs and focal areas

114. Principles of green finance are imbedded in all of the impact programs, as we seek to internalize externalities and foster greater private sector investment across the GEF's full portfolio. Lessons learned from each impact program will also add value to this program, for example, through the transfer of experience in climate change-related green finance toward areas such as land, forests, agriculture, and oceans.

Existing Platforms and Potential Partners

115. This program will coordinate and exchange lessons with existing and emerging initiatives in the area of green and conservation finance such as the Coalition for Private Investment in Conservation (CPIC), the Sustainable Forestry Initiative (SFI), the Sustainable Banking Network (SBN) and the Equator Principles, and the Global Sustainable Investment Alliance (GSIA). It would also build on recent needs assessments such as the State of Private Investment in Conservation by Forest Trends. The GEF can use its convening power to bring together a broad range of actors across non-governmental, governmental and private sectors to promote the adoption of green and sustainable principles in finance across thematic areas and GEF focal areas.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

116. Green finance entails multiple global environmental benefits that include reduced air, water and land pollution, GHG emission reductions, efficient utilization of natural resources and enhanced biodiversity conservation. Eighty-seven (61%) of GEF-eligible countries identified the need for innovative financing options, including green financing and non-grant instruments, in their submissions to the conventions¹⁹. The GEF is uniquely positioned to support financial sector reform and green finance in an integrated fashion, by ensuring that environmental and sustainable development considerations across MEAs and SDGs are appropriately reflected when designing national initiatives and when supporting international learning and cross-fertilization between countries and sectors.

¹⁹ GEF analysis of UNFCCC INDCs and UNCBD NBSAPS, 2017.

Green Infrastructure Impact Program

Introduction

117. The world is expected to invest around \$90 trillion in infrastructure over the next 15 years, more than our entire current inventory today²⁰. This will require a significant increase in investment globally, from the estimated \$3.4 trillion per year currently to about \$6 trillion per year²¹. These investments are needed to replace or retrofit aging infrastructure in advanced economies and to accommodate higher growth and rapid urbanization in developing countries, which will account for over two-thirds of global infrastructure investment.

118. Under business as usual, infrastructure planning will not include low-carbon or sustainability design principles, resulting in increased emissions, lock-in of "grey" infrastructure, and further disruption to integrated landscape planning and contiguous ecosystems protection. Instead, to meet our infrastructure challenges in a sustainable manner will require the world to rethink how to select, design, deliver and manage infrastructure investment. For example, in the Amazon Basin, infrastructure development is one of the primary drivers for land conversion and deforestation, leading to conflicts with indigenous peoples and biodiversity loss. With the support of the Moore Foundation, major NGOs are working to identify principles and interventions to advance conservation and human rights in areas such as roads, waterways, ports, mining, resource extraction, and hydropower.

119. The GEF approach is to build a broad coalition of public and private partners willing to work together to go beyond project by project engagement and enable pro-active advanced sustainability planning for major infrastructure. This will result in accelerated investment flows to sustainable infrastructure and natural infrastructure accompanied by reductions in investments for high-carbon and unsustainable infrastructure.

GEF-7 Impact Program

120. The GEF is uniquely positioned to work with National governments, the multi-lateral development banks, the private sector and other stakeholders to create an enabling environment conducive to increased domestic and international investments for

²⁰ The New Climate Economy Report: *The Sustainable Infrastructure Report*. Oct. 2016

²¹ Ibid.

green and sustainable infrastructure, and to foster techniques, criteria, and tools that go beyond safeguards for green infrastructure investments. Priority regions will include areas expected to see significant infrastructure development in the next decade and where globally significant land and biodiversity may be adversely impacted.

121. A comprehensive definition of infrastructure includes both traditional types of infrastructure (everything from energy to public transport, buildings, water supply and sanitation) and, critically, also natural infrastructure (such as forest landscapes, wetlands and watershed protection). Green infrastructure considers the complex interactions between human settlements and natural habitats in selecting, designing, delivering and managing infrastructure investment. When investing in housing, mobility, or energy projects, for example, a broader landscape consideration, including surface water, flood management, biodiversity, and food production, should be incorporated into the planning process.

122. In this context, green infrastructure investment can both mitigate GHG emissions and support adaptation to climate change while protecting natural resources.²²

123. The GEF has identified key interventions and coalition building that can influence large-scale planned infrastructure projects. The major focus of the impact program will be to convene and support coalitions willing to foster innovative and integral solutions for green infrastructure investment; support country efforts to build capacity and enabling environments; and work with private sector and other investors to make sustainability practices the new normal.

Objectives, Key Interventions, and Targets

124. In launching this impact program, the GEF will build on existing partner efforts and specifically enlist the large institutions responsible for infrastructure investment. Interventions will deliver at the global, regional, and country level. Proposed interventions include:

- (a) *Convene coalitions of interested institutions and private sector partners* willing to make a commitment to sustainability planning and investment to help countries achieve their MEA objectives. Several global scale initiatives in Asia, Latin America, and Africa would shape the membership of stakeholders for these

²² OECD Environment Working Papers No. 48

coalitions. GEF will use its convening authority and its strong partnership network to strengthen existing coalitions and build new ones. Private sector engagement in the coalitions will be critical, along with institutional investors, standards and rating organizations. Stakeholders and NGOs with expertise in protecting natural resources through land-use and sustainability planning will be included.

- (b) *Build country capacity for regulatory engagement* (e.g., environmental, planning ministries), procurement and tender guidelines. Countries must have expanded capacity, training, and expertise to deal with the wave of infrastructure spending coming their direction.²³ The GEF will support specific country projects, guided by global coordination and best practices, with a specific focus on countries facing globally significant impact. Regional hubs of best practice will also be considered.
- (c) *Engage with large private sector infrastructure developers* that are already leaders in sustainability planning to further accelerate adoption and buy-in. Leading developers want to break the cycle that mires projects in permitting delays and potentially expensive mitigation costs by building sustainability design criteria (e.g., water catchment management, mercury and POPs free material and equipment) into project design. Long-term planning can also foster greater use of offsets which can be net-positive for ecosystems protection.
- (d) *Build and advance tools for methodologies, benefits estimation, tracking, and reporting.* The coalition of willing partners will work on both voluntary and regulatory standards, backstopped by stakeholder consultations and strong analysis.

Integration across other Impact Programs and focal areas

125. The GEF Green Infrastructure Impact Program will integrate strategic concepts and selection criteria from all GEF-7 Impact Programs and focal areas to ensure that sustainability criteria, tools, and methodologies will address these concerns. The coalition building of investors, institutions, private sector, NGOs and civil society will ensure broad spectrum representation to ensure all MEAs are addressed.

²³ Body of Knowledge on Infrastructure Regulation (BOKIR), University of Florida Public Utility Research Center, <http://regulationbodyofknowledge.org/overview/>

Existing Platforms and Potential Partners

126. Several on-going efforts and partners can provide a foundation for GEF intervention. UN Environment is supporting efforts to green regional infrastructure initiatives. Groups such as WWF and the Nature Conservancy are supporting sustainability planning with leading private sector developers. The World Bank and other multi-lateral development banks have launched the Global Infrastructure Facility to foster collaboration on projects that sustainably meet the needs of governments. GEF will work with these partners and other regional initiatives or institutions to accelerate the use of sustainability planning for infrastructure and generate global environmental benefits.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

127. Reframing infrastructure development to foster pro-active sustainability planning will be crucial to safeguarding the global environment. With this impact program, there will be multiple opportunities to deliver benefits for biodiversity, climate change, land, chemicals and waste, international waters, as well as support the SDGs.

Agricultural Commodities Supply Chains Impact Program

Introduction

128. Global demand for agricultural commodities is a major driver of deforestation in tropical countries, where its expansion has often occurred at the expense of intact rainforests or other natural vegetation (Henders, 2015)²⁴. These tropical countries are concentrated in Latin America and Asia, with a small number in Africa, and many overlap with deforestation hotspots. Livestock is the single largest driver of deforestation, with soy and palm oil the two most exported commodities. To a lesser degree, commodities such as rubber, sugar, cocoa and coffee also pose a risk for forests (Climate Focus, 2016)²⁵. Without transformation, rapid growth of commodity production will continue to have significant negative impact on land and forests.

129. Because tropical forests may support as much as 70% of the planet's plant and animal species, their destruction represents the greatest single threat to global biodiversity. For example, a mean of only 15% of species found in primary forest in Indonesia and Malaysia was also found in oil palm plantations (Fitzherbert, 2008)²⁶. Conversion of natural forests for commodities also increases habitat fragmentation, and monoculture plantations can create barriers to species' migration and result in greater susceptibility to plant diseases (UNEP, 2011)²⁷.

130. In addition to species and habitat loss, about 15% of global greenhouse gas emissions is estimated to derive from agriculture-driven deforestation (Boucher, 2011)²⁸. However, agricultural commodities are a key element of economic growth in rural areas of many developing countries, accounting for as much as 10% of gross domestic product. Thus, a balance must be struck.

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²⁴ Henders, S., Persson, M., & Kastner T. 2015. Environmental Research Letters. Vol 10.

²⁵ Climate Focus. 2016. Prepared by Climate Focus in cooperation with the NYDF Assessment Coalition with support from the Climate and Land Use Alliance and the Tropical Forest Alliance 2020.

²⁶ Fitzherbert E.B., et al. 2008. Trends in Ecology and Evolution 23(10): 539-545

²⁷ https://na.unep.net/geas/getUNEPPageWithArticleIDScript.php?article_id=73

²⁸ Boucher, et al. 2011. *Root of the Problem: What's Driving Tropical Deforestation Today?* Union of Concerned Scientists.

131. GEF-6 saw the development of an integrated approach pilot (IAP) program on “Taking Deforestation out of Commodity Supply Chains” that focuses specifically on beef in Paraguay, oil palm in Indonesia and Liberia, and soy in Brazil. The integrated approach employed in this program harnesses connectedness along the supply chain between production and processing and those actors at the interface of demand and financing for key commodities. Success of this approach necessitates a shifting of the entire supply chain toward sustainability, with producers, sellers, and buyers embracing deforestation-free commodities as a major part of their business model. The strategic architecture developed for the Commodities IAP took form through expert consultation and will continue to serve as a basis for the development of the GEF 7 Agricultural Supply Chains Commodities Impact Program.

132. By expanding engagement with global and national supply chain actors, including smallholders, private sector producers, buyers and retailers, and financing institutions, the proposed Impact Program will further stimulate production and market demand for deforestation-free commodities. The growth of collective action toward zero deforestation commodities is tangibly represented by the 2014 New York Declaration on Forests (NYDF) between governments, businesses, and civil society. To date, the NYDF has led to more than 400 companies pledging to reduce their impacts on forests and the rights of forest communities. A window of opportunity therefore now exists to assist companies in operationalizing these commitments on the ground by working in leading producer countries to develop platforms to convene actors, providing guidance to reduce producers’ deforesting, supporting smallholder farmers, and engaging with financing institutions. Within target countries, GEF will prioritize support for promising jurisdictional approaches to reduce deforestation so as to match buyer requirements for deforestation free sourcing at a sufficiently large scale. The viability of creating a platform through which key actors from jurisdictions demonstrating progress in carrying out this approach can exchange lessons and experiences across countries and commodities will also be explored.

GEF-7 Impact Program Key Interventions and Targets

133. Building on the GEF 6 Commodities IAP framework, the proposed Implementation Program will expand its catalytic role on taking deforestation out of commodity supply chains in two ways: 1) Deepening engagement on commodities supply chains in existing and new geographies; and 2) Broadening focus to include additional commodities associated with tropical deforestation.

Deepening engagement on commodities supply chains in existing and new geographies

134. The GEF has established a strong foundation of critical assistance for countries to achieve a shift toward deforestation-free production and supply of the globally important beef, oil palm and soy commodities supply chains. As threats to forests posed by these commodities are more significant than any one four-year Program can address, national and global interventions with producers, suppliers, and financiers who are key parts of the commodities supply chain will be extended and expanded in the GEF 7 Impact Program. Considerations will also be placed on addressing specific gender dimensions in the value chains drawing on work commenced in the GEF 6 Commodities IAP. These will help ensure that interventions improve women's participation and benefits across different stages and levels of the value chain. New geographies will be added to address deforestation from palm, beef, soy, with a particular emphasis on palm in emerging producing countries and on beef. Countries where production is still nascent but has the potential to place forests at threat are also targets for support.

Focusing on additional commodities associated with tropical deforestation

135. The Impact Program will apply a programmatic approach to additional commodities driving deforestation, specifically coffee and cocoa. While there are many initiatives underway dealing with sustainability for cocoa and coffee, these efforts are largely fragmented. The integrated approach framework will harness these efforts and consolidate gains made on improving production and reducing negative externalities. A flexible response mechanism will also allow countries that are not significant producers of target commodities to propose others that are linked to deforestation at a national level.

136. Selected areas for implementation will be prioritized based on criteria including: i) where significant deforestation rates of biodiversity important forests²⁹ is driven predominantly by target commodities; ii) where governments demonstrate commitment to deforestation free commodities, willingness to establish national commodity platforms, and work with private sector; and iii) Global industry commitment and support of GEF intervention in country. Special emphasis will be placed on multi commodity

²⁹ Per CI Biodiversity Hotspots, Wilderness Areas, or justified through identification as High Conservation Value Forest classification.

countries or clusters of countries around a single commodity. An initial list of target countries can be found in Table 2.8 below.

Table 2.8. Target Countries for Implementation of the Commodities Impact Program

Country/Region	Scale of intervention	Multi/Commodity	Private Sector Commitment	CI BD Hotspot
Amazon – Brazil, Colombia, Peru, Ecuador	Large	B, PO (Peru, Ecuador, Colombia), Soy, Cof, Coc	Brazil & Colombia	No
C. America- Guatemala, Honduras, Costa Rica	Large	B, PO (Guatemala, Honduras), Cof,	Honduras (Walmart)	Yes
West & Central Africa – Ivory Coast, Ghana, Liberia, Sierra Leone	Medium (Coc), Small (PO)	PO, Coc (Ivory Coast, Ghana)	Yes (TFA/WEF for PO, WCF for Coc)	Yes (Ivory coast and Ghana)
Indonesia	Large	PO, Cof, Coc	Yes	Yes
Papua New Guinea	TBD	PO		No
Cerrado – Brazil	Large	Soy	Yes	Yes
Uruguay	Small	Soy		No
Argentina	Small	Soy		No
Chaco- Paraguay	Large	B, Soy	Yes	No
Vietnam	TBD	Cof		Yes
Ethiopia	TBD	Cof		Yes
Uganda	TBD	Cof		Yes

B=Beef, PO=Palm Oil, Coc=Cocoa, Cof=Coffee

137. Consideration for engagement will also be given to major consumer countries such as China, which can play a significant role in shifting the supply chain toward deforestation-free sourcing. Positive movement in this direction was made at COP 21, where the Chairman of COFCO, one of the largest Chinese agribusiness corporations, committed to improving the sustainability of its global supply chains, including steps to not source from deforested lands. This momentum will be built upon as part of the proposed IP.

138. Financial incentives will also be utilized to address the market drivers of deforestation. Fiscal instruments (e.g. concessional finance, guarantees, first loss guarantees) will be used as an incentive to de-risk private sector investment into new sustainable practices in their supply chains, and to encourage their embracing of conservation commitments.

Existing Platforms and Potential Partners

139. The proposed Impact Program will seek partnerships with global platforms to support Deforestation Free Commodities commitments. Among the most promising of these include: Consumer Goods Forum; Tropical Forest Alliance 2020; Norway's International Climate and Forest Initiative (NICFI); IDH Sustainable Trade Initiative; Commitment tracking initiatives like Forest Trends Supply Change and the Global Canopy Program; the company-led Global Agri-business Alliance; the newly announced Tropical Forest and Agriculture Fund; World Cocoa Foundation; International Coffee Organization; and the Stockholm Environment Institutes' Transformative Transparency traceability platform.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

140. The Agricultural Commodities Supply Chain Impact Program will generate global environmental benefits including climate change mitigation and biodiversity. The program will support decision X/2, Aichi Biodiversity Target 5 – By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced; and Target 7 – By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. The Impact Program is also fully aligned with the global climate agreement's Decision 15/CP.19 that "encourages Parties, organizations and the private sector to take action to reduce the drivers of deforestation and forest degradation."

Amazon Sustainable Landscapes Impact Program

Introduction

141. South America is home to several sensitive biomes, most notably the Amazon, where balancing economic development with conservation remains an on-going challenge. The Amazon Biome is defined as the area covered predominantly by dense moist tropical forest, with less extensive areas of savannas, floodplain forests, grasslands, swamps, bamboos and palm forests. The Biome encompasses 6.70 million km² and is shared by eight countries (Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana and Suriname), as well as the overseas territory of French Guiana (WWF, 2009). The Amazon includes 610 protected areas, as well as 2,344 indigenous territories that cover 45% of the basin. More than 40 percent of the rainforest remaining on Earth is found in the Amazon and it is home to at least 10 percent of the world's known species, including endemic and endangered flora and fauna. The Amazon River is the largest river basin in the world and accounts for 15-16% of the world's total river discharge into the oceans. The Amazon River flows for more than 6,600 km and with its hundreds of tributaries and streams contains the largest number of freshwater fish species in the world. The Amazon forest and river ecosystem is one of largest natural areas that still has the potential to remain sustainably conserved and managed.

142. Given the large amount of carbon stored in the forests of the Amazon, there is considerable potential to influence global climate if not properly protected or managed. The Amazon contains 90-140 billion metric tons of carbon, the release of even a portion of which could accelerate global warming significantly. Land conversion and deforestation in the Amazon release up to 0.5 billion metric tons of carbon per year, not including emissions from forest fires, thus rendering the Amazon an important factor in regulating global climate³⁰.

GEF-7 Impact Program

143. Export and internal markets (e.g. demand for agricultural and forest goods, minerals, and energy), transport infrastructure development, small -scale agriculture, cattle ranching, social inequality and poverty all contribute in varying degrees to deforestation and degradation of the Amazon Biome. These drivers are linked to

³⁰ Nepstad, D, C.M. Stickler, B. Soares-Filho, and F. Merry. 2008. Interactions among Amazon land use, forests and climate: prospects for a near-term forest tipping point. *Phil. Trans. Roy. Soc. B.* doi:10.1098/rstb.2007.0036

shortcomings of the policy frameworks in various sectors; weak governance of some institutions and governmental entities to establish and enforce legislation for nature conservation; and lack of appropriate land-use planning. These threats can be found in varying degrees in the individual countries, and can be exacerbated by the lack of regional coherence in laws and policies among the Amazonian countries.

144. In recognition of the importance of this biome to the global environment, the GEF initiated the Amazon Sustainable Landscapes Program (ASL) during GEF-6 to address the complex set of drivers of deforestation and barriers for sustainable land use in Brazil, Colombia and Peru (83% of the biome). The GEF-6 program aims to address these drivers and generate scalable results in reducing deforestation and the loss and fragmentation of natural habitats.

145. All projects in the GEF-6 Amazon Sustainable Landscapes Program, have been prepared following sound technical studies and consultations and all projects are expected to be CEO endorsed by June, 2017. The ASL Program has become an established collaboration platform amongst the participating countries during the project design process as well as with NGOs and donors active in the biome in order to identify opportunities for coordination during implementation. This platform will be further solidified during implementation and its convening power will provide a solid foundation upon which to base the development GEF-7 ASL Impact Program.

146. The GEF-7 Impact Program will expand the reach of the GEF-6 ASL Program and invite the remaining GEF-eligible countries that are part of the Amazon biome to become involved: Bolivia, Ecuador, Guyana, Suriname, and Venezuela.

Objectives and Key Interventions

147. The program objective is to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover. The GEF-Program will build on the existing lines of investment established in GEF-6, in consultation with the countries, as listed below:

- (a) Integrated Amazon Protected Areas aims to increase conservation and protection of biodiversity through creating protected areas, improving protected area management, and enhancing sustainable financing at the system-wide level.
- (b) Integrated Landscape Management aims to enhance sustainable land use by improving forest and land management and reducing carbon emissions from deforestation in the respective project areas.

- (c) Policies for Protected and Productive Landscapes will incorporate biodiversity management principles (both conservation and sustainable use) into selected government sectors that are drivers of deforestation (i.e., agriculture, extractive industries and infrastructure) through sectoral agreements and/or instruments.
- (d) Capacity Building and Regional Cooperation 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.

148. Additional priorities may be included in the GEF-7 ASL Program, such as:

- (a) Formalization or regulation of the artisanal and small-scale gold mining (ASGM) sector. Countries may consider developing and implementing national action plans to facilitate the formalization or regulation of the ASGM sector to prevent the exposure of vulnerable populations, particularly children and women, to mercury used in artisanal and small scale gold mining. ASGM initiatives supported under the GEF-7 Program will complement GEF-6 projects on ASGM in Suriname and Guyana focused on mainstreaming biodiversity into the mining sector; and
- (b) Management of freshwater resources. Countries may consider activities to improve management of fisheries focused on migratory species seasonally visiting the Andean headwaters. This could include activities to develop and implement land use management plans at the level of the watershed, focusing on the sustainability and maintenance of local fresh water resources. Key activities may include: Strategic environmental planning for future hydroelectric developments in order to maintain the integrity of the free flowing rivers that support major environmental services downstream (fisheries, hydrological pulses that maintain flooded forests and wetlands).

Existing Platforms and Potential Partners

149. As the GEF-7 Program is further developed, donors (i.e., Norway, UK and others) and bilateral-aid agencies (i.e., USAID, GIZ, and others) and private foundations (i.e., Gordon and Betty Moore Foundation, MacArthur Foundation, and Blue Moon Fund) will be consulted to ensure proper coordination and to exploit potential design and funding synergies.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

150. The Program will make significant contributions to achieving the following Aichi Targets: 2: Integrate biodiversity and development; 4: Sustainable production and consumption; 5: Habitat loss halved; 7: Sustainable agriculture, aquaculture, forestry; 11: Expansion of protected area networks; 14: Restore and safeguard essential ecosystem services; and 15: Enhance ecosystem resilience and carbon stocks. The program is particularly aligned with the activities referred to in paragraph 70 of the UNFCCC Decision 1/CP.16, UNCCD decision 4/CO P.8, and, if it seeks to formalize the ASGM Sector, it will address Article 7 of the Minamata Convention.

151. Specifically, the measure of GEBs will be the area of globally significant habitat, as measured in hectares, sustainably managed or conserved, hectares under sustainable land management, tons of CO₂e mitigated, and reduction in tons of Mercury. The Impact Program will also help implement SDGs 13, 14, and 15 on climate action, life below water, and life on land.

Wildlife for Sustainable Development Impact Program

Introduction

152. Africa is the only continent on the planet that retains a full spectrum of large animals, with many areas having fifteen or more species [1]. However, there is mounting evidence of widespread declines in the numbers and range of many wildlife populations across the continent. The declines occur both inside and outside protected areas and have been attributed to a number of factors including poaching and illegal wildlife trade, human encroachment, and competition with livestock for space.

153. The GEF responded to this assault on the most charismatic mammals in Africa by launching a global program to promote wildlife conservation, crime prevention and community engagement to reduce the impacts of poaching and illegal wildlife trade on known threatened species. The program brought together a total of 19 countries in Africa and Asia with a total investment of GEF \$131 million and \$703 million in co-financing. The program is the single largest investment in this field and is recognized as one of the most promising programs addressing the supply, transit and demand value chain. The program continues to attract the attention of governments in Africa and Asia, as evidenced by their expressions of interest to join the GEF program; a trend that is likely to continue in GEF-7.

154. This Impact Program aims at continuing the efforts that were initiated in GEF-6 and to complement them with targeted investments that support wildlife-based land uses become engines of economic growth and sustainable development.

GEF-7 Impact Program

155. Steady progress has been made in reducing poaching, trafficking and demand of African wildlife. One of the most important achievements in the fight against illegal wildlife trade was the announcement made by China that it will ban the domestic ivory trade and processing by the end of 2017. While this is encouraging, demand is unlikely to stop right away, as the black markets in China and other countries in South East Asia will continue driving the demand for ivory and rhino horn. Even a reduced demand for wildlife can still have devastating impact given that many species have become vulnerable due to reduced population sizes and shrinking of their natural habitats. This situation calls for

[1] William J. Ripple, et al. (2015). "Collapse of the world's largest herbivores." *Science Advances* 01 May 2015: Vol. 1, no. 4, e1400103 DOI: 10.1126/sciadv.1400103

continuing support to reduction of poaching and curtailing the illegal trade of wildlife and wildlife products along the entire value chain.

156. As the illegal killing of elephants is leveling off and showing signals of a slight decrease, the global community must continue exerting pressure on the illegal trade of wildlife while turning the current and future increases in wildlife numbers into an opportunity. Wildlife-based land uses have the potential to become an engine for sustainable development in Africa. Indeed, a growing body of evidence shows that wildlife-based land uses (including eco-tourism and safari hunting), confer several ecological and socio-economic benefits compared to livestock farming in isolated semi-arid environments. Included in this benefit is the potential for improved representation of women and other marginalized groups in the decision-making and management systems of the community. In many of these areas, wildlife is now generating four times as much income as livestock, and sixteen times the wages.

157. There are a number of barriers for wildlife to become the thrust for development in areas where the economy is dominated by food aid, grants and urban remittances. First, policy makers do not yet view wildlife economically. When livelihoods are based on wildlife management, the economy improves without an environmental impact, and is climate smart. Second, transformation depends on reversing colonial wildlife policies so that much higher revenues return to the parks and the communities that co-exist with wildlife. Third, many of the African parks require the basic conservation infrastructure, air or road access, the right to retain revenues, and investor friendly conditions to become a powerful economic driver.

158. The GEF-7 “Wildlife for Sustainable Development” IP, builds on the GEF-6 program and has a two pronged approach: First, to continue investing in addressing the illegal wildlife trade in supply, transit and demand countries. Second, to use growing and stable populations of wildlife to generate socio-economic benefits.

Objectives, Key Interventions, and Targets

159. The objective of this program is to secure the population of wildlife in order to propel one of the most promising economic development engines in Africa: the conservation of wildlife in the vast wilderness areas of Africa to generate benefits to local communities and revenue to support the conservation areas.

160. To secure the conservation of wildlife in Africa, investments will be made along the value chain³¹. Support will include: i) building the capacity of environmental law enforcement agencies and the judiciary to reduce poaching inside and outside of the protected area system and improving border enforcement; ii) developing action plans where governments commit to an adequate budget for their implementation; iii) increasing cooperation within and between law enforcement agencies and relevant international organizations to mobilize political support for environmental law enforcement through cross-sectoral collaboration; iv) reduce consumer demand for illegally traded wildlife by raising awareness of the scale and impacts of illegal wildlife trade on biodiversity and the environment, livelihoods, and human health, its links to organized crime, and the availability of sustainable alternatives.

161. African countries have significant social and economic reasons to embark on an initiative to use wildlife as the basis for sustainable development, since the model could easily render stable jobs for over 1 million people and generate over \$10 billion³². This GEF program, with co-financing from the Governments and the private sector, will address issues at regional, national and local levels. At the regional level, the GEF will support strengthening regional commitments to large scale conservation in the SADC countries. At the national level, the GEF will support the development of policy frameworks to unlock the potential for self-financing Conservation areas (i.e. National Parks, Nature and Game Reserves, etc.) and viable wildlife-based Community Based Natural Resources Management (CBNRM). At the local level, the GEF will co-invest with Government and partners on two fronts: re-capitalization of large wildlife wilderness areas and building capacity to implement CBNRM, so that local communities benefit fully from wildlife conservation in and around protected areas (i.e. buffer zones, private lands, game management areas, etc.). For the selected target geographies, the GEF will support sustainable tourism investment and enabling and mainstreaming sustainable tourism investment and finance, including the NGI. The geographic targets are the following TFCA: Okavango- Zambezi (Angola, Botswana, Namibia, Zambia); the Greater Limpopo (Mozambique, South Africa and Zimbabwe); Malawi-Zambia TFCA; ZAMOZA (Zimbabwe,

³¹ The conservation of Asian wildlife being poached and illegally traded at the national or regional levels will be addressed by the Biodiversity Complementary Investments.

³² An extrapolation for the region based on data from the Department of Environment (DEA), South Africa.

Mozambique, Zambia); Lower Zambezi-Mana Pools TFCA (Zimbabwe-Zambia) and Niassa-Selous (Tanzania-Mozambique).

Existing Platforms and Potential Partners

162. *The Trans-Frontier Conservation Area:* The TFCAs of the Southern Africa Development Community (SADC) offers the most robust political platform on which the GEF can build a wildlife-based economy³³. *Potential partners.* A) The Governments with areas in the targeted TFCA (including the State Park Agencies); B) Local communities and Conservancies; C) National, regional and international NGOs – AWF, Peace Parks African Parks, WWF, D) Coordination of with other international donors in the region including USAID, GIZ (SADC-GIZ TUPNR Programme³⁴) and AFD.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

163. The target TFCA contain the last largest wilderness areas in Africa, and are home to a high number of large and small herbivores that have a strong influence on the ecosystems structure and function. Several of these landscapes are important regional water catchments and with intact habitats of forest, savanna, swamp, and therefore important for carbon sequestration.

³³ <http://www.sadc.int/themes/natural-resources/transfrontier-conservation-areas/>

³⁴ <https://www.giz.de/en/worldwide/15903.html>

Inclusive Conservation: Engaging Indigenous Peoples Impact Program

Introduction

164. It is estimated that nearly a quarter of the Earth's surface and vast ocean areas are managed by indigenous peoples and these areas hold 80% of the Earth's biodiversity.³⁵ In Brazil, DR Congo, and Colombia alone, indigenous peoples' territories encompass over 120 million hectares of intact tropical forests, including 15-40% of all Key Biodiversity Areas (KBAs) in each country. In only the lands where indigenous peoples have full legal tenure contain an estimated 37.7 billion metric tons of carbon.³⁶

165. To date, indigenous peoples' efforts to maintain their territories have been critically important in providing global environmental benefits. Recent studies have shown that when the rights of indigenous people to their land and natural resources are honored, deforestation rates are lower than in government-managed areas and that local participation in conservation management can improve biodiversity outcomes.^{37,38} However, indigenous peoples are estimated to receive less than 2% of global conservation financing.

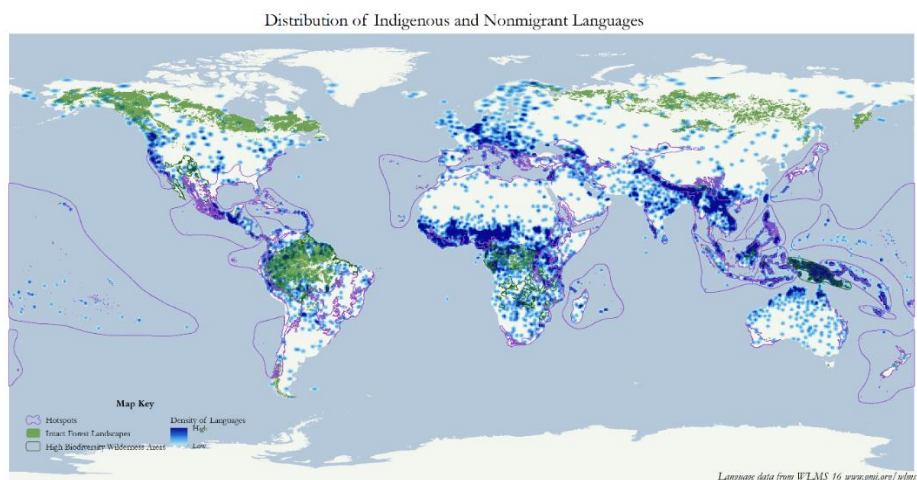
35 Sobrevilla, C. 2008. The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners. World Bank.

36 Stevens, C. et al. Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change. WRI. 37 Forest carbon in Amazonia: the unrecognized contribution of indigenous territories and protected natural areas. Wayne Walker et al. Carbon Management Vol. 5, Iss. 5-6, 2014.

37 Forest carbon in Amazonia: the unrecognized contribution of indigenous territories and protected natural areas. Wayne Walker et al. Carbon Management Vol. 5, Iss. 5-6, 2014.

38 Social and Ecological Synergy: Local Rulemaking, Forest Livelihoods, and Biodiversity Conservation Lauren Persha et al. Science 331, 1606 (2011).

Figure 2.4. Global distribution of indigenous and non-migrant languages (a proxy for indigenous peoples' resource management potential) and areas of biodiversity importance.³⁹



166. Because of their role as stewards of the global environment, the GEF has sought to support indigenous peoples since the pilot phase. In recent Annual Monitoring Reports, about 17% of GEF full size and medium size projects have substantive indigenous peoples' engagement. Effective participation of indigenous peoples has been a challenge due to several factors, including the lack of capacity among indigenous peoples' organizations and timelines that do not match with GEF operations. The GEF's Small Grants Program (SGP) has historically provided about 15% of grants to indigenous peoples' organizations, and the successes in these small projects show the potential impact of larger scale resources. For many years, indigenous peoples' organizations have expressed frustration that, despite the fact they are recognized by both the CBD and UNFCCC for their vital role as stewards of the global environment, they are unable to receive support from the GEF beyond the SGP and an occasional larger project goes through the national government. Established following GEF Council guidance, the GEF's Indigenous Peoples Advisory Group (IPAG) and its predecessor, the Indigenous Peoples' Task Force, were created to improve GEF policies and procedures and advise the GEF on greater inclusion. In light of the challenges in engaging indigenous peoples mentioned above, both of these groups produces papers calling on the GEF to create a fund specifically to support indigenous peoples.

39 L. J. Gorenflo, et al. Co-occurrence of linguistic and biological diversity in biodiversity hotspots and high biodiversity wilderness areas. PNAS 2012;109:8032-8037

167. The GEF has had a small number of MSPs and FSPs with significant support for indigenous peoples-led conservation. Two examples are a recently closed project in Brazil and an ongoing project in Philippines both supporting on-the-ground conservation and sustainable management of indigenous peoples' territories, legal reform, and increased indigenous peoples' representation in national policy processes. Both of these projects have seen real gains in the conservation and management of critical ecosystems and allowing countries to substantially increase their protected area estate, demonstrating the opportunity presented by supporting indigenous peoples-led conservation.

GEF-7 Impact Program

168. Building on the proven stewardship of indigenous peoples, this proposed Impact Program called *Inclusive Conservation: Engaging Indigenous Peoples Impact Program* will create a new partnership between the GEF, indigenous peoples, national governments, NGOs, and others. This program is estimated to enhance and secure the conservation of 25 million hectares and ensure that a half a Gigaton of carbon remain stored in forests, mangroves and wetlands, while increasing resilience to climate change and securing ecosystem services for an estimated target of 12.5 million people.

169. While other organizations, such as NGOs and foundations, are working on these same issues the GEF has a unique role in this space. The GEF has relationships with national governments that will increase the prominence of indigenous peoples' activities, particularly in mainstreaming indigenous peoples' issues into policy. This program will build upon GEF's experience supporting conservation programs integrated with national biodiversity strategies and policies and MEAs. The program will leverage GEF's indigenous peoples' knowledge and experience to pursue long-term conservation initiatives that deliver impacts at scale.

Objectives and Key Interventions

170. Inclusive Conservation will demonstrate models of indigenous peoples-led conservation in diverse political, social, and ecological contexts leading to a transformation in the recognition, support, and financing of indigenous peoples as key strategic partners in the response to environmental challenges.

171. Inclusive Conservation will focus where indigenous peoples' territories have high biodiversity, with carbon stocks and/or mercury pollution included as relevant. Within priority areas, grant recipients will be selected based on an analysis of indigenous peoples' governance and conservation leadership potential with GEF and partners input.

The program will have a diverse portfolio vis-a-vis region, types of organizations, activities, and ecosystems. It will use a flexible set of grant modalities to support organizations from international organizations to local and community-based organizations.

172. Investments will focus on:

- (a) Site-based conservation and sustainable financing of indigenous peoples-driven conservation in important ecosystems;
- (b) Capacity development for indigenous peoples' organizations and integration of diverse knowledge systems to achieve conservation and sustainable natural resource management outcomes.

173. The Inclusive Conservation Impact Program will engage globally recognized representatives of indigenous peoples in its design, as Inclusive Conservation can only be launched with indigenous peoples' representatives' input and full support and participation. The program will take into account the differences between and within indigenous peoples.

Existing Platforms and Potential Partners

174. Inclusive Conservation will engage the GEF/UNDP Small Grants Program, the World Bank's Dedicated Grants Mechanism, and other potential donors. Inclusive Conservation will actively coordinate with SGP, building on their long experience such as including helping direct CE investments in capacity building, scaling-up SGP initiatives, and using SGP infrastructure as an implementation mechanism. Inclusive Conservation could also coordinate with GEF projects, using resources to incentivize/supplement the use of national GEF resources for related issues.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

175. Inclusive Conservation will support progress towards the achievement of Aichi Targets 5, 6, 11, 12, 14, 15, 18, and 19. By 2027, and achieve the following Global Environmental Benefits: enhance and secure the conservation of 200 million hectares; and 4 Gigatons of carbon stored IPLC lands better managed and protected.

176. Inclusive Conservation will contribute to SDGs by improving IPLC well-being (Goal 3), reducing inequalities (Goal 10), maintaining carbon stocks in IPLC lands and supporting IPLCs in adaptation (Goal 13), strengthening IPLC management of their waters and lands

(Goals 14 and 15). Inclusive Conservation will also support the implementation of the 2007 United Nations Declaration on the Rights of Indigenous Peoples.

Circular Economy Impact Program

Introduction

177. Our world today is largely based on a linear, or take- make-dispose, economy in which natural resources and materials are extracted, processed and then disposed into landfills, waterways and elsewhere. Approximately 60 billion tons of raw materials are extracted per year (22kg/person/day). Most of these materials are then disposed within one year. Only 7% of these materials are recycled or reused; yet it is estimated that half of these materials (everything except fossil fuels and biomass) can potentially be recycled or reused.

178. This process of mass extraction and industrial production and consumption creates serious environmental consequences, including GHG emissions, hazardous chemical emissions and marine debris affecting biodiversity. Greenhouse gas emissions are at an all-time high with 82% of emissions from sources tied to the linear economy (i.e. industry, buildings, agriculture & forestry, transport). Approximately 280 million tons of plastic are in the ocean today⁴⁰ and 8 million tons of plastic enter the ocean every year. These environmental impacts adversely affect livelihoods, the economy and society at large.

179. This linear system is a particular concern in developing economies where increasing manufacturing has been closely recoupled with gross domestic product in the last 10 years. This recoupling is driven by the increased manufacturing due to the spread of the supply chain to the developing economies, the demand from increasing middle income populations and less efficient practices in the developing economies.

GEF-7 Impact Program

180. The Circular Economy concept is receiving increasing attention worldwide as a means of decoupling environmental pressure from economic growth through improved product design, material use, industrial process change, waste management and recycling. By promoting the adoption of closing-the-loop production patterns within an economic system, Circular Economy aims to increase the efficiency of resource use, with special focus on urban and industrial waste, to achieve a better balance and harmony between the economy, environment and society. Circular Economy implies the adoption

⁴⁰ World Economic Forum (WEF). 2016. The New Plastic Economy: Rethinking the future of plastics.

of life cycle based approach to drive more materials efficient and cleaner production patterns at the company level, maximize use, reuse and remanufacturing of products, establish effective secondary materials systems to connect materials post-product use directly to manufacturers, an increase of producers and consumers' responsibility and awareness, the use of renewable technologies and materials (wherever possible) as well as the adoption of suitable, clear and stable policies and tools. There are increasing examples of successes in adopting Circular Economy principles around the world, which now need to be scaled up.

181. The failure to institute a circular economy system will continue to exacerbate the challenge of restoring planetary boundaries and hinder the achievement of all global conventions objectives such as bio-diversity, greenhouse gas reduction, water quality and ocean conservation. The Circular Economy approach is particularly powerful as a means of reducing GHG emissions 40 percent of which are attributable to materials management. Furthermore, the economic benefits of Circular Economy approaches are estimated to promote livelihoods opportunities and represent a \$US4.5 trillion GDP opportunity by 2030⁴¹.

182. The GEF has a critical role to play in furthering the Circular Economy concept by bringing governments and private sector together particularly in developing economies, which are increasingly important to advance circular systems to accommodate their economic growth while advancing environmental objectives. Through such private-public partnerships, the governments can better meet their MEA obligations while the private sector can meet their sustainability goals. Furthermore, since institutionalizing Circular Economy requires integration into economic development/industrial strategies finance and commerce ministries together with industries are integral therefore offering a unique opportunity mainstreaming environmental priorities into economic development. This approach can also offer opportunity to improve engagement of civil society, and to better leverage the important roles women can play across the supply value chain. The GEF can also help foster investments from private capital investors and multilateral development banks as the GEF de-risks investments and raises investor awareness and transparency regarding sustainability of supply chains.

Goal, Objectives, Key Intervention Points and Mechanisms

⁴¹ Lacy, P., Rutqvist, J (2015): Waste to Wealth – The Circular Economy Advantage, NY/London: Palgrave Macmillan.

183. The goal of the Circular Economy Impact Program is to flip global supply chains and country/regional manufacturing/economic development strategies from take-use-dispose to redesign-reduce-reuse-repair-recycle approaches. The Circular Economy IP will focus primarily on plastics because of its relevance and feasibility to further Global Environmental Benefits, specifically to reduce GHGs, hazardous chemicals, and marine debris. However, other materials, such as e-waste, building materials and textiles, critical to promoting a Circular Economy approach will also be considered.

184. The Circular Economy IP is designed to catalyze change in the entire supply chain from extraction to production to consumption to waste management and back to production. The key intervention points include:

- (a) Extraction – switch to recycled materials or raw materials that minimize GHG emissions and avoid toxic and persistent substances (e.g. biomass);
- (b) Production – design to disassemble for long life/usefulness, for secondary materials and to ensure resource efficiency (e.g. industrial symbiosis through eco-industrial parks);
- (c) Consumption – extend product lifetime by promoting shared economies and increased product utilization, repair, refurbishing and reselling; and,
- (d) Recycling – promote efficient collection systems, separation of recyclables from waste for disposal; and creation of businesses and trade markets for remanufacturing secondary raw materials, which leads back to the first intervention point.

185. The Circular Economy IP will work through several mechanisms, which relate to all of these intervention points: policy; technical assistance and awareness raising; green/sustainable chemistry & technology, and financing models.

Existing Platforms and Potential Partners

186. The proposed IP will seek alliances with key partners from industries, non-governmental organizations, government and multilateral institutions, such as the World Economic Forum's Platform for Accelerating the Circular Economy and Circular Economy Leaders Network, the G-7 Alliance on Resource Efficiency, the Circular Economy 100 Leaders Network, the International Resource Panel, the Responsible Raw Materials Initiative, the 10-Year Framework of Programs on Sustainable Consumption and Production and the APEC Cooperative Network on Green Supply Chain. Specifically, on

plastic packaging, potential partners include New Plastics Alliance, Trash Free Seas Alliance and Plastics Stewardship Council.

187. This Circular Economy Impact Program will build on the GEF's current relevant investments in related projects, including GEF support for the Trash Free Seas Alliance and the New Plastic Economy Alliance, which are together addressing the phases of the plastic life cycle.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

188. Outcomes and GEBs for the impact program will be in line with the Sustainable Development Goals, the Paris Agreement, chemical conventions (Strategic Approach for International Chemical Management) and the Convention on Biological Diversity. The efforts specific to plastics will reduce GHGs, which are emitted during fossil fuel extraction, support sound chemicals management priorities in plastics; and, reduce marine debris, which is 80% plastic. In doing so this IP will have tremendous Global Environmental Benefits related to reducing GHGs and hazardous chemicals and safeguarding marine biodiversity.

Integrated National Planning for MEAs/SDGs Impact Program

Introduction

189. Safeguarding our planet calls for urgent and scaled-up action on the global scale. Such global priorities need to be translated into action at the national level, and reflected in the enhanced level of national ambitions to ensure that collective efforts can meet the global needs in the medium- to longer-term.

190. However, there is a clear ambition gap between the global needs/goals articulated and proposed action on the ground. Aggravating this problem is the lack of integration across sectors, MEA processes and national development planning. As a result, national actions toward fulfilling these international objectives are still lagging behind. In order to address these constraints, national and sub-national decision makers need to be equipped with a better understanding of what the international goals set under the MEAs and with the SDGs mean for their constituency. In addition, by facilitating convergence of national SDG plans with MEA priorities and objectives, decision-makers are able to design and implement policies and actions in a smarter way, taking into account SDGs in unison with MEAs rather than in a fragmented fashion.

191. Bridging the ambition gap requires coordinated national planning to articulate necessary actions on the ground for various facets of sustainable development. While the GEF has been supporting national strategy formulation and reporting, primarily as Convention obligations and enabling activities, support has been provided separately for each plan and report for each Convention. To date, countries have received little support from the GEF to facilitate coordinated planning and reporting, and to inform cross-linkages. As countries embark on the process to translate SDGs into national plans, targets and action, coordination between and with MEAs has become more important than ever before.

192. The GEF-7 period is a critical juncture for the GEF Partnership to facilitate concerted action, as countries consider planning and implementation of commitments and contributions for various MEAs, such as the NDCs and Land Degradation Neutrality, among others, as well as SDGs. There is also a renewed interest among countries and MEAs to enhance synergies and to introduce practical measures to achieve commitments under the MEAs. Furthermore, the significant support for Convention obligations and enabling activities totaling approximately \$500 million in GEF-7 calls for innovative approaches to enhance their relevance and utility for national planning purposes and implementation, and to facilitate coordination among national institutions.

GEF-7 Impact Program

193. The *Impact Program on Integrated National MEA-SDG Planning* aims to address the global ambition gap, and to enhance coordinated planning and implementation of the recent global environmental agreements for which the GEF serves as a/the financial mechanism and the 2030 Agenda for Sustainable Development. The GEF-7 period represents a window of opportunity for coordinated support, as this is the first time for the countries to implement national commitments/contributions/targets for these MEAs as well as the national SDG plans.

194. The GEF is uniquely positioned to help interested countries identify and strengthen areas where it may be viable to further enhance national and international commitments and action to accelerate and strengthen the implementation of MEAs toward sustainable development. GEF's support for Convention obligations and enabling activities is the foundation for this Program. This Impact Program also aligns with the need to raise the level of ambition as stated in the Paris Agreement.

Objectives, Key Interventions, and Targets

Planning-implementation support for SDGs and MEAs to address ambition gap:

195. The Impact Program will support interested countries, upon request, to establish and utilize a coordinated and integrated planning and implementation framework for the MEAs and SDGs. Given that MEA priorities and legally binding elements may not be automatically included in SDG planning and implementation, this Impact Program will aim at supporting concerted national efforts in considering SDG targets and indicators in an integrated manner with MEA priorities, and developing local action in the medium- to longer-term. This will be facilitated by a global platform that unites various practitioners' communities and thought leaders across themes that are MEA- and SDG-relevant.

196. The Program will provide support in establishing/enhancing the institutional and policy frameworks to enable up to 20 countries to continue to raise their level of ambition and track action in addressing sustainability challenges, including capacity building. Two or three workstreams, such as land and energy, may be identified for coordinated analysis. The Program will also identify innovative financing opportunities to facilitate the realization of the implementation plans.

Coordinated and synergistic MEA planning and reporting support:

197. The GEF supports Convention obligations including national reporting, planning and strategies for various MEAs. Across the MEAs, it is estimated that at least five plans and strategies, and seven reports will be prepared or updated during GEF-7 period with GEF support (see Figure 2.1)⁴². If catalyzed effectively with political momentum gathered through the SDGs, the legally binding nature of the MEAs can and should be the foundation to compel global action toward a sustainable future for all.

198. By utilizing reporting as a tool to strengthen national capacities in the respective thematic areas, the GEF can make an impact in helping up to 20 interested countries, in collaboration with MEA Secretariats, to better understand how the implementation of MEAs can be streamlined, and how opportunities to strengthen plans and strategies can be realized.

199. Support may also be used to analyze and correlate to tracking progress on delivering country-driven, MEA-related SDG targets on the ground. This effort may enable countries to better link the reporting work stream to inform the planning and implementation of enhanced action as articulated in element above, and vice versa. The pilot common sets of data will enhance access to and use of data among relevant institutions, and inform decision making and policy development with more consistent and evidence based manner.

Enhancing CBIT beyond climate change:

200. The Paris Agreement requested the GEF to support the establishment and operation of the Capacity-building Initiative for Transparency (CBIT) to assist developing countries in meeting the enhanced transparency requirements of the agreement in both the pre- and post-2020 period (see Climate Change Mitigation investment strategy for further information on CBIT).

201. This Impact Program will support additional opportunities for interested countries, upon request, to go beyond climate action, and support integration of CBIT-type elements in other GEF areas. An incentive-based mechanism will enable countries to utilize resources to build capacity through a range of activities, including (1) activities to

⁴² Plans include: Climate Change National Adaptation Plan, Climate Change Nationally Determined Contribution, Land Degradation Neutrality national target, POPs National Implementation Plan, and Minamata Artisanal and Small Scale Gold Mining National Action Plan.

strengthen national institutions for transparency- and reporting-related activities in line with national priorities; (2) activities to provide relevant tools, training, and assistance for meeting SDGs and MEA priorities hand in hand with each other; and (3) activities that may raise national/local ambition in implementing SDG and MEA priorities over time. During GEF-7, countries can also continue to request support for CBIT for climate change, as specified in the Climate Change Mitigation strategy.

Integration across other Impact Programs and thematic areas

202. This Program aims at informing ongoing and future GEF and non-GEF investments in targeted recipient countries, including all other Impact Programs and GEF investments. Linkages with platforms to be supported by all GEF investments will be established.

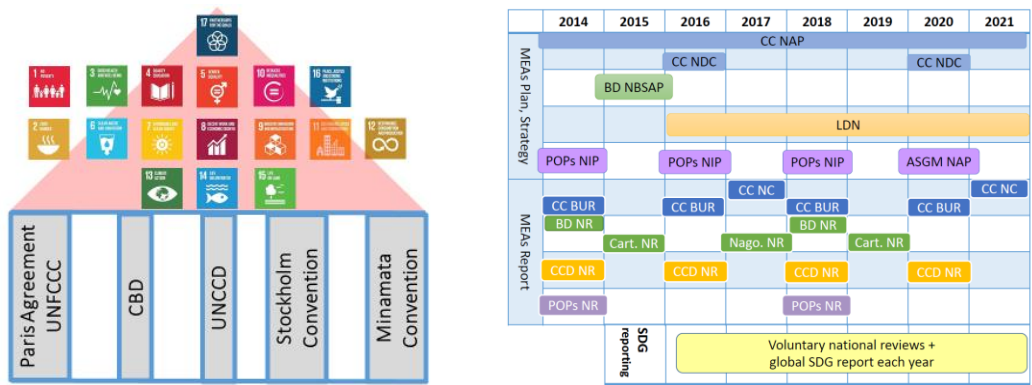
Existing platforms and potential partners

203. The Impact Program will enhance partnerships, and build on existing and emerging platforms. These include Convention secretariats, the World in 2050 initiative, UN Secretary General's Office, SDSN, UNITAR, relevant GEF Agencies engaged in planning, implementation and reporting support, National Science Foundations/Research Councils to aid in building country based system, national statistical services and regional bodies as appropriate.

Global Environmental Benefits and Links to Multilateral Environmental Agreements

204. The GEB contributions from this IP focus more on institutional change and level of synergy achieved in national planning/implementation architecture with MEA priorities and SDGs. Proposed indicators for monitoring and evaluating the effectiveness of this IP are the following: (i) Degree to which MEA priorities and relevant SDG targets are addressed in national sustainable development planning and implementation process; (ii) Number of countries that enhance the effectiveness of MEA planning and reporting through coordinated support, and; (iii) Institutional capacity built for transparency-related activities.

Figure 2.5. Schematic of SDG and MEA linkages and timeline of MEA-related reporting and planning activities at country level



FOCAL AREA COMPLEMENTARY INVESTMENTS

Biodiversity Focal Area

Global Context of Biodiversity

205. 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.”

206. The Millennium Ecosystem Assessment (MA) and analyses produced by TEEB (The Economics of Ecosystems and Biodiversity) were among the first studies that demonstrated that biodiversity underpins the ecosystem goods and services that are required for the survival of human societies and for the future of all life on the planet.⁴³ In addition, biodiversity generates considerable economic value through the provision of goods such as food, water, and materials, and services such as climate regulation, pollination, disaster protection, and nutrient cycling.

207. This changed way of looking at biodiversity as an “asset” that makes critical contributions to sustainable development has since influenced approaches to biodiversity management which are now reflected in the Strategic Plan for Biodiversity, 2011-2020, and the Aichi Biodiversity Targets as well as the GEF-6 biodiversity strategy. This evolution in thinking was made most prominent in the recently concluded CBD COP-13 with the adoption of the Cancun Declaration on Mainstreaming the Conservation and Sustainable Use of Biodiversity for Well-being in which the international community recognized that biodiversity is an asset that contributes to economic development and human well-being and as such requires full engagement of all government ministries and sectors, and most critically, from agriculture, fisheries, forestry and tourism.

208. Governments, civil society organizations, the private sector, indigenous peoples and local communities, and others have made some progress in sustainably managing biodiversity and ecosystems at local and national levels, but not at the scale necessary to

⁴³ 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*.

stem the ongoing tide of biodiversity loss. Of all the global environmental problems facing the world today, biodiversity loss is the only one that is likely irreversible.

209. In 2016, the Living Planet Index, which measures biodiversity abundance levels based on 14,152 monitored populations of 3,706 vertebrate species, showed a persistent downward trend in biodiversity status. On average, monitored species population abundance declined by 58 % between 1970 and 2012 with a greater loss in freshwater environments.⁴⁴ The Strategic Plan for Biodiversity, 2011-2020, and the Aichi Biodiversity Targets are an ambitious roadmap which collectively aspires to reverse these trends, however, a recent analysis of national reports on progress against all 20 Aichi Targets demonstrates limited achievements to date⁴⁵ (please see Figure 2.5.)

- only about 5% of countries indicate that they are *on track* to meet the global targets;
- around 75% of countries have *made progress but at an insufficient rate* to meet the global ambition by 2020; and
- 20% of national reports indicate that countries have made *no progress or have even moved away* from the global targets.

210. The Millennium Ecosystem Assessment highlighted the five main direct drivers of biodiversity loss: habitat change (loss and degradation), overexploitation or unsustainable use, invasive alien species (particularly in island ecosystems), climate change, and pollution. These critical drivers of biodiversity loss are intensifying, particularly habitat loss driven by agriculture expansion. Human activities and resource uses and their impact on the planet and biodiversity in particular have grown so dramatically that more scientists are attracted to the concept of humanity entering a new epoch identified as the Anthropocene. The Anthropocene defines Earth's most recent geologic time period as being human-influenced, or anthropogenic, based on overwhelming global evidence that humans are now the most dominant influence on atmospheric, geologic, hydrologic, biospheric, and other earth system processes.

211. Based on current assessments of biodiversity status and the magnitude of the pressures being exerted on biodiversity, and with 95% of countries not on track to achieve

⁴⁴ WWF. 2016. Living Planet Report 2016. Risk and resilience in a new era. WWF International, Gland, Switzerland.

⁴⁵ <http://www.birdlife.org/campaign/national-commitments-fall-short-action-needed-safeguard-nature> Analysis conducted by RSPB, BirdLife, WWF, CI and TNC based on CBD data.

the Aichi Targets, one can only conclude that all stakeholders have to redouble their efforts, including finding new ways to increase financing for biodiversity conservation and sustainable use and applying new approaches at a commensurate scale to eliminate threats to biodiversity.

Conference of the Parties (COP) Guidance to the GEF

212. At the CBD COP 13 recently concluded in Mexico on December 17, 2017, Parties agreed a Four-year Framework of Program Priorities for the Seventh Replenishment Period (2018-2022) of the Global Environment Facility Trust Fund (Decision CBD/COP/DEC/XIII/21).

213. The four-year Framework, as well as associated additional guidance in the Decision, includes specific program priorities and expected outcomes to be addressed in GEF-7 through GEF's Biodiversity Investments. The Decision also "Encourages the Global Environment Facility to continue and further strengthen integrated programming as a means to harness opportunities for synergy in implementing related multilateral environmental agreements as well as the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, in particular Sustainable Development Goals 14 and 15." As such, the framework recognizes the opportunities for synergy, inherent in the unique institutional design of the Global Environment Facility, which serves as the/a financial mechanism for multiple related multilateral environmental agreements.

Delivery of Biodiversity Priorities through the GEF-7 Programming Directions Framework

214. The GEF-7 biodiversity investment framework fully embodies an integrated approach to biodiversity management. Implementation of the GEF-7 Framework of Program Priorities from CBD COP-13 is supported through a series of eleven Impact Programs that seek to deliver impact at scale by addressing key underlying drivers of biodiversity loss as well as direct drivers/pressures.

215. The impact programs directly respond to the biodiversity mainstreaming agenda of COP-13 and the most challenging elements of the Strategic Plan for Biodiversity, 2011-2020. The Impact Programs are complemented by a series of biodiversity-specific investments that address particular elements of the biodiversity agenda. As a whole, they provide the most comprehensive strategic response in GEF's history to the five most prominent direct drivers/pressures of biodiversity loss as highlighted in Table 2.15.

GEF-7 Biodiversity Investment Results Framework

216. The goal of the GEF-7 biodiversity investments is to maintain globally significant biodiversity and the ecosystem goods and services that it provides to society. To achieve this goal, GEF investments will contribute to these three objectives:

- (a) Mainstream biodiversity across sectors as well as within production landscapes and seascapes;
- (b) Reduce direct drivers of biodiversity loss; and
- (c) Strengthen biodiversity policy and institutional frameworks.

217. Each GEF-7 Impact Program and the biodiversity complementary investments will map their contributions to the goal and objectives and the associated indicators presented below.

218. Impacts:⁴⁶

- (a) Biodiversity conserved and habitat maintained in national protected area systems and other effective area-based conservation measures
- (b) Conservation and sustainable use of biodiversity in production landscapes and seascapes.

219. Indicators:

- (a) Intact vegetative cover and degree of fragmentation in national protected area systems and other effective area-based conservation measures measured in hectares as recorded by remote sensing.
- (b) Intact vegetative cover and degree of fragmentation in production landscapes measured in hectares as recorded by remote sensing.
- (c) Coastal zone habitat (coral reef, mangroves, etc.) intact in marine protected areas and productive seascapes measured in hectares as recorded by remote sensing and, where possible, supported by visual or other verification methods.

⁴⁶ Long term effects of the portfolio investment, target area for impacts would be 1.2 billion hectares.

220. Corporate Level Targets: ⁴⁷ 1.2 billion hectares of landscapes and seascapes under improved biodiversity management.

221. Table 2.9 below maps the relationship between the CBD Guidance to the GEF (Four-Year Framework of Program Priorities for GEF-7), the Impact Programs, and the Biodiversity Complementary Investments for GEF-7 and its relation to the Strategic Plan for Biodiversity 2011-2020.

⁴⁷ The achieved short-term effects of the portfolio's outputs.

Table 2.9. Convention Guidance for GEF-7 Biodiversity Focal Area Investments ⁴⁸

CBD Guidance to the GEF (Four Year Framework of Program Priorities)	Delivery Through Impact Programs and Focal Area Complementary Investments:	Contributions to Achieving the Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets
<p>I. Mainstream biodiversity across sectors as well as within production landscapes and seascapes</p> <p>A) Improve policies and decision-making, informed by biodiversity and ecosystem values</p> <p>B) Manage biodiversity in landscapes and seascapes</p> <p>C) Harness biodiversity for sustainable agriculture</p>	<p>Impact Programs</p> <p>Agricultural Commodities</p> <p>Amazon Sustainable Landscapes</p> <p>Circular Economy</p> <p>Inclusive Conservation</p> <p>Food Systems</p> <p>Green Infrastructure</p> <p>Landscape Restoration</p> <p>Natural Capital</p> <p>Healthy Oceans for Sustainable Fisheries</p> <p>Biodiversity Complementary Investments:</p> <p>Securing Agriculture's Future: Sustainable Use of Plant and Animal Genetic Resources</p>	<p>Goal A. Address underlying causes</p> <p>1) Raise awareness of biodiversity values</p> <p>2) Integrate biodiversity and development</p> <p>3) Address incentives harmful to biodiversity</p> <p>4) Sustainable production and consumption</p> <p>Goal B. Reduce direct pressures</p> <p>5) Halve rate of habitat loss</p> <p>6) Achieving sustainable fisheries</p> <p>7) Sustainable agriculture, aquaculture, forestry</p> <p>Goal C. Enhance state of biodiversity</p> <p>13) Maintain gene pool of plant and animal genetic resources</p> <p>Goal D. Enhance benefits of ecosystem services</p> <p>14) Restore and safeguard essential ecosystem services</p> <p>15) Enhance ecosystem resilience and carbon stocks</p>

⁴⁸ Please see Decision CBD/COP/DEC/XIII/21 for associated outcomes with each priority. COP 13 provided guidance for GEF-7 in the form of a Four-year Framework of Program Priorities.

CBD Guidance to the GEF (Four Year Framework of Program Priorities)	Delivery Through Impact Programs and Focal Area Complementary Investments:	Contributions to Achieving the Strategic Plan for Biodiversity 2011-2020 and Aichi Biodiversity Targets
<p>II. Reduce direct drivers of biodiversity loss</p> <p>D) Prevent and control invasive alien species</p> <p>E) Reduce pressures on coral reefs and other vulnerable coastal and marine ecosystems</p> <p>F) Enhance the effectiveness of protected area systems</p> <p>G) Combat illegal and unsustainable use of species, with priority action on threatened species</p>	<p>Impact Programs</p> <p>Circular Economy</p> <p>Inclusive Conservation</p> <p>Natural Capital</p> <p>Healthy Oceans for Sustainable Fisheries</p> <p>Wildlife for Sustainable Development</p> <p>Biodiversity Complementary Investments</p> <p>Prevention, Control and Management of Invasive Alien Species (focus on islands)</p> <p>Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate</p> <p>Preventing the Extinction of Known Threatened Species</p>	<p>Goal B. Reduce direct pressures</p> <p>5) Halve rate of habitat loss</p> <p>6) Achieving sustainable fisheries</p> <p>9) Achieve effective IAS management</p> <p>10) Minimize pressures on reefs and other vulnerable ecosystems</p> <p>Goal C. Enhance state of biodiversity</p> <p>11) Expansion of Protected Area Networks and Effective Management</p> <p>12) Prevent extinctions and improve status of threatened species</p> <p>13) Maintain gene pool of plant and animal genetic resources</p>
<p>III. Strengthen biodiversity policy and institutional frameworks</p> <p>H) Implement the Cartagena Protocol on Biosafety</p> <p>I) Implement the Nagoya Protocol on Access to Genetic Resources and Benefit-sharing</p> <p>J) Improve biodiversity policy, planning, and review</p>	<p>Biodiversity Complementary Investments:</p> <p>Implementing the Cartagena Protocol on Biosafety (CPB)</p> <p>Implementing the Nagoya Protocol on ABS</p> <p>Priority J will be Addressed through the biodiversity set aside support for national reporting and NBSAP development and revision as required.</p>	<p>Goal D. Enhance benefits of ecosystem services</p> <p>16) Achieve entry into force of ABS Protocol</p>

Impact Programs and Biodiversity

222. Ten of the GEF-7 Impact Programs respond directly to the CBD Guidance to the GEF (Four-year Framework of Program Priorities) as well as the Strategic Plan for Biodiversity, 2011-2020, *particularly with regards to the increasingly important biodiversity mainstreaming agenda*. They will make significant and synergistic contributions to the GEF-7 framework of program priorities *and* the associated expected outcomes as agreed at COP-13. These contributions are presented in detail in Table 2.16.

Biodiversity Complementary Investments

223. While the Impact Programs make a sizable contribute to the biodiversity agenda, some gaps do exist and these will be addressed through a series of “Biodiversity Complementary Investments” building on GEF-6 experience. A brief description of these complementary investments is provided below and a full description of each biodiversity-specific investment can be found in the Biodiversity Annex.

Securing Agriculture’s Future: Sustainable Use of Plant and Animal Genetic Resources

224. GEF support in this area will be three-fold. First, GEF will support in-situ conservation, through farmer management, of plant genetic resources in Vavilov Centers of Diversity. This focus will complement the thematic and geographic focus of the Food Systems Impact Program. Second, GEF will provide support to establish protection for Crop Wild Relatives (CWR) in-situ through CWR Reserves. Third, the GEF will also support conservation and sustainable use of animal genetic resources and actions to conserve the wild relatives of domesticated livestock, not solely focusing on breeds.

Prevention, Control and Management of Invasive Alien Species

225. GEF will support capacity building to manage invasive alien species and will focus on 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. 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 strongly engage with island states to advance this agenda, projects submitted by continental countries that address IAS management through the comprehensive pathways approach outlined above will also be supported.

Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate

226. GEF support will seek to strengthen three critical elements of sustainable protected area systems: a) effective protection of ecologically viable and climate-resilient representative samples of the country's ecosystems and adequate coverage of threatened species at a sufficient scale to ensure their long term persistence⁴⁹; b) sufficient and predictable financing to support protected area management costs; and c) retained individual and institutional capacity to manage protected areas such that they achieve their conservation objectives.⁵⁰ A protected area system is only sustainable if the status of protected areas in the system does not change. Therefore, GEF will also support legal reviews of conservation/environmental legislation to help countries ensure that the laws and policies governing changes to protected areas are comparable to those that governed establishment of PAs in the first place. Often there are sophisticated procedures for establishing PAs but very simple methods for enacting protected area downgrading, downsizing, and degazetting (PADDD).

Preventing the Extinction of Known Threatened Species

227. According to IUCN, as of 2013 there were over 20,000 threatened species globally. While other GEF investments actively address many of the threats to species (i.e. habitat destruction and fragmentation, over-exploitation, climate change, and introduction of invasive alien species), additional efforts are required to prevent the extinction of the unprecedented number of species that have seen their numbers and distribution ranges reduced dramatically due to illegal, unregulated and unsustainable taking, and/or trafficking.

228. In countries where there is significant pressure on threatened wildlife species, GEF will help build the capacity of environmental authorities, law enforcement agencies and the judiciary to reduce poaching inside and outside of protected areas. Investments in these areas is crucial, as the poaching and trafficking of wildlife goes hand in hand with

⁴⁹ When providing support to create new protected areas, the Key Biodiversity Area Standard will be applied. The KBA Standard is formally taken to include the definitions, the criteria and thresholds, delineation procedures used to identify Key Biodiversity Areas. KBAs are sites that contribute to the global persistence of biodiversity, including vital habitat for threatened plant and animal species in terrestrial, freshwater, and marine ecosystems.

⁵⁰ A protected area system could include a national system, a sub-system of a national system, a municipal-level system, or a local level system or a combination of these.

other illegal trafficking of threatened species, as has been well documented on the east coast of Africa with fine woods, such as Chanfuta (*Afzelia bella*), Umbila (*Pterocarpus angolensis*), Mondzo (*Combretum imberbe*) and Pau Ferro (*Swartzia fistuloides*). This support will include strengthening decision and policy-making processes including legislation geared towards limiting and punishing illegal activity. GEF will also enhance science-based wildlife monitoring, communications, knowledge sharing, education and awareness. In demand countries, raising awareness and other behavioural change approaches to reduce demand will be supported.

Implementing the Cartagena Protocol on Biosafety

229. GEF will support for the implementation of National Biosafety Frameworks when the characteristics of the eligible country, as assessed in the stock-taking analysis, recommend a national approach for the implementation of the CPB in that country. 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. GEF will also provide support to eligible countries through regional or sub-regional cooperation projects such as those using regional and sub-regional networks to build capacity for the detection of living modified organisms, with a view to facilitating the sharing of experiences and lessons learned, and harnessing associated synergies. 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.

Implementing the Nagoya Protocol on Access and Benefit Sharing

230. GEF will support national and regional implementation of the Nagoya Protocol and, if still required in specific countries, 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: a) 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; b) development and implementation of a strategy and action plan for the implementation of ABS measures; and c) building capacity among stakeholders (including indigenous and local communities, especially women) to negotiate between providers and users of genetic resources.

231. 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 and the FAO Commission on Genetic Resources for Food and Agriculture.

Enabling Activities: Revision of the National Biodiversity Strategy and Action Plan and National Reporting

232. Enabling activity support will be provided for all GEF-eligible countries to revise their NBSAP, and/or to produce the National Report to the CBD as well as national reporting obligations under the Cartagena Protocol and Nagoya Protocol that will be identified during upcoming COPs and COP-MOPs and that will come due during the GEF-7 period.

Climate Change Focal Area

Global Context of Climate Change

233. Climate change continues to present a growing and significant global challenge to humanity and the biosphere in the 21st century. The 2015 update of the Planetary Boundaries analysis named climate change as one of the four planetary boundaries that have been crossed as a result of human activity.

234. To prevent dangerous anthropogenic interference with the climate system, the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) agreed that actions must be taken to keep global temperature rise below 2°C above the pre-industrial level. The Paris Agreement, which was adopted at COP 21 in December 2015 and entered into force in November 2016,⁵² further aims “to strengthen the global response to the threat of climate change in the context of sustainable development and efforts to eradicate poverty” by keeping global temperature rise this century to below 2°C and aim for 1.5°C above pre-industrial levels, increasing the ability to adapt to impacts of climate change, and making finance flows consistent with a low GHG emissions and climate-resilient pathway.⁵³

235. With entry into force of the universal Paris Agreement, the global community has entered a new era of climate action with an emphasis on implementation in all countries with transparency. Action from both, developed and developing countries, is needed to meet these ambitious goals: currently developing countries produce over 60% of total global GHG emissions, but historically, developed countries are responsible for more than 80% of emissions.

236. All Parties are to put forward nationally determined contributions (NDCs) reflecting the principle of common but differentiated responsibilities and respective capabilities. Every five years, a global stock take will assess the collective progress towards the goals of the Agreement and inform the preparation of future NDCs. Further, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place to support action by developing countries and the

⁵² As of February 2017, 132 of the 197 Parties to the Convention Parties have ratified the Paris Agreement.

⁵³ "Paris Agreement". United Nations Treaty Collection. 8 July 2016.

most vulnerable countries. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

237. Implementation of the Paris Agreement is crucial for the achievement of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). Adverse impacts from climate change can undo the progress made in development and exacerbate threats such as food and water scarcity, disproportionately burdening the poorest and most vulnerable. Beyond SDG 13: Climate Action, a transformation to low-emission, climate-resilient pathways can contribute to achieving and preserving the other SDGs such as SDG 2: Zero Hunger, SDG 7: Affordable and Clean Energy, SDG 9: Industry, Innovation and Infrastructure, SDG 11: Sustainable Cities and Communities, SDG 12: Responsible Consumption and Production, SDG 14: Life Below Water and SDG 15: Life on Land.

Conference of the Parties (COP) Guidance to the GEF

238. The GEF-7 period (2018 to 2020) coincides with a key phase in the implementation of the Paris Agreement. Article 9 of the Paris Agreement confirmed that as an operating entity of the Financial Mechanism of the Convention, the GEF would serve as financial mechanism of the Agreement. Further, Article 13 establishes an enhanced transparency framework for action and support. The COP decision adopting the Paris Agreement urged and requested the GEF to make arrangements to support the establishment and operation of a Capacity-building Initiative for Transparency (CBIT), including through voluntary contributions to support developing countries during GEF-6 and future replenishment cycles.

239. The GEF-7 framework is structured to address these seminal COP decisions for the Paris Agreement, and to further support climate action in developing countries in line with the GEF's role as an operating entity of the financial mechanism of the UNFCCC.

240. The most recent COP guidance was provided at COP 22 in Marrakesh, Morocco in 2016. The COP called upon Parties to ensure a robust seventh replenishment taking into consideration the Paris Agreement. It requested the GEF to provide enhanced support, including enabling activities in the context of national climate strategies and plans, and to continue to assist in particular the least developed countries and small island developing states in efficiently accessing resources. The COP further welcomed the establishment of the CBIT Trust Fund and the decision to integrate it in the seventh replenishment to complement existing support under the GEF. The GEF was also encouraged to continue

alignment of GEF programming with priorities identified in countries' NDCs, where they exist, and to continue to promote synergies across focal areas.

241. In addition, the COP encouraged the GEF to further expand the non-grant instrument pilot and requested the GEF to take into consideration climate risks in all its programs and operations. On capacity building, the GEF was requested to continue to support activities related to the implementation of Article 6 of the Convention. On technology transfer, the GEF was encouraged to continue enhancing collaboration with the Climate Technology Centre and Network (CTCN), and to strengthen linkages with the technology mechanism and the Green Climate Fund (GCF).

Delivery of Climate Change Priorities through the GEF-7 Programming Directions Framework

242. The GEF-7 Climate Change investments encompass opportunities that combine technologies, systems, financial mechanisms, policies, and best practices that support country-driven strategies towards rapid and transformational change in addressing climate change mitigation, while integrating climate resilience measures to address climate change risks. Climate change priorities will be delivered primarily through closely aligned Impact Programs, with special emphasis on transforming energy, urban, and land systems. However, not all of the GEF-7 Climate Change investments can be addressed through the GEF-7 Impact Programs (IPs), thus, additional targeted investments to complement these will be required (see Table 2.10).

243. Projects under relevant IPs will be required to demonstrate alignment to national climate strategies and plans, as well as develop and demonstrate innovative mechanisms that are sustainable beyond the project implementation period. The GEF support will prioritize innovative mechanisms, technology transfer financing, and private sector engagement that are complementary to efforts of other financial mechanisms, such as the GCF, to scale up and replicate in a timely manner. The two cross-cutting initiatives in GEF-7 on Resilience and Non-Grant Innovative Finance will be key to supporting climate change priorities⁵⁴.

⁵⁴ The role of conservation, sustainable management of forests and enhancement of forest carbon stocks is highlighted by Article 5 of the Paris Agreement. The GEF-7 Programming Directions Framework will consider the activities identified and in related decisions and texts, such as those regarding safeguards and the Warsaw Framework for REDD-plus, to

Table 2.10. Convention Guidance for GEF-7 Climate Change Focal Area Investments

UNFCCC Guidance to the GEF	Delivery through Impact Programs and Focal Area Complementary Investments
<p>Serve the Paris Agreement as financial mechanism in the context of national climate strategies and plans.</p> <p>While continuing to:</p> <ul style="list-style-type: none"> • Align GEF programming with priorities identified in NDCs; • Promote synergies across its focal areas; • Support technology-related projects, including those resulting from technology needs assessments; • Support mitigation actions in the forest sector; • Support activities related to the implementation of Article 6 or Action for Climate Empowerment 	<p>Primarily through the following Impact Programs:</p> <p><i>Transforming Energy Systems</i></p> <p><i>Sustainable Cities</i></p> <p><i>Green Infrastructure</i></p> <p><i>Circular Economy</i></p> <p><i>Food Systems</i></p> <p><i>Landscape Restoration</i></p> <p><i>Agricultural Commodities Supply Chains</i></p> <p><i>Amazon Sustainable Landscapes</i></p> <p><i>Inclusive Conservation</i></p>
Support the establishment and operation of the Capacity-building Initiative for Transparency (CBIT)	Through <i>Climate Change Complementary Investments</i> . Aligned to <i>Integrated National Planning</i>
Support the preparation and communication of INDCs	Through <i>Climate Change Complementary Investments</i> . Aligned to <i>Integrated National Planning</i> .
Support National Communications, Biennial Update Reports	Through <i>Climate Change Complementary Investments</i> . Aligned to <i>Integrated National Planning</i> .
Expansion of the non-grant instrument pilot	Continue to support through the Non-Grant Innovative Finance
Take into consideration climate risks in all its programs and operations	Continue to support through the Resilience Systems Thinking approach

maximize the climate benefits obtained through the forest-related IPs. The GEF support will be oriented to all types of forests, and particular attention will be given to the alignment and coordination with other global initiatives, such as the New York Declaration of Forests, the UN Strategic Plan for Forests, and the SGDs.

Impact Programs and Climate Change

Transforming Energy Systems

244. Energy related carbon emissions are the major driver of climate change. The Transforming Energy Systems IP aims to identify targeted investments in specific sectors and countries that not only align with country commitments to the Paris Agreement but achieve high impact through leveraging private sector engagement. Key priorities will be: 1) Sustainable energy for SIDS and LDCs; 2) Grid modernization and integration; 3) Energy management systems and emissions controls for industries; 4) Strengthen energy efficiency accelerators; and 5) Fostering adoption of economy wide policies.

Sustainable Cities

245. The need to engage subnational and local governments, including to facilitate the exchange of experiences and best practices in identifying and implementing opportunities to mitigate GHG emissions and adapt to the impacts of climate change, has been a feature of several COP decisions. The Sustainable Cities IP will address climate change mitigation in the urban energy, transport and waste sectors through the following interventions: 1) Streamline passenger and freight transport systems; 2) Transform urban energy systems to promote adoption of smart grids, smart buildings, and low-carbon districts; 3) Support low-carbon city cluster planning through coordination of inter-city infrastructure and activities; 4) Streamline urban water systems and improve municipal solid waste management.

Green Infrastructure

246. Infrastructure underpins all the major sources of GHG emissions, including our energy systems, transport systems, buildings, industry and land use. The existing stock of infrastructure and its use are responsible for 60% of the world's total GHG emissions, while the infrastructure built in the next 15 years will help determine future global emissions pathways. The Green Infrastructure IP will foster sustainability criteria for low-carbon and resilient investments that support countries infrastructure needs in line with their NDCs, while providing a key opportunity for leveraging private sector investment. Investments can be at no or very low incremental cost; will reduce climate risk; and avoid costly retrofitting later.

Circular economy

247. Climate change mitigation benefits are a major rationale for efforts to foster the circular economy. By using resources more efficiently, reducing waste, and following cradle-to-grave design principles, GHG emissions can be significantly reduced. Areas of early priority that have been identified by the Circular Economy IP include plastics and building materials.

Food Systems

248. According to INDCs communicated, the agriculture sector features prominently in national mitigation and adaptation goals, signalling the willingness of developing countries to take actions to tackle climate change in agriculture for food security and sustainable development. To this end, well-targeted interventions in the agricultural sectors are uniquely able to deliver climate change benefits, as well as socioeconomic and environmental co-benefits. The Food Systems IP will result in climate change mitigation through enhanced carbon stocks from restoration of degraded agricultural land, reduced emissions from improved crop and livestock management, and reduced emissions from increased energy efficiency in food value chains.

Landscape Restoration

249. Soils play a crucial role in global climate processes through their regulation of carbon dioxide, nitrous oxide, and methane. At the global scale, soils 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 Land Restoration IP will work to restore carbon stocks and reservoirs in a variety of ecosystem types, including peatlands, the conversion of which has led to a significant amount of GHG emissions and thus requires particular attention for combating climate change.

Agricultural Commodities Supply Chains

250. Clearance of forests for the production of agricultural commodities is a major cause of deforestation and associated GHG emissions. The Agricultural Commodities Supply Chains IP will stimulate production and market demand for deforestation-free commodities. As compared to the GEF-6 IAP, this IP will broaden the geographic focus and include more commodities, such as coffee and cacao, focusing on regions and countries with important potential for the rapid expansion of these commodities. The

new approach will thus maximize the potential for carbon stock conservation and climate mitigation, and will be fully aligned with COP decisions on the reduction of GHG emissions due to deforestation.

Amazon Sustainable Landscapes

251. Due to its vast carbon stocks, the Amazon plays a critical role in global climate regulation. Despite efforts and progress achieved, land conversion, deforestation and forest fires in the Amazon continue to release a massive quantity of GHG emissions. The Amazon Sustainable Landscapes IP will contribute to climate change mitigation through its activities aiming at enhancing ecosystem resilience and carbon stocks, avoiding deforestation, and increasing the agriculture and forest areas under sustainable management. It is aligned with relevant COP guidance and also considers important provisions on safeguards, including in particular the respect for the knowledge and rights of indigenous peoples and members of local communities.

Inclusive Conservation: Engaging Indigenous Peoples

252. Indigenous peoples play a key role in sustainably managing and conserving a territory estimated to be nearly a quarter of the Earth's surface and vast ocean areas. Being on the front lines of adapting to climate change, these local stakeholders are thus also crucial to preserving the natural carbon stock and mitigating climate change. The Inclusive Conservation IP focuses on empowering these indigenous peoples and local communities to sustainably manage a wide extent of forests and wetlands. This IP is also particularly aligned to the objectives stated in the non-state stakeholder part of the COP 21 Decision.

Climate Change Complementary Investments

253. While the GEF-7 Impact Programs are wide in scope and address most climate change priorities, there are certain components of the Climate Change Complementary Investments that respond directly to UNFCCC guidance and thus require a set of Complementary Investments:

Capacity-building Initiative for Transparency

254. During GEF-7, the CBIT launched in GEF-6 will be mainstreamed and continue to support projects that strengthen transparency-related institutional and technical capacity

in light of the Paris Agreement. As per the COP decision adopting the Paris Agreement, the CBIT will aim:

- (a) To strengthen national institutions for transparency-related activities in line with national priorities;
- (b) To provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement;
- (c) To assist in the improvement of transparency over time.

255. The CBIT will support activities aligned with its aim at the national and regional/global levels. Additional details are provided in the Annex.

NDC preparation and enhancement

256. Given the timing of GEF-7, countries will have the opportunity to update their NDCs with enhanced ambition after the facilitative dialogue of 2018 provides an assessment of collective progress towards the goals of the Paris Agreement. The GEF will continue to support Parties in the preparation and communication of their NDCs, following COP guidance. In addition, collaboration with ongoing global programs that support NDC implementation will continue to be supported through the CBIT.

Enabling Activities

257. The GEF will continue to provide resources to non-Annex I countries to prepare National Communications (NCs) and Biennial Update Reports (BURs) to comply with Convention obligations. The GEF may also support actions and activities to sustainably develop and enhance the capacity of countries to prepare their NCs and BURs through for example a Global Support Program that provides logistical and technical support, capacity building, and knowledge management activities, with a view to facilitating the timely preparation and submission of NCs and BURs.

258. These Climate Change Complementary Investments will be aligned to the impact program on Enhancing Ambition in National Action for SDGs and Conventions and Enhancing Capacity-building Initiative on Transparency (CBIT) beyond Climate Change. Potential synergies with other focal areas for coordinated planning and implementation of the 2030 agenda and other global agreements will be explored.

Land Degradation Focal Area

Global Context of Land Degradation

259. The world population is projected to increase by about 2.5 billion people to 9.7 billion in 2050 (+35%) with rising demands for agricultural produce including food, feed, fuel, fiber, and fuel.

260. About 2 billion ha, or 25 percent of the total global land area has been affected by land degradation. Each year, an estimated 24 billion tons of fertile soil are lost globally. Agricultural GHG emissions – excluding the effects of agriculture on land-use change – make up an estimated 13% of total global emissions. In the drylands, 12 million ha of land are being degraded by desertification annually.

261. Forest degradation and deforestation are of particular concern. Between the years 2000 to 2010, the world lost on average 13 million ha of forest each year to deforestation – the clearing of forests and subsequent conversion of land other uses. During the same decade, in addition, millions hectares of forests were degraded – a reduction in biomass and carbon stocks largely due to unsustainable use.

262. Globally, 1.5 billion people are affected by land degradation, especially rural communities, smallholder farmers, and the very poor. 70% of the world's poorest people live in rural areas and depend on agriculture for their livelihoods, mostly in the tropics.

263. Land degradation processes threaten the livelihoods, well-being, food, water and energy security and increase vulnerability of millions of people, and in many cases cause migration and serious social unrest.

264. Pressure on the global land resource is increasing from local to global scales due to the following factors:

- (a) Growing demand for food and agricultural commodities (e.g. palm oil, soy, and beef) in terms of both quantity (kilojoules of energy) and quality (proportion of animal protein in the diet) for an expanding and more affluent world population;
- (b) Competition for productive land for biofuel, urban expansion and other non-productive uses;
- (c) Decrease or lack of growth in productivity due to decline in soil health indicated by lower nutrient status and organic matter, and other degradation processes;

- (d) Weakened resilience of agricultural production systems on account of depleted biodiversity, (including the genetic bases for crops, livestock, trees) and the associated ecosystem services (pollination for instance);
- (e) Pressures from natural factors such as climate variability and extreme weather events. Climate change is projected to exacerbate variations in year-to-year yields and income from agriculture, threatening the resilience of agroecosystems and stability of food production systems.

265. Gender roles have impacts on both farming and livelihood systems, but the contribution of women smallholder farmers often goes unrecognized. Women farmers often have less access to land, decision making processes, labor, credit, information, technology, and extension. Therefore, the GEF-7 LDFA strategy will mainstream gender by including (i) practical gender needs – improving the conditions of women through access to resources, services and opportunities, and (ii) strategic gender interests – empowering women to take decisions and be better represented in various decision making bodies.

Convention Guidance to the GEF as a Financial Mechanism of the UNCCD

266. 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 Complementary Investments provides the opportunity for eligible countries to utilize GEF resources for implementing the Convention and its forthcoming new long-term strategy (2018-2030).

267. Land Degradation Neutrality (LDN) is the new 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”. Unlike past approaches, LDN creates a measurable target for sustainable land management, promoting a dual approach of measures to avoid or reduce degradation of land combined with measures to reverse past degradation. The minimum objective is that losses are balanced by gains in order to achieve a position of no net loss of healthy and productive land (for details please refer to UNCCD Science-Policy Brief 02, September 2016, “Land in Balance”).

268. The LDN concept is considered as an accelerator of the SDGs and associated targets: 15.3 on LDN, SDG 1 to end poverty, SDG 2 to end hunger and malnutrition and

promote sustainable food production systems, SDG 6 on clean water and sanitation, and SDG 13 on climate action, including strengthening resilience to climate-related hazard and integrating climate change measures in policy.

269. LDN also serves as an integrator of the SDGs as LDN provides opportunities to promote synergies and policy coherence across sectors and at all levels, including the national agendas relating to the SDGs: NDCs, national adaptation plans, and the Aichi biodiversity targets.

270. At the last Committee to Review the Implementation of the Convention CRIC (2016), parties emphasized the need to increase means of implementation to achieve voluntary LDN targets, including capacity building support and the development of transformative projects. Parties encouraged the GEF and the Global Mechanism to provide support for this purpose.

271. The GEF is well-placed to help countries to implement this convention guidance and facilitate coordinated investment in sustainable land management (SLM) as a means to achieve LDN. Since land degradation has both poverty and global environment dimensions, integrated solutions are required to support interventions that address both dimensions. Building synergies across GEF delivery model will pave the way for improvement in the cost effectiveness of interventions, and deliver multiple outcomes toward environmental, social and economic sustainability.

Table 2.11. Convention Guidance for GEF-7 Land Degradation Focal Area Investments

UNCCD guidance to GEF	Delivery through IPs and FA Complementary Investments
<p>The land degradation focal area provides the framework for eligible countries to utilize GEF resources for implementing the Convention and its current 10-year (2008-2018) strategy, which aims to:</p> <ul style="list-style-type: none"> - Improve the living conditions of affected populations; - Improve the condition of affected ecosystems; and - Generate global benefits through effective implementation of the UNCCD. <p>COP12 has invited the GEF to continue its support for the implementation of the Convention in the light of the 2030 Agenda for Sustainable Development, in particular target 15.3. and in line with the LDN concept adopted by UNCCD:</p> <ul style="list-style-type: none"> - Strive for Land Degradation Neutrality with the following objectives: - Maintain or improve ecosystems services; - Maintain or improve productivity, in order to enhance food security; - Increase resilience of the land and populations dependent on the land; - Seek synergies with other environmental objectives; and - Reinforce responsible governance of land. <p>COP12 has also invited the donors to the GEF to consider providing increased support to address country priorities relating to the implementation of the Convention, in the light of the 2030 Agenda for Sustainable Development, in particular target 15.3, during the planning process for GEF-7.</p> <p>COP12 encouraged Parties to engage in South–South cooperation under GEF-6 and invites the GEF to continue its support to Parties in this regard.</p> <p>COP12 Invited the GEF, in the context of enabling activities under GEF-6, to consider technical and financial support for voluntary national land degradation neutrality target-setting.</p>	<p>Impact Programs</p> <p>Food Systems</p> <p>Landscape Restoration</p> <p>Agricultural Commodities</p> <p>Environmental Security</p> <p>Transforming Energy Systems</p> <p>Natural Capital</p> <p>NGI / Green Finance</p> <p>Land Degradation Complementary Investments</p> <p>Diversified agro-ecological food production systems</p> <p>Integrated Landscape Management</p> <p>Creating an enabling environment to support the two objectives above</p> <p>Enabling Activity Support (with a view to expected future COP guidance)</p>

Delivery of Land Degradation Priorities through the GEF-7 Programming Directions Framework

272. To enhance the effectiveness of the GEF-7 LD related delivery, investment will continue to be based on the drivers of land degradation, robust assessment of experience and existing knowledge, and knowledge and experience gained through ongoing implementation of LD related projects and programs. This approach will focus on approaches that can be scaled up to maximize global benefits for the environment and also address the issues of food security and climate change.

273. GEF will continue to apply a comprehensive landscape approach as the best way forward to address the broad multi-faceted nature of land degradation across the range of agro-ecological and climatic zones in arid, semi-arid, sub-humid and humid areas of the world.

274. Further evolution of the LDFA strategy in GEF-7 has two main purposes of (i) seeking effective integration within the Impact Programs for generation of multiple benefits, and (ii) aligning GEF support with the UNCCD's Land Degradation Neutrality (LDN) concept through Land Degradation Complementary Investments.

Impact Programs and Land Degradation

275. Sustainable land management is critical to the global response to food security, climate change, land degradation and threats to biodiversity and loss of other ecosystem services critical to human well-being. The impact programs form a major component of the GEF delivery towards combating land degradation and deforestation in the following ways:

- (a) Food Systems: This Impact Program provides the opportunity for an integrated approach to implementing SLM to increase the prospects for food security for smallholders and communities that are dependent on farming for their livelihoods. The highest rates of food insecurity, malnutrition and poverty correspond to areas with high rates of land degradation and environmental problems, e.g. in regions of sub-Saharan Africa.
- (b) Landscape Restoration: Restoration of productive landscapes will feature as an important element of this IP towards contributing to UNCCD objectives, focusing on dryland forest ecosystems and production areas where agro-forestry land-use systems dominate. A huge opportunity exists to restore agricultural productivity

in (degraded) agro-forestry systems by increasing soil organic matter content⁵⁵, increasing the vegetation and tree coverage in those systems, and generating significant benefits for conserving biodiversity outside the protected area network.

- (c) Agricultural Commodities: Global demand for agricultural commodities, specifically soy, beef, oil palm, coffee, and cocoa, is a major driver of deforestation in the tropics. An enhanced Impact Program on commodities is intended to harness the connectedness along the supply chain between the production, processing, and demand for key agricultural commodities. The synergy with objectives to combat land degradation is on the sustainable production side of the program, especially by involving smallholder farmers and local communities and facilitating a mutually beneficial engagement with the private sector. A window of opportunity exists during which changes to commodity production pathways that are more sustainable and environmentally friendly can be made before irreversible damage is done to the respective agro-ecosystems.
- (d) Environmental Security: This Impact Program will maintain and restore some critical terrestrial ecosystems for functionality linked to providing populations with basic ecosystem services, such as water, food, carbon sequestration, and land and soil stability and quality.
- (e) Transforming Energy Systems: This Impact Program will to some extent address the energy/water/food nexus to help small holders achieve resilience and increase productivity. Rural and urban energy solutions are often based on the utilization of fuelwood and charcoal that are in need to be made more efficient and/or replaced.
- (f) Natural Capital: The production systems depend largely on the natural capital (biodiversity, land, soil, water) and associated ecosystem services. The LDN approach will provide the conceptual framework to establish a baseline, targets, indicators and the metrics.

⁵⁵ Increasing carbon stocks in soils is the objective of a major new initiative “4 per 1000”.

- (g) Sustainable Cities: Cities are known as important drivers for food production. Integrated land-use planning in support of LDN calls for the optimization of the landscape in terms of where SLM should be pursued.
- (h) Non Grant Instrument (NGI) and Green Finance: The NGI will continue to be an innovative instrument to better catalyze investments from the private sector, including SME and smallholder farmers. Sustainability of financing mechanisms for SLM, innovation, and financing access to the smallholder farmer for scaling up will help implementation of the entire GEF-7 LD Complementary Investments. The Green Finance IP will ultimately help the transition to a low-carbon, climate-resilient, biodiversity-friendly and land degradation neutral economy.

Land Degradation Complementary Investments

276. The LD Complementary Investments focuses on production landscapes where agricultural and rangeland management practices underpin the livelihoods of poor rural farmers and pastoralists.

277. LD Complementary Investments are proposed in the following areas: 1) Diversified agro-ecological food production systems; 2) Integrated Landscape Management, 3) Systems Resilience, 4) Creating an enabling environment to support the two objectives above, 5) Enabling Activities, and 6) Targeted Research.

- (a) *Diversified agro-ecological food production systems*: Diversified agro-ecological food production systems aim to improve productivity and maintain or improve flow of services that underpin food production and livelihoods. These agro-ecological approaches will support an efficient use of land, soil, water, and vegetation in crop and livestock production systems, including temporal diversification and spatial diversification at various levels, including plot, farm and landscape (e.g. crop rotation, intercropping; mixed farming as crop-livestock and crop aquaculture systems).
- (b) *Integrated landscape management*: Integrated landscape management is proposed to address the physical, biological and socio-economic aspects of the processes of land degradation, with a particular attention to desertification and deforestation to maximize the delivery of multiple benefits in the context of food security and livelihoods of affected communities. Integrated landscape management is a comprehensive framework to invest in the management of landscape across sectors and across political or administrative boundaries in the

- context of sustainable development. This framework will support wide applications of innovative tools to prioritize policy reforms, investments, and other interventions to optimize the collective impact of all interventions across the landscape. Scaling up of SLM practices and the restoration of landscapes will be particularly supported, including the use of locally adapted species, agro-forestry, farmer-managed natural regeneration, and practices for sustainable supply of wood and biomass energy.
- (c) *Creating an enabling environment to support diversified agro-ecological food production systems and integrated landscape management:* This objective aims to support additional and innovative aspects of the enabling environment to permit the achievement of the two objectives above. Creating and reinforcing an enabling environment for SLM will include support to policies that help SLM across concerned sectors and that remove disincentives to adoption of these practices, policies, capacity building to support integrated landscape management, and conditions conducive to comprehensive and representative stakeholder engagement that reflect all the components of the land and food systems.
 - (d) *UNCCD Enabling Activities:* GEF support under the GEF-7 LDFA strategy will include financing for UNCCD enabling activities to support the implementation of the UNCCD strategy and in accordance with countries' obligations to the convention, and based on decisions from the COP. Support will focus on UNCCD reporting obligations and formulations of National Action Plans in line with the new long-term (2018-2030) strategy. The GEF-7 LDFA strategy is seeking a more strategic approach towards enabling activity support with a view to mainstreaming SDGs and enabling cross-sectoral coordination in countries. This will include a land degradation focal area set aside focusing, among other issues, on building the necessary institutional capacity and processes for cross-sectoral integration.
 - (e) *Targeted research:* Land degradation affects global public goods and the integrity and function of ecosystems. The interconnection between SLM and other global benefits is known, but targeted research is needed to reinforce the scientific evidence-base, and improve techniques for monitoring, and assessing multiple and beneficial impacts, including the articulation of process indicators of resilience. It will also be essential to evaluate the implementation of LDN so that factors that enhanced or proved to be barriers to success can be identified and addressed.

International Waters Focal Area

Global Context of International Waters

278. One of the most essential ingredients for life on this planet, a resource that connects ecosystems and supports life – Water - is experiencing tremendous pressures. These pressures are forecasted to increase over the coming decades. The importance of healthy aquatic ecosystems is being highlighted in many national strategies and political priority setting exercises as the systems are intrinsically linked to opportunities for prosperity and economic growth. Both marine and freshwater ecosystems have been recognized in the Sustainable Development Goals.

279. Water crises, extreme weather events, and interstate conflict with regional consequences have consistently ranked among the top five global risks in terms of likelihood and/or impact in the World Economic Forum's annual Risk Reports over the last five years and large scale involuntary migration ranked among highest risk for two years in a row. While fragility and conflicts are rarely caused by environmental insecurity or water stress by themselves, climate change and increased climate variability, land degradation and water stress are considered compounding factors for loss of livelihoods, conflicts and displacement especially in dry areas, contributing to large-scale movement of people across borders and continents in the next decades. The OECD fragility framework provides a useful systematic assessment of country fragility based on political, societal, economic, environmental and security concerns.

280. Calls are made for countries to step up action safeguarding the marine and freshwater ecosystems to not only ensure continued growth and prosperity and potentially unlock new economic opportunities. Resilience is needed to cope with the effects of a changing climate, and a whole suite of other anthropogenic pressures that may halt development and in the most extreme cases eradicate the ecosystems that support life. The need for strong resilient marine and freshwater ecosystems is clear to all levels of society and resource users. But both of these two interlinked sets of resources cuts across a myriad of sectoral needs and themes (food security, flood protection, agriculture, transport, energy, ecosystems, urban infrastructure) and are not bound by political boundaries, hence sustainable solutions demand transboundary cooperation and governance mechanisms to secure that local and national needs, priorities and obstacles are acknowledged and respected between the stakeholders sharing a common water body.

281. The Sustainable Development Goals call for a set of specific actions on both marine and freshwater ecosystems that will be needed to secure a healthy environment for ourselves and future generations. If we safeguard the transboundary marine and freshwater ecosystems through improved governance, we stand a better chance for meeting key challenges of increasing demands of a growing population, including increased need for food, energy and water while supporting iconic biomes. GEF and its International Waters Focal Area through Complementary Investments will in GEF 7 play a substantial role in supporting the achievement of the targets, while continue to serve as the only global funding mechanism to invest in transboundary Water ecosystems and their management.

282. Transboundary river basins cover about 50 % of the earth's land surface and are home to about 40% of the world's population. 1.2 billion people live in river basins where human water use already has surpassed sustainable limits including the majority of fragile countries. Yet, only a fraction of the 286 basins identified are governed by a cooperative agreement which provide among other a framework for country interaction and the settlement of disputes. Extended droughts, overexploitation, and desertification contribute to local conflicts where compounded by weak governance and social instability and can escalate to regional conflicts and large scale displacement. The Transboundary Waters Assessment Program recently published a comparison of five different transboundary ecosystems, namely, aquifers, rivers, lakes, large marine ecosystems and ABNJs and associated risks. The TWAP identified a number of trends and findings that crystalizes challenges that the GEF7 International Waters Complementary Investments will work towards addressing as highlighted below:

- (a) Transboundary aquifers are at high risk, due to lack of Governance mechanisms.
- (b) Special attention should be paid to the impacts of upstream activities on deltas, in particular the reduction of sediment supply (resulting in sinking deltas) and of water flows due to dams and abstractions and to pollution.
- (c) Four groups of transboundary river basins have been clustered due to similar risk profiles. These clusters offer opportunities for common management strategies within each of these groups, while simultaneous offering a unique opportunity for learning between and within these clusters.
- (d) Water Risks are projected to increase in the next 15-30 years, particular in some hotspot regions: the Middle East, Central Asia, South Asia and Africa.

- (e) Policy responses for LMEs should be protecting marine habitats, through improving LME governance and integrating consideration of the natural benefits humans derive from marine ecosystems into policy(ies).
- (f) Management of LMEs can be considerably improved by strengthening the quality of data and information and by assessments at sub-LME scales.
- (g) Governance arrangements for the Open Oceans should connect to those for areas under national jurisdiction at the regional level.
- (h) An ongoing and robust scientific support enterprise is essential in providing confidence to policy and decisions makers within Areas Beyond National Jurisdiction that resources are being appropriately allocated.

283. The goal of the International Waters focal area is the promotion of collective management of transboundary water systems and subsequent implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services.

284. To achieve this the International Waters Complementary Investments will support investments within three objectives:

- (a) Catalyze foundational capacity building, portfolio learning and targeted research needs for multi-state cooperation
- (b) Enhance multi-state cooperation and catalyze investments to balance conflicting uses in transboundary surface and groundwater.
- (c) Enhance multi-state cooperation and catalyze investments in LMEs to rebuild fisheries, protect coastal habitats and reduce pollution.

285. The GEF-7 International Waters Complementary Investments will be continuing the successful approach of programming of GEF resources accompanying progressive multi-state commitments to collective action. One of the corner stones of these successes builds on bringing states together through foundational investments that will deliver Transboundary Diagnostics Analysis (TDAs) followed by the formulation of Strategic Action Programs (SAPs). Furthermore, GEF projects will incorporate capacity building, knowledge generation and a small sample of target research project, to further the

common understanding of upcoming threats of particular relevance to furthering governance of transboundary waters on specific topics.

286. Bringing countries together through foundational processes, to facilitate agreement on regional priorities while building trust between states sharing water resources, leads to joint development benefits and regional integration. Leveraging political commitment through fostering of legal institutional frameworks, is a key feature in order to catalyze collective action to underpin the implementation of SAPs through Impact Program. Stimulating innovative transboundary policy, legal and institutional reforms and pilot demonstrations may take multiple investments to reach through transformative impacts, but the GEF IW portfolio and its impressive investments through the last 25 years have proven that this concept of long-term engagement delivers.

287. Formulation of Transboundary TDA and SAPs to address cross-sectoral opportunities and trade-offs while outlining an agreed agenda realizing countries sustainable development needs and maintain the underlying ecosystem health and its services. However, the engagement model will not be viable, nor credible if they only address environmental pressures. Therefore, it is paramount that capacity building, technical assistance, institutional aspects of multilevel and multi-sectoral governance reforms and gender mainstreaming are key pieces of such long-term strategic transboundary governance frameworks.

288. The GEF 7 International Waters Complementary Investments will not only be instrumental in supporting governance of transboundary water ecosystems, but also supporting setting up new policies and institutional reforms, as well as in delivering to regional Conventions, strengthening transboundary cooperation and assisting countries in delivering towards a number of SDG and Aichi targets.

Delivering against the MEAs

289. Water Security are prioritized in most INDCs and NBSAPs. Notably, 44 SIDS and a total of 2/3 of all the INDCs submitted in relation to the Paris Agreement refer to oceans, many emphasizing Blue Economy opportunities. The IW FA Complementary Investments will contribute to the achievement of Aichi Targets 2, 5, 6, 7, 8, 9, 10, 11 and 14, as well as contribute to the implementation of Stockholm Convention on POPs and the Minamata Convention on Mercury. Furthermore, a host of related conventions and agreements, such as the two UN Freshwater Conventions, draft articles on transboundary aquifers, RAMSAR Convention, and FAO guidelines on fisheries complement the global legal framework in shared waters. Further, the Investments will prepare countries to work on

complying with the Code of Conduct for Responsible Fisheries, VSSFSG, support the 2009 PSMA and support countries in following UNCLOS guidance to conserve marine resources.

290. In country based and regional context, the UNCCD is addressing land security with a clear focus on fragility, e.g. within the '3 S' Initiative on Sustainability, Stability and Security in Africa.

Table 2.12. GEF 7 International Waters Complementary Investments

Promote collective management of transboundary water systems and subsequent implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services.		
International Waters Objectives	Alignment of IP and Complementary Investments	SDGs and Aichi Targets
Catalyze foundational capacity building, portfolio learning and targeted research needs for multi-state Cooperation	Through Complementary IW Investments	Particular SDG 6, 14 and 15
Enhance Multi-state cooperation and catalyze investments to balance conflicting uses in transboundary surface and groundwater.	<p>Deliver primarily through complementary IW investments and following IPs:</p> <ul style="list-style-type: none"> • Amazon Sustainable Landscapes • Food Security • Green Infrastructure <p>And in conjunction with following complementary investments:</p> <ul style="list-style-type: none"> • Chemicals and Waste • Land Degradation 	<p>SDG 2, 5, 6, 7, 11, 14 and 15 <u>Aichi Goal A. Address underlying causes</u> 2) Integrate biodiversity and development <u>Aichi: Goal B. Reduce direct pressures</u> 5) Halve rate of habitat loss 6) Achieving sustainable fisheries 7) Sustainable agriculture, aquaculture, forestry <u>Goal C. Enhance state of biodiversity</u> 11) Expansion of Protected Area Networks and Effective Management <u>Aichi: Goal D. Enhance benefits of ecosystem services</u> 14) Restore and safeguard essential ecosystem services 15) Enhance ecosystem resilience and carbon stocks</p>
Enhance Multi-state cooperation and catalyze investments in LMEs to rebuild fisheries, protect coastal habitats and reduce pollution.	<p>Deliver primarily through following IPs:</p> <ul style="list-style-type: none"> • Healthy Oceans for Sustainable fisheries • Circular Economy • Green Infrastructure <p>And in conjunction with following complementary investments:</p> <ul style="list-style-type: none"> • Chemicals and Waste • Biodiversity • Land Degradation 	<p>SDG: 2, 5, 6, 14 <u>Goal A. Address underlying causes</u> 2) Integrate biodiversity and development 3) Address incentives harmful to biodiversity <u>Aichi: Goal B. Reduce direct pressures</u> 5) Halve rate of habitat loss 6) Achieving sustainable fisheries 7) Sustainable agriculture, aquaculture, forestry 10) Minimize pressures on reefs and other vulnerable ecosystems <u>Aichi: Goal D. Enhance benefits of ecosystem services</u> 14) Restore and safeguard essential ecosystem services 15) Enhance ecosystem resilience and carbon stocks</p>

291. The International Waters Complementary investments will not only be delivering to the SDGs and Aichi Targets identified in table 2.12 but also to a number of international conventions, treaties, and agreements addressing international waters and their management. Through ongoing knowledge management investments such as IWLEARN, the Complementary Investments will continue to support and engage with regional and global stakeholders to increase collaboration and cross support to investments and processes. The construction of marine agreements is intricate and coupled with a set of global and regional legal instruments, the Global Program of Action for Land Based Sources of Marine Pollution and several regional seas conventions, protocols and support to countries under endorsed SAPs. Examples of such support needed will be to assist countries to move from commitment to action to implement the Code of Conduct for Responsible Fisheries, the Voluntary Small Scale Fisheries Guidelines, the 2009 Port State Measurement Agreement and finally support countries in following UNCLOS guidance to conserve marine resources.

292. The potential for fostering multistate-cooperation on shared river basins and aquifers is increasing due to continuous positive development on international legal frameworks on transboundary freshwater systems. The fact that the United Nations Convention on the Non-navigational Uses of International Watercourses entered into force on the 17 August 2014, and the decision of the 1st of March 2016 that countries outside the ECE region can accede to the Convention of the Parties to the United Nations Economic Commission for Europe (UNECE) Water Convention, shows a significant momentum in support for regional cooperation. Furthermore, guidance on the governance of transboundary aquifers is provided through the UN General Assembly Resolution 63/124 and draft articles on the 'law of transboundary aquifers' annexed therein.

293. The IW focal area will deliver at scale benefits by creating incentives to combine multiple resources into larger, integrated multi-country agendas and catalyzing substantial cross-sectoral co-finance. Investment packages may combine grant funds to public sector entities and concessional NGI funds to de-risk private sector engagement both in innovation and upscaling successful approaches on local level and across supply chains.

Complementary Investments

294. The Complementary Investments will deliver towards the following objectives two objectives 1) Catalyze foundational capacity building, portfolio learning and targeted research needs for multi-state Cooperation and 2) Enhance Multi-state cooperation and

catalyze investments to balance conflicting uses in transboundary surface and groundwater.

295. Objective 1: Catalyze foundational capacity building, portfolio learning and targeted research needs for multi-state Cooperation will deliver following main outputs:

- (a) Political commitment/shared vision and improved governance demonstrated for joint, ecosystem-based management of transboundary water bodies
- (b) Innovate demonstration actions implemented, such as in water quality, quantity, conjunctive management of groundwater and surface water, fisheries, coastal habitats
- (c) IW portfolio performance enhanced from active learning/KM/science/experience sharing
- (d) Targeted research on upcoming critical global concerns to transboundary fresh and marine waters and their sustainable management
- (e) Support to adoption of standards for the shipping industry towards reducing sea-based noise pollution.

296. Objective 2: Enhance Multi-state cooperation and catalyze investments to balance conflicting uses in transboundary surface and groundwater, will delivering support to cooperation in transboundary freshwater basins.

297. Support will focus on interventions in shared basins where water stress creates both a challenge but can be a driver and opportunity for cooperation. Interventions will prioritize preventative actions in transboundary basins facing multiple stressors. Investment in cooperation among countries in shared basins can be one avenue to increase interaction among countries with increasing trade and transport creating common interests and providing an entry point for regional integration and peaceful country relations. As identified by WRI, WWF, TWAP ⁵⁶ emerging hotspots appear to be greatest in Africa, MNA and sub-regions of Asia and further work is on the way in GEF-6 to identify global and regional nexus hotspots. Cooperation on water is an imperative in most international basins to support the need for water, food, energy, and ecosystems

⁵⁶ The TWAP River Basins (TWAP RB) component is a global assessment of 286 transboundary river basins, and is an indicator-based assessment, allowing for an analysis of basins, based on risks to both societies and ecosystems.

security and related dimensions for each nation. IW support to freshwater basins will support innovative approaches in supporting countries to consider water, food, energy and environment nexus dimensions as an entry point for cooperation and reducing potential for conflicts between countries sharing water and related resources. To do so effectively and enhance delivery of a range of GEBs, these investments will leverage the comparative advantage and expertise across GEF across focal areas to address multiple environmental dimensions and deliver against country commitments to a number of MEAs in conjunction with other focal area resources (such as BD, LD, CW and SFM). IW support in freshwater basins will therefore focus on three sub-components:

- (a) *Cooperation on shared freshwater surface and groundwater basins.* Support will combine the need for long term support to bring countries together to realize the opportunities from cooperation on their shared resources ‘beyond the river’ itself and catalyze stable regional legal and institutional mechanisms for cooperation, underpinning peaceful country relations in pursuing investments for energy, water, food, and ecosystems security. IW support would also enhance co-riparian capacity in the governance of their national resource base and support the consistency of national policies and regional and MEA commitments. Investments would support processes and innovative tools for the countries to agree on a cross-sectoral program of cooperation and moving the interactions from a zero-sum game to realizing the opportunities for benefit sharing across borders and sectors.
- (b) *Bridging the science to policy gap: enhance availability of sound data and information for science based policies and decisions.* The subcomponent will support public and private partners to enhance the quality, coverage and free availability of sound information on surface and groundwater availability and use, natural resources, and related grey and green infrastructure assets and adaptation deficits. On regional level this will build the science base and dialogue for informed prioritization of investments; on global level this effort will enable predicting future ‘hotspots’ and ‘basins at risk’.
- (c) *Increase water, food, energy and environmental security in transboundary basins.* Investments will be country and context driven and include a full range of policy reforms, capacity building efforts and investments to aid countries in implementing agreed program of action. IW support will aim to build synergies across the GEF and combine the strength and expertise of the GEF across focal areas in order to increase delivery to countries. Realizing benefits from

cooperation at scale will increase multi-level/multi-level ties and interactions among countries sharing a basin/sub-region and deflate the likelihood of escalating conflict potential. Investments will support a context driven menu of interventions across focal area objectives (incl. IW, BD, LD, and CW) such as, e.g. in nature based approaches to improve land management and biodiversity benefits; the establishing minimum flows to maintain healthy ecosystems and aquatic biodiversity; regional and national management of fish stocks, to minimize threats to freshwater fisheries and associated ecosystems; conjunctive management of surface and groundwater; water efficiency reducing point and non-point sources of pollution (incl. nutrients, agricultural chemicals, mining effluents, elimination of POPs etc.), and flood and drought early warning systems - to name a few. Flood and drought early warning systems can be instrumental for countries and the international community alike to intervene early and before the onset of destabilizing social conditions and out-migrations.

Impact Programs and International Waters

298. Following Impact Programs will be assisting in delivering towards Objective 3 in the International Waters Complementary Investments Framework - Enhance Multi-state cooperation and catalyze investments in LMEs to rebuild fisheries, protect coastal habitats and reduce pollution.

299. International Waters and its management is essential to support global food and energy security, key biodiversity fauna and habitats. The International Waters Strategy will have multiple linkages to many proposed Impact Programs, but for simplicity reasons only a few of these Impact Programs have been listed below, as they present the main vehicles for delivery of the International Waters Complementary Investments.

Circular Economy Impact Program

300. Plastics are omnipresent due to their tremendous functionality at low cost; however, they have increasingly apparent costs. After a short first-use cycle, plastic packaging escapes collection systems and the vast majority ends up in waterways and oceans degrading these valuable natural resources. Leakage into the oceans is a particular concern with 150 million ton of plastics currently in the ocean and an estimate that there will be one ton of plastic for every three tons of fish within 25 years. Activities will be addressing the full suite of interventions relevant to the plastic value chain with emphasis on the impacts on ocean ecosystems. This includes identifying alternative sources to

petroleum feedstock, redesigning products, changing consumer behavior and improving waste management.

Healthy Oceans for Sustainable Fisheries

301. 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 ecosystems. Marine, open ocean and coastal ecosystems health are fundamental to life on earth, providing critical ecosystem services for billions of people (as captured by SDG14). However, these valuable ecosystems lack sustainable governance resulting in continued degradation due to over- and destructive fishing, habitat loss and pollution compounded by climate change. GEF-7 will confront the major stressors facing these valuable transboundary ecosystems by building on and furthering national implementation of identified stressors in transboundary Large Marine Ecosystems and Areas Beyond National Jurisdiction to sustain and restore the health of marine, open oceans and coastal ecosystems.

Potential Partners and existing platforms

302. The GEF is one of the largest grant financier in international waters. The GEF created a unique cross-agency and multi-actor platform of knowledge exchange and capacity building on international waters through IW-learn. IW-learn is a dynamic mechanisms and able to partner with a range of additional actors to aid in moving forward themes, such as – currently – including economic evaluation, nexus assessments and benefits sharing, international water law, gender mainstreaming, and economic evaluation of natural assets. With regard to regional cooperation/transboundary waters and delivery against MEAs on national level GEF agencies have a solid track record in supporting country driven processes on cooperation on shared marine and fresh waters, watershed and natural resource management and protection of terrestrial and aquatic biodiversity. One example of this is the cooperation with the CGIAR system, as important partners to drive forward innovation across a range of partners.

Chemicals and Waste Focal Area

Global context of Chemicals and Waste

303. Over the past 20 years, the work of the GEF on chemicals has focused on end of pipe solutions with some exceptions such as the development of alternatives to DDT for vector management and in the production of Dicofol and anti-fouling paints. This was necessary due to the nature of the chemicals being addressed. With the addition of new chemicals by the Stockholm Convention, more GEF engagement in the SAICM process and the adoption of the Minamata Convention, the role of the GEF in the sound management of chemicals and waste requires a new approach to deal with chemicals in use in products and industrial processes.

304. The SDG's provide a framework for development, and a number of SDG's target sustainable production and consumption. Of relevance to de-toxifying development would be SDG's 6, 9, 11 and 12. The GEF can pilot interventions and bring down the barriers in cities/countries that are interested in detoxifying their development supply chains, so that construction materials, textiles, consumer electronics, agricultural chemicals etc. use sustainable materials that do not contribute to toxic loading of the environment.

305. The chemicals investment framework will support the reduction of POPs, Mercury, ODS, lead in paints, chemicals of global concern in the supply chain of commercial and domestic products and highly hazardous pesticides covered under Annex III of the Rotterdam Convention due to their impact on global food supply.

COP guidance to the GEF

306. The GEF functions to fulfil the following roles in the multilateral architecture for the sound management of chemicals and waste:

Table 2.13. Role of Chemicals and Waste Focal Area in the global context of Sound Management of Chemicals and waste

Convention/Process	Role of the GEF
Stockholm Convention on Persistent Organic Pollutants	Operates the Financial Mechanism on an interim basis
Minamata Convention on Mercury	Is included in the Financial Mechanism of the Convention
Montreal Protocol on Substances that Deplete the Ozone Layer	Provides support to Countries with Economies in Transition to implement the Protocol
Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal	Indirect support through projects to implement the Stockholm and Minamata Convention
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Indirect support through projects to implement the Stockholm and Minamata Convention
Strategic Approach to International Chemicals Management (SAICM)	Supports specific SAICM priorities

307. The chemicals and waste focal area directly responds to the guidance from the COPs and needs of the Stockholm Convention and Minamata Convention and responds to certain requests from SAICM, and helps support the compliance needs of countries with economies in transition to meet their obligations under the Montreal Protocol). The guidance provided to the GEF primarily points to the elimination and phase out of the toxic chemicals covered by the Conventions. The GEF-7 Chemicals and Waste (CW) Complementary Investments serve to:

- Eliminate/restrict/control emissions of the chemicals listed in Annex A, B and C of the Stockholm Convention and;
- Eliminate emissions and releases of mercury in activities and processes listed in Annexes A, B, C and D of the Minamata Convention on Mercury as well as support the control of supply and trade, waste and sound management and storage of mercury and mercury containing waste.
- Phase out the production and consumption of Hydrochlorofluorocarbons and Hydrofluorocarbons from Countries with Economies in Transition
- Support the objectives of the Strategic Approach to International Chemicals Management, specifically in supporting the global phase out of the use of lead in

the manufacture of paint and pigments, building capacity for management and disposal of e-waste, elimination of chemicals of global concern from the supply chain of commercial and domestic products and support to countries to control and prevent the use of highly hazardous pesticides that enter the global food supply chain.

308. Globally efforts to shift to sustainable patterns of production and consumption and principles such as the circular economy offers opportunities to leverage resources from these efforts, to ensure that the work of the GEF on chemicals and waste not only supports these actions, but also provides the evidence for acting.

Delivery of Chemicals and Waste Priorities through the GEF-7 programming Directions Framework

309. Recognizing that global environment benefits can be additionally achieved for chemicals and waste through investments in energy intensive industries, cities, commodities and green infrastructure as well as in extractive zones in the Amazon, the chemicals focal area could support the following impact programs in so far as they can contribute to or above the reduction targets for the focal area:

- Sustainable Cities
- Transforming Energy Systems
- Agricultural Commodities Supply Chain
- Amazon Sustainable Landscapes
- Green Infrastructure

310. Additionally, investments in the sound management of chemicals and waste should seek to promote, as far as is practical, circular approaches to resource use and promote sustainable production and consumption.

Chemicals and Waste Focal Area Complementary Investments

311. The GEF-7 CW Complementary Investments propose to move away from single convention programs to thematic programs. In GEF-7 there will be increased attention placed on maximizing private sector engagement and public-private sector investments in the CW cluster as well as gender mainstreaming in the CW cluster. *The investment strategy is built on an overarching goal of detoxifying development.*

312. The SDG's provide a framework for development, and several SDG's target sustainable production and consumption. Of relevance to de-toxifying development would be SDG's 6, 9, 11 and 12. The GEF can invest in programs that support removal of the barriers in cities/countries that are interested in detoxifying their products and materials supply chains to prevent toxic loading of the environment.

313. The Chemical and Waste Complementary Investments will support the reduction of POPs, mercury, ODS, lead in paints, chemicals of global concern in the supply chain of commercial and domestic products and highly hazardous pesticides that enter the global food supply.

314. Given the specificity of the interventions required to implement the chemicals and waste agenda most programming for chemicals and waste will fall within four broad program areas that are described in more detail below.

Industrial Chemicals Program

315. This program is intended to eliminate or significantly reduce chemicals listed under

- The Stockholm Convention on Persistent Pollutants
- The Minamata Convention on Mercury
- The Strategic Approach to International Chemicals Management
- The Montreal Protocol on Substances that Deplete the Ozone Layer

316. Through supporting projects and programs that address:

- Elimination of production, use and stockpiles;
- Reduction or elimination of emissions and releases.

317. In support of the above, this program will fund facilitation of enabling environments including the removal of barriers to market access of manufacturing of products containing GEF relevant chemicals, introduction of alternatives and reduction of production of the pure chemical using sustainable/ green chemistry approaches and that promotes a shift to a circular economy and that supports de-toxifying products and material supply chains.

Agriculture Chemicals Program

318. This program will address the agricultural POPs. Where the chemicals are in use, investments will be made to introduce alternatives with a preference given to non-chemical means. The program will target the reduction of Endosulphan, Lindane and highly/severely hazardous pesticides that enter the global food supply chain as well as address plastics used in agriculture.

319. This program will also address the phase out of DDT in the vector control sector.

Least Developing Countries and Small Island Developing States Program

320. This program will seek to address the sound management of chemicals and waste through strengthening the capacity of sub-national, national and regional institutions and strengthening the enabling policy and regulatory framework in these countries. The program will provide support to the development of public-private frameworks and platforms specifically adapted to the circumstances of LDCs and SIDS to enable the sound management of chemicals and waste.

321. Under this program, locally appropriate solutions will be encouraged as well as the use of existing regional institutions.

322. This program does not prevent LDCs and SIDS from accessing resources from the other 3 programs.

Enabling Activities

323. This program will:

- Support enabling activities under the Stockholm Convention, including National Implementation Plans (NIPs) and NIP Updates
- Support enabling activities under the Minamata Convention, including Minamata Initial Assessments (MIAs) and artisanal and small-scale gold mining National Action Plans (ASGM NAPs)
- Support global monitoring of chemicals under the Chemical Conventions

Programming for Impact

324. In programming resources to address chemicals and waste priorities the following principles will be used in determining the choice of projects in the focal area.

- (a) Cost Effectiveness - consider the potential chemicals reductions of a proposed activity relative to its costs.
- (b) 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.
- (c) Innovation – Projects should seek to develop and scale locally developed technologies and practices particularly in the context of the LDCs/SIDs program including in the design of financial mechanisms at the sub-national, national and regional levels.
- (d) Private Sector Engagement –Projects should seek to create the enabling environments in which the private sector can engage to reduce the use of harmful chemicals and to prevent the emission of harmful waste.
- (e) Programs/Programs that promote/lead to Resource Efficiency and circular economy.
- (f) Prioritized under National Implementation Plans/Minamata Initial Assessments/ASGM National Action Plans.
- (g) Builds on existing networks, platforms, regional, national and sub-national institutions.
- (h) Supports the objectives of the Impact Programs.

GEF-7 Small Grants Programme

325. The GEF Small Grants Programme (SGP) was launched as a GEF Corporate Program to finance the development of community-led initiatives. It has been specifically designed to mobilize bottom-up actions by empowering local civil society organizations, and poor and vulnerable communities, including women and Indigenous Peoples. For the past 25 years, SGP has been implemented in 126 countries through a decentralized delivery mechanism.

326. SGP remains one of the GEF's most successful flagship initiatives and it enjoys strong support from stakeholders. The Joint Evaluations by IEO and UNDP's Independent Evaluation Office have concluded that SGP continues to play a key role in promoting the GEF's objectives. It specifically noted that SGP continues to support projects that are relevant, effective and efficient in achieving global environmental benefits, while addressing issues of livelihoods, poverty, gender equality and women's empowerment. They also found evidence of strong replication, scaling-up, sustainability, and mainstreaming of activities. SGP plays an important role in meeting the objectives of the MEAs that the GEF serves, particularly in ensuring local stakeholder involvement.

327. For GEF-7, SGP will continue to support and strengthen innovative and scalable initiatives to protect the global environment at the community level. SGP will maximize local knowledge and capacity by allowing for country-driven approaches and enhancing adaptability of projects. SGP will continue to serve as "incubators" of innovation, thereby supporting the design and replication through larger projects supported by the GEF and/or other partners.

328. Based on lessons learned during the last 25 years, and inputs from recent stakeholder consultations, including with governments, Convention focal points, and the private sector, SGP under GEF-7 will focus on strengthening partnerships, knowledge and innovation from the bottom up that can help provide effective approaches and tools for policy-makers and the private sector at sub-national and national levels, and which can be actively scaled up through relevant Impact Programs.

329. In GEF-7, SGP would specifically focus on the following strategic initiatives through landscape and seascape approaches, which complement the proposed Impact Programs at the community level: (a) Sustainable Agriculture and Food Security; (b) Low-Carbon Energy Access Benefits; (c) Local to Global Coalitions in Chemicals and Waste Management; and (d) Catalyzing Sustainable Urban Development.

330. The role of SGP goes far beyond grant making at the country level. SGP plays a crucial role in providing strategic services to the civil society and community organizations by enhancing their institutional, technical and financial capacities; and develop partnership platforms and networks for scaling up. Through the Grantmaker Plus initiatives, including: 1) CSO-Government-Private Sector Dialogue; 2) Social Inclusion; and 3) Citizen Based Global Knowledge Platforms, SGP will act as a convener for civil society, governments, and the private sector on key global environmental issues towards relevant GEF programs and projects, particularly in transforming policies and practices for sustainability under the Impact Programs.

FINANCIAL BREAKDOWN ACROSS IMPACT PROGRAMS AND FOCAL AREA COMPLEMENTARY INVESTMENTS

Table 2.14. Financial breakdown across Impact Programs and Focal Area Complementary Investments*

Impact Programs	Finance Envelopes (\$ million)
Landscape Restoration	400
Transforming Energy Systems	400
Food Systems	500
Sustainable Cities	450
Environmental Security	50
Healthy Oceans for Sustainable Fisheries	250
Natural Capital	50
Green Finance	75
Green Infrastructure	75
Agriculture Commodities Supply Chains	130
Amazon landscapes	250
Wildlife for Sustainable Development	250
Inclusive Conservation: Engaging Indigenous Peoples	50
Circular Economy	80
Integrated National Planning for MEAs/SDGs	50
Small Grants Program	140
Non-Grant Instruments (across Impact Programs)	400
Sub-total	3600 (60%)
Focal Area Complementary Investments	Minimum Finance Envelope
Biodiversity	500
Climate Change	400
Land degradation	350
International Waters	300
Chemicals and Waste	850
Sub-total	2400 (40%)
TOTAL	6000

* Does not include budget for corporate programs such as the Corporate Budget, the Country Support Program and Cross-cutting Capacity Program.

CHAPTER 3
GEF-7 POLICY AGENDA

INTRODUCTION

1. **In view of the proposed programming directions for GEF-7, there is a need to adapt the GEF's delivery model to enable a sharper strategic focus for greater impact.** To do so, the discussion above suggested that the GEF needs to take steps to reduce the fragmentation of resources and efforts, strengthen its results focus, and enhance upstream engagement with a broad set of stakeholders. Specifically, is there a need to optimize the GEF's approach to allocating resources to enable a greater concentration of funding for higher impact? Is the GEF doing enough to seize the growing opportunities for multi-stakeholder engagement in efforts to safeguard the global environment? How can the GEF's results architecture drive higher impact and stronger accountability?
2. **In addition to these three priorities, a broader look at the GEF's institutional structure and policies suggests multiple areas for possible, carefully targeted measures to improve effectiveness and efficiency.** Drawing on priorities set out in GEF 2020, building on progress made in GEF-6, and recognizing changes in the GEF's external context, the replenishment process allows the Partnership to examine opportunities for institutional evolution. Are the GEF's capabilities, policies and systems related to, *inter alia*, gender equality, transparency and resilience keeping up with best practice? Are there ways to strengthen the GEF's business processes to improve the timely delivery of resources to address urgent global threats? Can the GEF make more effective use of technology for improved management and communication?
3. **With a view to framing replenishment discussions on possible reforms for GEF-7, this chapter sets out a preliminary policy agenda.** The chapter is organized around two main sections: the first of these discusses critical changes to the GEF's delivery model in light of the broader strategic direction proposed, with a focus on issues and opportunities related to resource allocation, partnerships, and results; whereas the second explores a broader range of policy and institutional topics, identifying opportunities and constraints along with preliminary options for change. The topics include operational efficiency, transparency, gender, knowledge management, climate and disaster risk screening and the balance of grants and concessional loans.
4. **Rather than presenting a definitive roadmap for policy and institutional reform, this chapter is intended to set the scene for discussions on possible policy recommendations for GEF-7.** Those recommendations will also be informed by the conclusions and recommendations of the *Sixth Comprehensive Evaluation of the GEF* (OPS6). It is worth noting, however, that the Secretariat, in developing the below options, has not yet had access to most of the latest evaluative evidence on the various topics discussed.

ADAPTING THE GEF'S DELIVERY MODEL FOR MAXIMUM IMPACT

5. **The level of ambition set out in the proposed strategy for GEF-7 calls for a more effective, more responsive and more agile delivery model.** Looking forward, there is a need to

carefully review and possibly ease the internal constraints that have evolved over 25 years as the GEF has taken on new responsibilities, and as its Partnership has continued to expand. Three broad objectives emerge as priorities in this respect.

6. **First, the GEF should seek ways to concentrate its resources on the issues and opportunities where it can achieve the highest impact.** The GEF has experienced a long-term trend of growing fragmentation of resources across themes, programs and projects. In addition to a more focused programming strategy (see Chapter 2 above), reversing this trend entails reviewing the way in which resources are allocated and programmed. Importantly, rather than treating the GEF's focal areas as the organizing principle for funding allocations and investments, the proposed programming strategy views those focal areas increasingly as result areas where global environmental benefits will be pursued through integrated, systems approaches that address key drivers of environmental degradation. In support of this shift, the GEF may need a more flexible resource allocation framework that eases thematic constraints and allows funding to target maximum impact, while maintaining a system of resource allocations to countries.

7. **Second, the GEF needs to maximize its engagement with the broad range of actors that are critical for systems change.** Closely related to the trend of fragmentation, there is a growing concern that the GEF, while managing a complex and ever-expanding network of stakeholders, may not be working closely enough with the actors that will ultimately make the greatest difference for the global environment. Evidence suggests that the GEF may not be optimizing the diverse capabilities of its 18 Agencies, that it continues to operate on the margins of national development planning and budgeting processes, and that it is not doing enough to seize rapidly growing opportunities to work with other key actors, notably in the private sector and civil society. In order to maximize its engagement with the broad range of actors that are critical for systems change, and thereby to respond most effectively to the needs and priorities of recipient countries, the GEF needs to actively bring together countries, Agencies and other actors around shared challenges and opportunities. In line with the proposed programming directions for GEF-7, the GEF needs more broad-based, upstream and issue-based consultation across relevant stakeholder groups, ultimately with a view to building, strengthening and catalyzing diverse coalitions of actors that can meaningfully contribute towards transforming the key social and economic systems that threaten the global environment.

8. **Third, the GEF should promote management for impact as well as greater accountability through a fit-for-purpose results architecture.** The proposed programming strategy for GEF-7 is designed with a view to maximizing the GEF's positive impact on the global environment through integrated, systems approaches. To deliver this strategy, the GEF needs to carefully review its approaches to capturing, applying and communicating information on expected and achieved results. The GEF's results architecture will need to embrace a closer integration across focal areas and introduce a sharper focus on the most relevant results, while promoting the improved availability, accessibility, quality and timeliness of information for decision-making, accountability and transparency.

9. **Keeping in mind the broad objectives set out above, this section explores opportunities to adapt the GEF's delivery model across three policy dimensions: resource allocation, partnerships, and results.** Each dimension is discussed in terms of the current state of affairs based on, *inter alia*, evaluative evidence and recent operational data, followed by a suggested way forward in terms of preliminary options for policy and institutional improvements.

Reviewing the GEF's Resource Allocation Framework

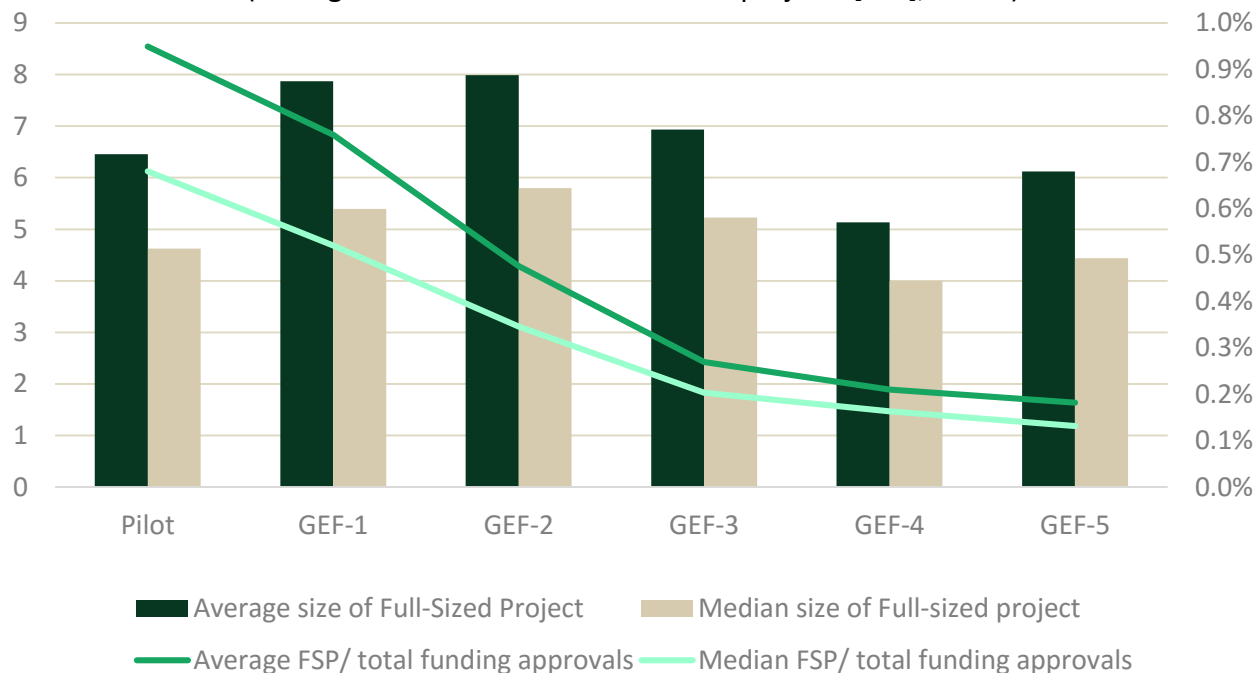
10. **The resource allocation framework plays a critical role in enabling the GEF to concentrate its resources on the issues and opportunities where it can achieve the highest impact.** In addition, experience suggests that resource allocation is a critical factor in shaping the GEF's engagement with various stakeholder groups.

Current State: Opportunities and Constraints

11. **The GEF has a broad and expanding mandate to safeguard the global environment. Unless coupled with a focused strategy and selective programming, there is a risk that the GEF's limited resources will be increasingly fragmented.** IEO's *Fifth Overall Performance Study* (OPS5, 2014) found that the GEF's mandate has expanded faster than its real financing capacity, leading to the conclusion that "the GEF therefore needs to focus on the strategic issues on which it can make a difference, or face a situation where it promises support but is not able to deliver on this promise". In GEF-6, steps have been taken to achieve greater focus, notably through the Integrated Approach Pilot (IAP) programs, which leverage multi-stakeholder coalitions to address key drivers of global environmental degradation. As pilot programs, however, the IAPs represent a relatively small share of the GEF-6 envelope, whereas the majority of resources are programmed through discrete projects that address a wide range of priorities.

12. **Project size is one indicator of fragmentation. Each replenishment cycle has seen the number of individual projects grow faster than the amount of funding provided (see Figure 3.1.).** In GEF-5, the GEF provided some US\$3.4 Billion in project financing across nearly 1,000 projects. From GEF-4 to GEF-5, the median size of all projects declined slightly, to US\$1.9m, and the median size of full-sized projects increased by 11 %, to US\$4.4m, even as overall funding approvals grew by 38 %. From an efficiency standpoint, the declining, relative size of the average or median GEF project represents an unwelcome trend, and it may ultimately limit the GEF's ability to contribute towards systems change.

Figure 3.1. Fragmentation is a longstanding trend
(average and median size of full-sized projects [FSP], US\$m)

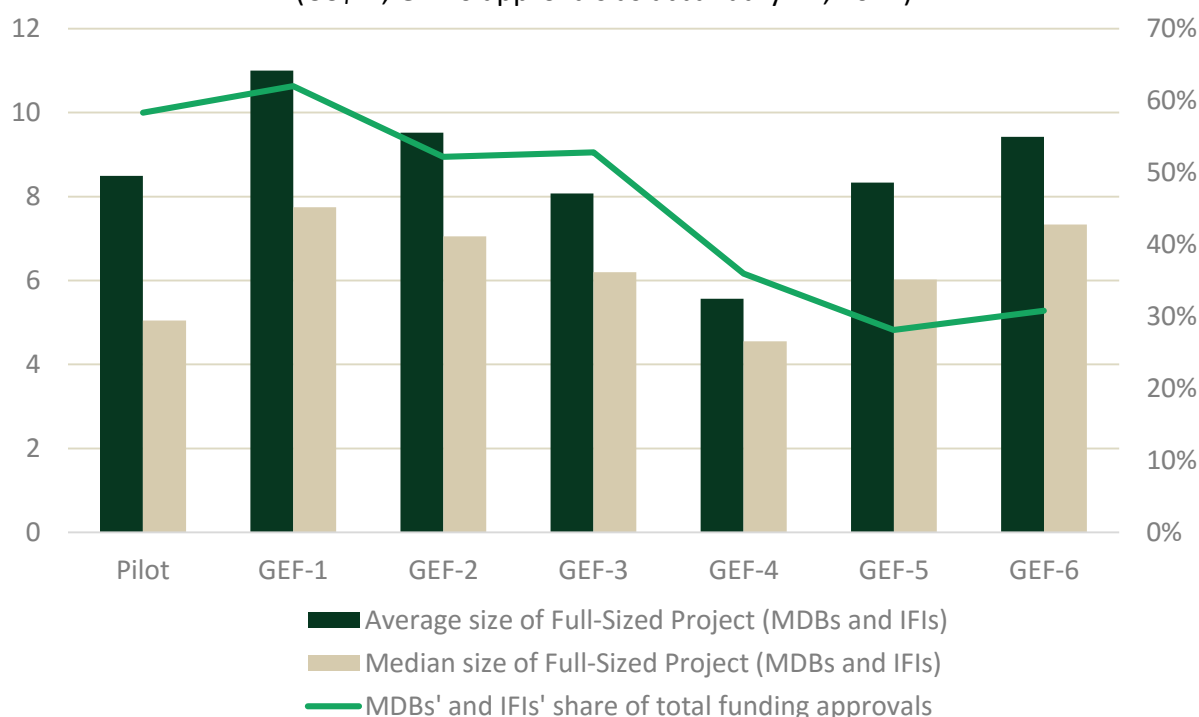


13. **A system of country allocations has clear advantages, but in its current form it may constrain the GEF's ability to program resources for maximum impact with the broad range of actors that are critical for systems change.** The introduction of country allocations through the Resource Allocation Framework (RAF) in GEF-4 and the System for the Transparent Allocation of Resources (STAR) in GEF-5 and GEF-6 has been credited for ensuring that virtually all eligible recipient countries, notwithstanding capacity constraints, have been able to access resources from the GEF. RAF and STAR have also been found to enhance transparency and predictability across the GEF Partnership. (OPS5; IEO 2014, *Mid-Term Evaluation of the System for the Transparent Allocation of Resource*; GEF/ME/C.34/2, *Mid-Term Review of the Resource Allocation Framework*) On the other hand, recent evaluations have suggested that the introduction of country allocations had a considerable impact on the GEF's ability to engage with the private sector and civil society, as well as with the multi-lateral development banks (MDB) and international financing institutions (IFI)⁵⁷ (GEF/ME/C.50/06, *Evaluation of the Expansion of the GEF Partnership - First Phase*; GEF/ME/C.51/01, *Semi-Annual Evaluation Report by the Independent Evaluation Office*). Specifically, RAF and STAR have left fewer opportunities for partners to develop larger-scale activities, and less space for private sector and civil society stakeholders to engage directly in the identification, design and execution of GEF projects and

⁵⁷ This group of Agencies includes ADB, AfDB, BOAD, CAF, DBSA, EBRD, IDB, IFAD and the World Bank.

programs (see Figure 3.2. below). In GEF-6, the median country allocation is US\$9 million, and nearly 60 % of countries have allocations that amount to less than US\$10m.

Figure 3.2. MDBs and IFIs tend to require larger amounts of project financing, and their share of funding approvals has declined after the introduction of country allocations in GEF-4
(US\$m, GEF-6 approvals as at January 12, 2017)



14. **The current division of allocations by focal area may not be conducive to a sharper strategic focus on transforming the social and economic systems that drive the degradation of the global environment.** With allocations divided among three focal areas – biodiversity, climate change mitigation and land degradation – the ability of countries to prioritize the investments that would maximize their contribution towards the global environment will be constrained. Indeed, while an increasing number of countries have found ways to combine funding across multiple focal areas for larger, more integrated projects (see Paragraph 35 below), a strategic focus on the opportunities and issues where the GEF can achieve the highest impact may require greater flexibility.

15. **In its current form, STAR offers only limited flexibility, whereas experience suggests that the demand for a flexible allocation of resources across focal areas is high.** Countries with aggregate allocations of less than US\$7 million can move their funds across focal areas without constraint, while those with allocations greater than US\$7 million can make marginal

adjustments⁵⁸. Experience suggests that there is considerable demand for flexibility: in GEF-5, nearly all countries with fully flexible allocations took advantage of that flexibility, and half of other countries used the adjustments available to them (see Table 3.1 below).

Table 3.1: There was considerable demand for flexibility in GEF-5

	Number	Share
Countries with full flexibility	63	44%
did not use flexibility	6	10%
used flexibility	57	90%
Countries that are not flexible (allowed marginal adjustments)	81	56%
did not use adjustments	42	52%
used adjustments	39	48%
Total	144	100%

Looking Forward: Options for Policy and Institutional Improvements

16. **The proposed programming directions for GEF-7, anchored in a limited number of carefully selected Impact Programs, would aim to drive a greater strategic focus, and a more selective approach to programming GEF resources.** This may have important implications for the optimal design of the GEF's resource allocation framework.

17. **The GEF needs an approach to resource allocation that allows countries to direct funding strategically towards the issues and opportunities where they can maximize positive impacts on the global environment, in line with the GEF's core mission and relevant priorities and obligations under the MEAs it serves.** The resource allocation framework should allow the GEF Partnership to operate at a sufficient scale to enable operational efficiency and effective partnerships. At the same time, such a framework should provide a reasonable degree of predictability, transparency and equity across the GEF Partnership in terms of how much is available to whom, and under what conditions.

18. **Considering these basic requirements, and in view of experience from GEF-5 and GEF-6, there is scope to improve the GEF's approach to allocating resources, but reforms should be weighed carefully against the many positive features of the existing system.** With a view to ensuring the effective implementation of the proposed programming directions for GEF-7, and

⁵⁸ In GEF-5, this was done via a tiered system of marginal adjustments, and in GEF-6 a flat adjustment of US\$2 million was introduced.

while recognizing that discussions remain at a very early stage, the principles of impact, flexibility, predictability, transparency and equity could be balanced along the following lines:

- (a) The resource allocation framework for GEF-7 should be designed to drive a greater concentration of resources on the issues and opportunities where the GEF can achieve the highest impact.
- (b) Consistent with a programming strategy that emphasizes integrated, systems approaches that cut across focal areas, the allocation framework should reduce fragmentation by providing greater flexibility to enable resources to be directed towards the most impactful investments, rather than unnecessarily hardwiring funding to focal areas.
- (c) While maintaining a focus on impact, the resource allocation framework should continue to consider countries' diverse capabilities and strengths. Predictability should be retained particularly for countries that face important capacity constraints.

Seeking Stronger Partnerships for Systems Change

19. The GEF can do more to harness the growing opportunities for partnership with the broad range of actors that can play critical and complementary roles in systems change, including national and sub-national governments, Agencies, the private sector and civil society. As discussed in Chapter 1, the GEF's operating environment is evolving rapidly. Recent landmark agreements on sustainable development and climate change have been significantly reinforced by an unprecedented, multi-stakeholder engagement in international efforts to protect the global environment. New actors have entered the scene and the business case for sustainability is growing. A greater concentration of resources for higher impact, supported by a more flexible approach to resource allocation could help create space for stronger partnerships. Enhanced multi-stakeholder engagement, in turn, could serve to drive greater strategic focus on shared challenges and opportunities, and help bring resources together for critical scale.

Current State: Opportunities and Constraints

20. A more flexible approach to resource allocation could help recipient countries maximize the value of GEF support in line with national priorities. In addition, a strategic shift towards a more impactful, systems approach may require broader stakeholder engagement at the national and sub-national levels, as well as on a global scale. The proposed programming directions for GEF-7 respond to and seek to strengthen countries' commitments to Agenda 2030, the Paris Agreement, CBD and the other MEAs that the GEF serves. These efforts would build on a solid track record of country ownership. Indeed, IEO's *Fifth Overall Performance Study* (OPS5, 2014) found that "GEF support to countries rates well on indicators for meeting the Paris Declaration and outperforms bilateral and multilateral donors on alignment with national priorities". Still, the GEF's partnership structure is quite heavily focused around ministries of environment and associated agencies, which may not always be well equipped to spearhead a more seamless integration of sustainability into development policy: 85 % of GEF Operational Focal Points (OFP) are located in ministries of environment or associated agencies, compared

with 5 % for ministries of finance or planning. In view of the proposed strategy for GEF-7, which aims to contribute towards a transformation of the key social and economic systems that drive environmental degradation at a global scale, the GEF may want to empower its primary counterparts in ministries of environment to work closely with other line ministries and agencies responsible for coordinating national development policy, planning and budgeting.

21. In part as a result of the growing fragmentation of resources, there is a concern over the degree to which the GEF is able to optimize the diverse capabilities present across the expanded Partnership, particularly the unique strengths of the MDBs and IFIs. As pointed out in the Secretariat's recent review of the expanded network of Agencies, and the IEO's 2016 study, the share of the MDB and other IFIs of GEF funding approvals has declined considerably over time, from between 50 and 60 % from the Pilot Phase to GEF-3, to just over 30 % in GEF-4 through GEF-6 (see Figure 3.3. below) (GEF/C.50/07, *Future Directions on Accreditation – A Follow-Up*; GEF/ME/C.50/06, *Evaluation of the Expansion of the GEF Partnership - First Phase*). The sharp decline from GEF-3 to GEF-4 coincides with the introduction of country allocations under RAF. Interviews carried out for the IEO's 2016 evaluation suggest that financial fragmentation and increased competition have emerged as major disincentives for MDBs to engage with the GEF, along with high transaction costs associated with the GEF's project cycle (Ibid.). Moreover, related to the GEF's engagement with recipient countries, the evaluation found that "the MDBs have tended to be more effective in managing their relationships with [Operational Focal Points, OFP] in countries where an OFP is based in the finance ministry than in countries where the OFP is in the ministry responsible for environment issues" (Ibid.). Overall, the trend of declining engagement represents an important risk with a view to GEF-7 and the effective delivery of the proposed programming directions. The MDBs and IFIs offer a distinct comparative advantage in their ability to work with ministries of finance and other key institutions at the core of national policy, planning and budgeting processes, and with the private sector. Moreover, the MDBs and IFIs are unique among GEF Agencies in their ability to blend GEF funding with larger-scale development investments (see Figure 3.4. below).

Figure 3.3. The MDBs' and IFIs' share of GEF funding approvals fell sharply from GEF-3 to GEF-4 (Share of GEF funding approvals, up to and including the October 2016 Work Program)

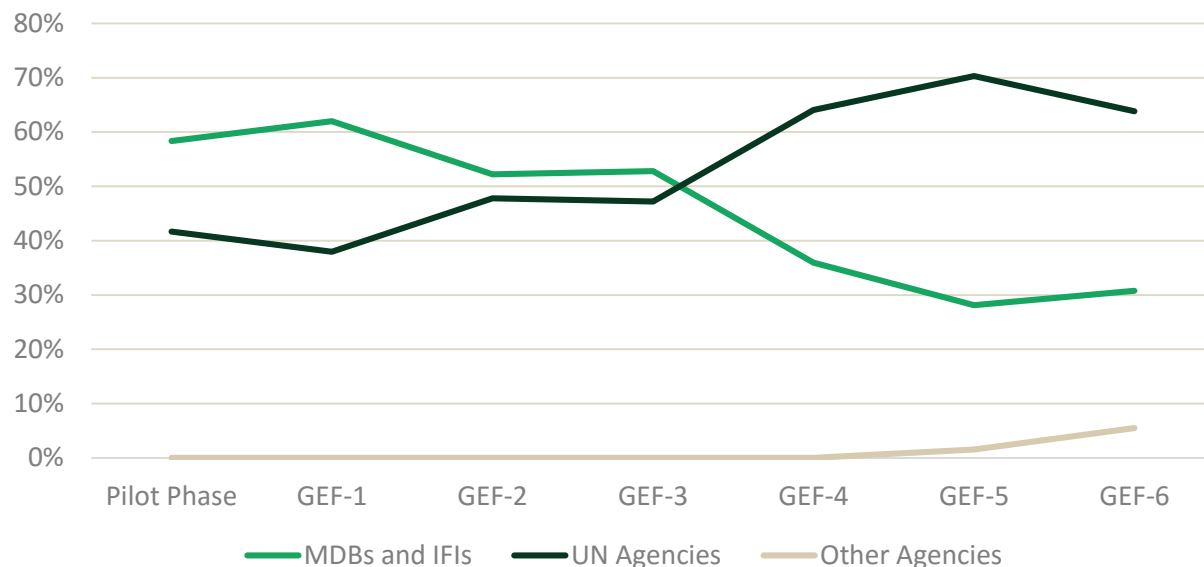
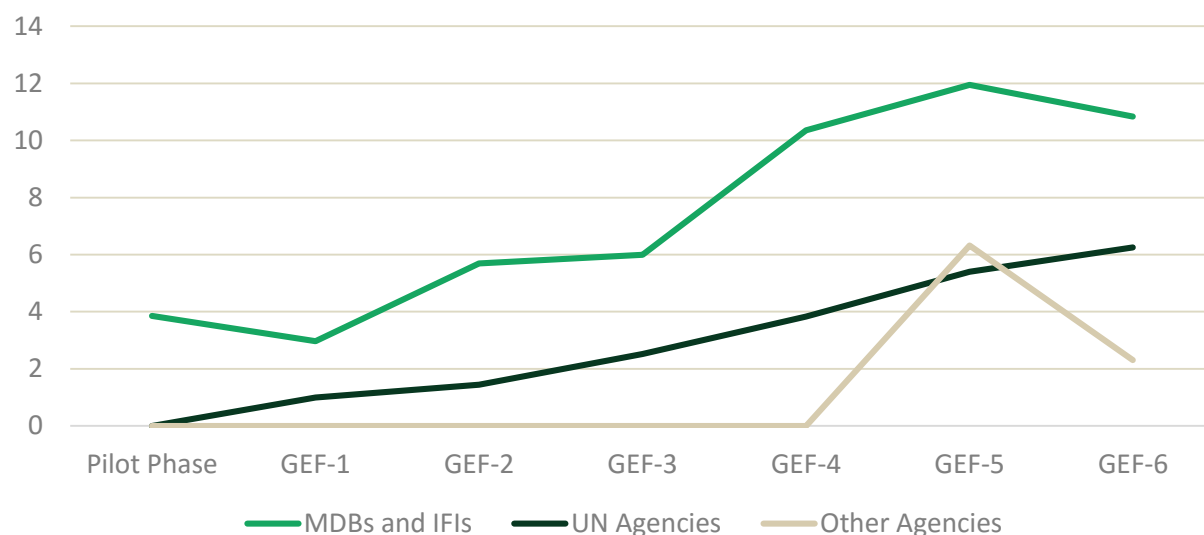


Figure 3.4. MDBs and IFIs continue to mobilize the highest levels of co-financing (Co-financing/ GEF project financing for CEO Endorsed/ Approved projects, January 12, 2017)



22. A broader and deeper engagement with the private sector is both a prerequisite for success in GEF-7, and a critical test for the GEF's delivery model. The GEF has engaged with a wide variety of private sector partners in many different ways, consistently with strong results for the global environment. The GEF's role includes, *inter alia*, risk-sharing of private sector investments, paving the way for investment by working with governments on policy and regulatory reforms such as markets for clean energy, convening multi-stakeholder alliances on

key issues such as commodity supply chains, and piloting or demonstrating innovative approaches such as water funds; with partners ranging from multinational corporations to large domestic firms and financial institutions, small and medium enterprises and microenterprises. Emerging findings from IEO's OPS6 study on private sector engagement suggest that the GEF's "private sector portfolio outperforms the non-private sector portfolio in achieving market change" (GEF/ME/C.51/01, *Semi-Annual Evaluation Report by the Independent Evaluation Office*). The study points to continued constraints, however, particularly resulting from the introduction of country allocations in GEF-4, which diminished the GEF's ability to engage the private sector.

23. Views from the private sector suggest ways to further strengthen engagement. Based on a survey of 60 stakeholders, including 30 external private sector stakeholders, the aforementioned OPS6 study suggests, *inter alia*, that environmental sustainability is increasingly mainstreamed into private sector strategies and business models, and that the GEF can add the most value by removing barriers for mainstream capital, rather than through direct investments. Respondents further noted that the GEF could strengthen its outreach to potential private sector partners, and that there is scope to further clarify the GEF's specific added value and improve operational efficiency. (Ibid.)

24. GEF-6 has seen promising initiatives to partner with the private sector and encourage committed private sector partners to help safeguard the global environment. Experience suggests that intensive, upstream engagement is critical to unlocking these opportunities. Through the Commodities IAP, for example, the GEF has forged a coalition of some of the leading palm oil producers as well as retailers to leverage, accelerate and expand commitments to deforestation-free production. The recently approved program *Global Opportunities for Long-term Development in the Artisanal Scale Gold Mining Sector* (GOLD) – which was developed in dialogue with major jewelers, electronics manufacturers and gold refiners, four Agencies and the governments of eight priority countries – aims to reduce the use of mercury in the artisanal gold mining sector, thereby contributing towards reduced health hazards and more sustainable livelihoods. Thematic and regional accelerators are another example of how the GEF can help convene public and private sector partners to speed up and expand the adoption of environmentally sustainable policies, approaches and technology. The GEF-6 program *Leapfrogging Markets for Energy Efficient Appliances and Equipment* (GEF ID: 9083) brings together leading technology companies, international organizations and governments in seven countries to transform national and regional markets for energy efficient products.

25. In terms of the GEF's ability to mobilize private financing, experience from GEF-6 to date suggests that some delivery models are more conducive to private sector involvement. Across the GEF-6 portfolio at large, the ratio of GEF financing to private co-financing – at 1:2 – suggests a positive trend, but to date only 13 % of GEF-6 projects have mobilized private co-financing (see Figures 3.5. and 3.6. below). While co-financing represents a highly imperfect measure of the GEF's track record of mobilizing private financing, or its broader ability to engage with the private sector, it seems clear that the GEF's current model does not keep up with growing opportunities.

Net investment in renewable power and fuels grew from US\$73 billion in 2005 to US\$285 billion in 2015 (*Renewables 2016 Global Status Report*), and the amount of private capital committed to conservation efforts – including sustainable food and fiber, as well as habitat conservation – rose by more than 60 % between 2013 and 2015 (Forest Trends). On the other hand, the non-grant instruments (NGI) pilot, introduced under GEF6, has seen very high demand, with nearly all available resources programmed during the first two years of the replenishment cycle, and projects have demonstrated a strong leverage ratio of US\$7 in confirmed private co-financing for each US\$ in GEF financing⁵⁹. Indeed, NGI investments have outperformed other projects both in terms of overall levels of co-financing, and in terms of mobilized private financing (see Table 3.2 below).

Figure 3.5. The GEF at large has seen steady growth in private co-financing since GEF-4...
(Confirmed, private sector co-financing/ GEF project financing at CEO Endorsement/ Approval, as at January 12, 2017)

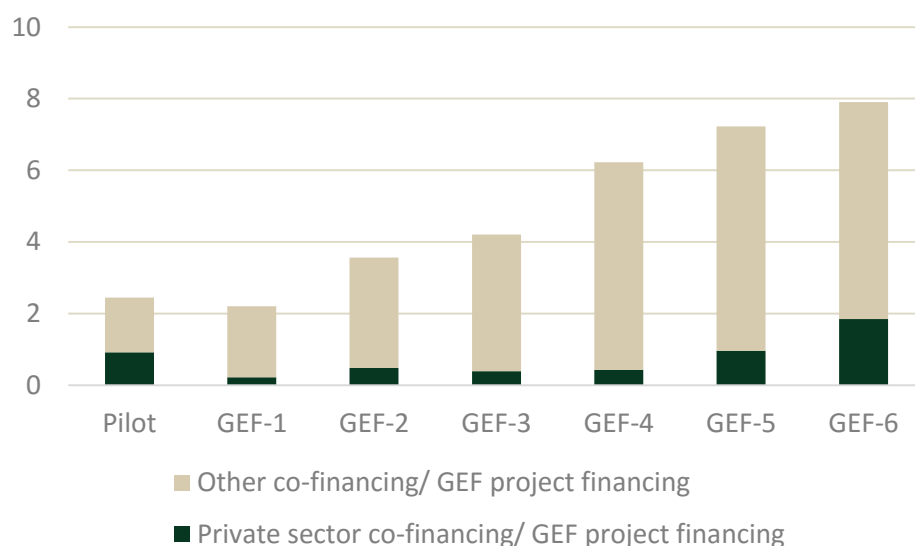


Figure 3.6. ...but the share of projects that mobilize private co-financing remains low
(Share of projects with confirmed, private sector co-financing at CEO Endorsement/ Approval, as at January 12, 2017)

⁵⁹ This reflects confirmed co-financing towards the four NGI projects that had received CEO Endorsement/ Approval as at January 12. Based on indicative co-financing associated with the ten NGI projects that had been approved by the Council, the ratio of private co-financing to GEF financing may still increase substantially by the end of GEF-6.

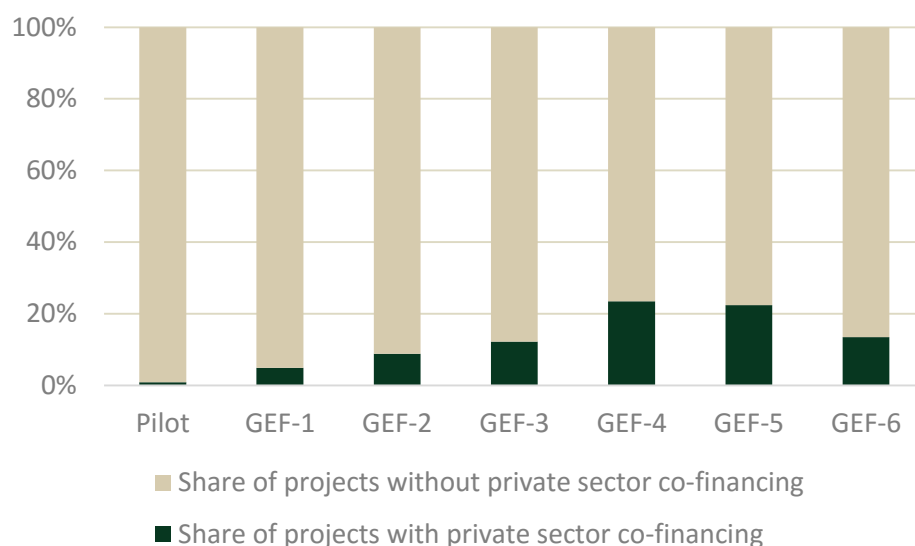


Table 3.2. NGI investments have seen high levels of private co-financing
(GEF project financing and confirmed co-financing at CEO Endorsement/ Approval, (US\$m), as at January 12, 2017)

	Total funding approvals	Total co-financing	Private co-financing	Other co-financing	Total co-financing/ GEF project financing	Private co-financing/ GEF project financing	Other co-financing/ GEF project financing
Other GEF-6 projects	583	4,590	1,003	3,587	7.9	1.7	6.2
NGI Pilot ⁶⁰	38	321	255	66	8.4	6.7	1.7

26. Like the private sector, civil society has been a critical partner for the GEF, and it will need to play an important role in multi-stakeholder initiatives that seek to contribute towards a transformation of key social and economic systems. For 25 years, civil society organizations (CSO) have contributed towards the GEF's mission variety of ways, including through policy analysis and advocacy; project identification, design, execution, monitoring and co-financing; and facilitating information exchange across the GEF Partnership, from the global to the local level. These contributions have been highlighted in several Overall Performance Studies, and OPS5 finds that CSO-executed projects – amounting to about US\$1.1 billion or 10 % of GEF funding

⁶⁰ As noted above, the sample is based on four NGI projects that had received CEO Endorsement/ Approval as at January 12, 2017. As the remaining projects are Endorsed/ Approved, the level and composition may change.

approvals at the end of GEF-5 – perform better than non-CSO-executed projects. Still, evidence suggest that the share funding approvals towards CSO-executed projects failed to grow between GEF-2 and GEF-5 (see Table 3.3. below), and the number of CSO-executed projects declined (see Table 3.4.). Echoing the constraints to private sector and MDB engagement, past evaluations carried out by IEO as well as independent analysis commissioned by the CSO Network have found that the introduction of country allocations contributed towards a decline in the direct engagement of CSOs in project execution (GEF/ME/C.34/2, *Mid-Term Review of the Resource Allocation Framework*; Hisas, L. 2009, *The Impact of the Global Environment Facility's Resource Allocation Framework on Civil Society Organizations*).

Table 3.3. Funding towards CSO-executed projects has remained flat since GEF-2...
(US\$m approved towards CSO-executed projects by type, adapted from OPS5)

	Pilot	GEF-1	GEF-2	GEF-3	GEF-4	GEF-5	Total
Enabling Activities	2		1	1		0.3	4
Full-sized projects	80		94	113	116	117	520
Medium-sized projects		3	56	54	30	9	151
Small Grants Program	12	15	96	78	127	95	425
All projects	94	18	247	246	273	221	1,100
Share of total funding approvals	14%	2%	13%	9%	10%	12%	10%

Table 3.4. ...and the number of CSO-executed projects has declined
(number of CSO-executed projects by type, excluding the Small Grants Program)

	Pilot	GEF-1	GEF-2	GEF-3	GEF-4	GEF-5	Total
Enabling Activities	1		4	3		2	10
Full-sized projects	7		11	15	28	19	80
Medium-sized projects		4	72	58	35	9	178
All projects	8	4	87	76	63	30	268

27. **In order for the GEF to maximize its positive impact in GEF-7, its strategy and approaches for engaging with different stakeholder groups should be based on the fundamental recognition that safeguarding the global environment is a challenge that lies beyond the capabilities of any single actor.** Accordingly, the GEF's delivery model has to be adapted in such a way that allows the GEF to convene the broad range of actors that can play critical and complementary roles in systems change, to provide opportunities that meet the needs of different actors, and to catalyze actions and commitments in line with the unique added value that each actor brings. Specifically, considering the GEF's own role and capabilities, and its experiences of multi-stakeholder engagement, the following, broad directions could serve to guide an upgraded engagement model in GEF-7:

- (a) The GEF should seek and nurture partnerships with a resolute focus on impact. This entails adopting a very proactive and outward-looking approach to identifying potential partners, and bringing different actors together for synergy.
- (b) In order to effectively serve the identification, design and implementation of key investments, notably the proposed Impact Programs, the GEF Partnership should invest heavily in intensive, upstream engagement with key actors.
- (c) In a similar vein, the GEF Partnership could seek to a greater extent to engage with diverse coalitions of actors based on specific issues as well as shared opportunities and challenges, consistent with the priority areas addressed through the proposed Impact Programs.
- (d) With a view to promoting closer cooperation on the ground, particularly during implementation, the GEF could encourage collaborative arrangements and intervention types that cultivate collaboration, knowledge sharing and shared accountability, rather than a fragmentation of resources and responsibilities.

28. **In light of the above, there may be a need to review the GEF's existing policies, systems and tools to ensure that they support the GEF's ability to maximize its engagement with key actors.**

29. **With respect to recipient countries, GEF-7 presents an opportunity to optimize the GEF's platforms for country engagement.** With the proposed programming directions for GEF-7, and targeted improvements to the GEF's approach to allocating and programming resources, countries will be empowered to focus on key strategic issues and opportunities where national priorities coincide with a potential to achieve a higher impact on the global environment. In addition, countries will benefit from stronger linkages to regional and global platforms, initiatives and actors. To further strengthen the GEF's engagement with recipient countries, the guidelines and criteria associated with the Country Support Program (CSP), including national dialogues and regional outreach activities, could be strengthened to create opportunities for multi-stakeholder engagement at the national and regional levels and to foster a greater integration of

environmental sustainability into mainstream development policy and planning processes. Building on experience gained in GEF-6, the GEF could continue and expand its use of broad-based, strategic dialogues with countries to help identify key programming opportunities. Moreover, to help recipient countries navigate an increasingly complex financing landscape, the GEF could also work towards stronger information sharing, coordination and synergies with the regional and country outreach activities of other environmental and development finance institutions.

30. As for GEF Agencies, GEF-7 presents an opportunity to enhance the level and quality of engagement across the GEF Partnership in line with each Agency's comparative advantage. The proposed Impact Programs are expected to provide diverse opportunities for a broad range of partners. As suggested above, the GEF will seek a higher concentration of resources on the most critical opportunities, and aim to achieve sufficient scale to maintain productive partnerships. Many of the programs will rely on the Agencies' ability to cultivate productive relationships with a broad range of stakeholders, including ministries of environment, other relevant line ministries, and institutions responsible for coordinating national development policy, planning and budgeting, as well as the private sector.

31. The proposed programming directions for GEF-7 are expected to expand the space for the private sector to engage as a key partner in collaborative initiatives that seek systems change. In addition, the implementation of the proposed strategy could benefit from targeted measures to facilitate a scaled-up and more effective partnership with the private sector. Through a sharper strategic focus on the proposed Impact Programs, the GEF would establish clear, thematic entry points for engagement, thereby responding to the expressed need to clarify its offering vis-à-vis the private sector (IEO 2016). In addition, the GEF may need to strengthen other forms of on-going awareness raising, training, knowledge sharing opportunities for private sector partners. Finally, drawing on emerging experiences of other similar institutions and existing arrangements for CSO participation, the GEF could consider inviting private sector representatives to engage as observers in GEF Council meetings, thus directly informing GEF governance and decision-making.

32. In addition to the proposed Impact Programs, and the associated measures to strengthen the GEF's engagement model, the GEF should continue to offer, and possibly expand, dedicated opportunities for catalyzing greater private sector investment through the use of non-grant instruments such as equity and guarantees. Based on lessons from the NGI Pilot under GEF6, such a window could introduce a number of new features to enhance its efficiency and effectiveness, including a streamlined approval process to enable the GEF to work closer to the pace of the private sector, allowing larger-scale investments packages, the possibility to include upstream advisory services in projects that combine non-grant and grant resources, and incentivizing the broader use of non-grant instruments without reflows to the GEF Trust Fund.

33. **In line with the proposed, upgraded engagement model, there is a need to engage CSOs more effectively in multi-stakeholder initiatives to transform key social and economic systems.** Civil society organizations can play a key role in promoting citizen engagement, strengthening the GEF's ability to reach vulnerable groups, and improving inclusion, accountability and transparency. They have also been effective in promoting innovation as well as knowledge generation and exchange. The proposed programming directions for GEF-7, and the Impact Programs in particular, will create expanded opportunities for CSO engagement in line with the unique added value they offer. In addition, CSOs will benefit from an updated institutional and policy framework: the GEF has recently embarked on a Partnership-wide process to review and strengthen its engagement with civil society, particularly in the context of the CSO Network and an updated policy on stakeholder engagement and access to information.

Reinforcing the GEF's focus on results

34. **The proposed programming directions for GEF-7 aim to maximize the GEF's positive impact on the global environment through integrated, systems approaches. To inform this ambition, the GEF needs a fit-for-purpose results architecture.** Specifically, the GEF's systems and approaches for capturing and applying information on expected and achieved results should be adequately adapted to investments that aim to transform key social and economic systems, thereby seeking multiple global environmental benefits consistent with its core mission. At the same time, the GEF should continue to meet the demand for results information under the MEAs it serves, and across its wider Partnership. In GEF-7, the GEF may also need to better articulate and quantify, where possible, its contribution towards Agenda 2030 and the Sustainable Development Goals (SDG). In light of these demands, the GEF and its partners should carefully assess *what* results the GEF needs to monitor and report on moving forward, as well as *how* to do so most effectively and efficiently.

Current State: Opportunities and Constraints

35. **Lessons from GEF-6 suggest that an exclusive link between funding allocations and focal areas – which may contribute towards fragmentation as discussed above – is increasingly at odds with how the GEF delivers results on the ground.** The share of funding approvals towards projects financed under multiple focal areas, and seeking to capture these multiple benefits, has increased – from 22 % in GEF-4 to 37 % in GEF-5, and 52 % in GEF-6 as at January 12, 2017 (see Figure 3.7. below). To maximize its impact, and to capture all relevant global environmental benefits across all projects, however, the GEF could benefit from approaching its focal areas increasingly as result areas where global environmental benefits will be pursued, rather than the organizing principle for funding allocations and investments. For example, of the 75 GEF-6 projects that set targets for hectares under sustainable land management, 83 % also set targets for climate change mitigation benefits, but the share drops to just 60 % of projects without financing from the climate change focal area, and 50 % for projects financed exclusively under the land degradation focal area (see Figure 3.8. below). Evaluative evidence supports a comprehensive accounting of the climate change benefits associated with sustainable land

management: IEO’s recent *Value for Money Analysis for Land Degradation Projects of GEF* suggests that carbon benefits represent an essential component of the value of GEF investments in this focal area (GEF/ME/C.51/Inf.02).

Figure 3.7. An increasing share of GEF projects seek multiple benefits across focal areas...
(GEF-6 funding approvals as at January 12, 2017)

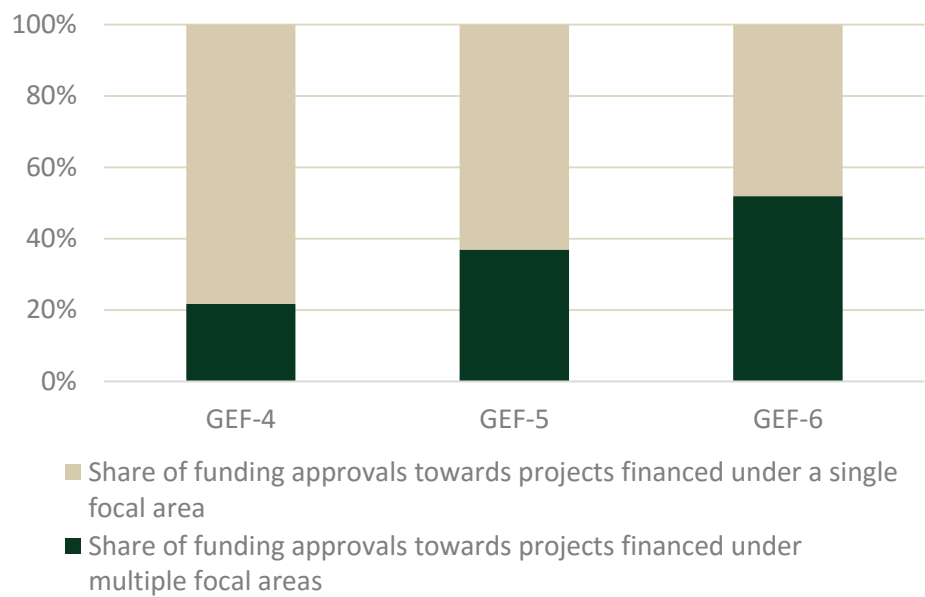
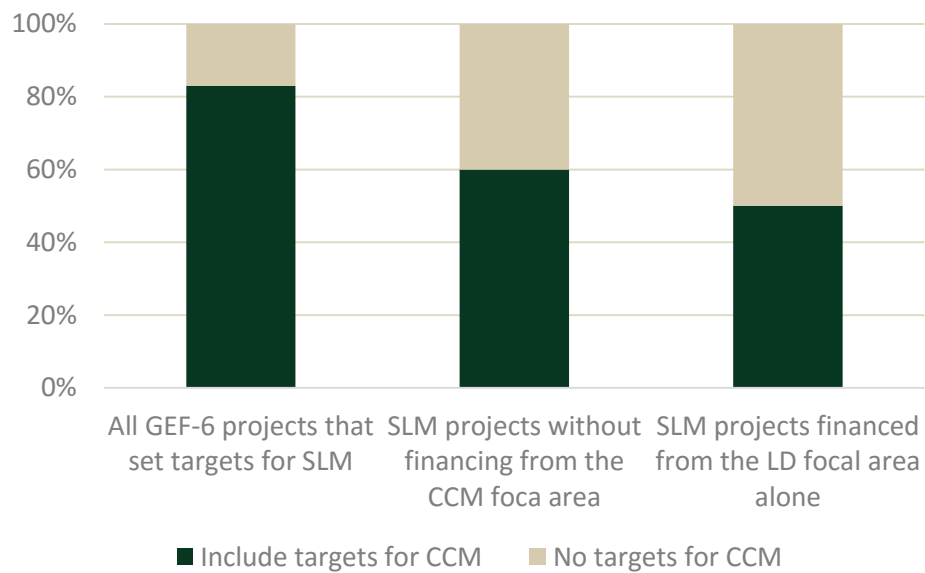


Figure 3.8. ...but some global environmental benefits may still be overlooked due to the GEF’s rigid approach to resource allocation and results
(Based on GEF-6 funding approvals as at January 12, 2017)



36. **GEF investments may have considerable but underreported socio-economic co-benefits.** A review of nearly 1,000 on-going and completed projects, mainly approved in GEF-3 and GEF-4, found that 39 % of these projects provide expected or actual numbers of beneficiaries, with more than 250 million people expected to benefit – directly or indirectly – from GEF investments (see Table 3.5. below). A separate review of 151 mid-term reviews and terminal evaluations found that 31 % of projects included sex-disaggregated indicators, mostly related to project beneficiaries. Currently, however, the GEF’s results architecture does not systematically capture, aggregate or report data on any socio-economic co-benefits, such as numbers of beneficiaries disaggregated by gender.

Table 3.5. Data on expected and actual beneficiaries is widely available, but not systematically captured, aggregated or reported
(On-going and completed projects mainly from GEF-3–4)

GEF Focal Area	Direct/ indirect beneficiaries (million)	No. of projects with beneficiary data	No. of projects reviewed	Share of projects with beneficiary data
Land Degradation	6.4	52	111	47%
International Waters	4.9	28	122	23%
Biodiversity	11.7	127	262	48%
Climate Change	28.4	75	342	22%
Chemicals and Waste	169	36	59	61%
Multi-Focal Area	33.3	71	98	72%
Total	254	389	994	39%

37. **A broader look suggests that reporting requirements to the GEF could be streamlined, while ensuring a better fit for purpose of its corporate results framework.** At the project level, the GEF continues to use seven different focal area tracking tools to collect information across a large number of indicators. In contrast, periodical reporting on expected, portfolio-level results has been streamlined considerably with the introduction of ten corporate indicators for global environmental benefits (See the latest *GEF Corporate Scorecard* annexed to document GEF/C.51/03, *Annual Portfolio Monitoring Report*). Similarly, recent GEF reports to MEAs have focused on expected global environmental benefits across a very limited number of data points in line with the aforementioned corporate indicators. Overall, there seems to be considerable potential, within a redesigned results framework, to further harmonize project-level monitoring and reporting requirements with the GEF’s corporate reporting obligations and needs.

38. **As the GEF explores ways to enhance the coverage and relevance of its results architecture, it cannot overlook opportunities for improving the availability, accessibility, quality and timeliness of results information for decision-making, accountability and transparency.** Following similar findings made in OPS5, IEO’s *GEF Annual Performance Report*

2015 (GEF/ME/C.50/04) suggests that there is considerable scope to improve compliance with the GEF's existing reporting requirements, particularly during project and program implementation, and at completion. Similarly, the retrieval, storage and management of project-level results information could benefit from improved procedures and an upgraded information management system. The recent *Value for Money Analysis for Land Degradation Projects of GEF*, in turn, suggests that the GEF could do more to systematically harness geospatial tools for monitoring global environmental benefits (GEF/ME/C.51/Inf.02).

Looking Forward: Options for Policy and Institutional Improvements

39. **The GEF's results architecture should ultimately enable greater accountability and improved management for higher impact.** As the GEF embarks on an ambitious strategy to work with partners to contribute towards a transformation of the key social and economic systems that drive the degradation of the global environment, relevant and timely results information will be critical in enabling the GEF to maintain a resolute focus on impact. Moreover, robust and reliable system to capture expected and achieved results based on clear expectations, roles and responsibilities should promote greater accountability and transparency across the GEF Partnership. Looking towards GEF-7, there is an opportunity for the GEF to significantly upgrade its systems and approaches in line with this objective.

40. **In order to sharpen its focus on the most important results, and to ensure that the burden of monitoring and reporting matches the need, GEF-7 could introduce an enhanced corporate results framework to capture all relevant global environmental benefits across all GEF-financed activities, using a limited number of carefully selected core indicators** (see pp. 24–31 above, and Annex 4). Appropriate indicators could also be introduced to capture additional, socio-economic co-benefits, where relevant. A unified results architecture based on a system of core indicators could contribute towards reducing the burden of monitoring across the GEF as a whole, clarifying expectations, simplifying communication, and improving the quality, completeness and timeliness of information captured at the project level.

41. **As part of a new corporate results framework for GEF-7, the GEF could also seek opportunities to harmonize its results indicators with relevant indicators and targets associated with relevant SDGs.** The GEF can and will play an important role in the implementation of Agenda 2030 in GEF-7, and an important feature of an upgraded results architecture could be to allow all stakeholders to understand the GEF's contributions towards the SDGs.

42. **In addition to a more strategic approach in terms of what results the GEF would monitor and report on in GEF-7, multiple options exist to improve the ways in which results information is captured and used.** A possible, multi-pronged approach could entail a combination of (a) an enhanced information management system to enable direct input of and access to results data, real-time feedback on overdue reports, data quality and completeness, and faster aggregation and reporting at the portfolio level; (b) greater use of geo-spatial tools to monitor portfolio-level

progress in a manner that complements and adds value to project-level data; and (c) stronger policy requirements for monitoring and reporting across the GEF Partnership. These options are closely related with potential measures to enhance the operational efficiency and transparency of the GEF (please see paragraphs 44–54 below).

EXPLORING OPPORTUNITIES FOR GREATER EFFICIENCY AND EFFECTIVENESS IN OTHER PRIORITY AREAS

43. Whereas the previous section explored opportunities to adapt the GEF’s delivery model to the proposed strategy for GEF-7, this section takes a broader look at opportunities to enhance the GEF’s efficiency and effectiveness. With a focus on the strategic priorities set out in GEF 2020, and key reform areas in GEF-6, the section spans the following, possible priority areas for institutional and policy change: operational efficiency, transparency, gender, knowledge management, climate and disaster risk screening, and the balance of grants and concessional loans.

Improving Operational Efficiency and Monitoring

44. In view of its ambitious strategy for GEF-7, the GEF needs to enhance efficiency, effectiveness and accountability throughout its organizational structure and business processes. This section explores a limited number of potential entry points for reform, in particular the timely development and delivery of GEF projects and programs, and the processing of project-related documentation, as well as the capture and management of operational and financial information.

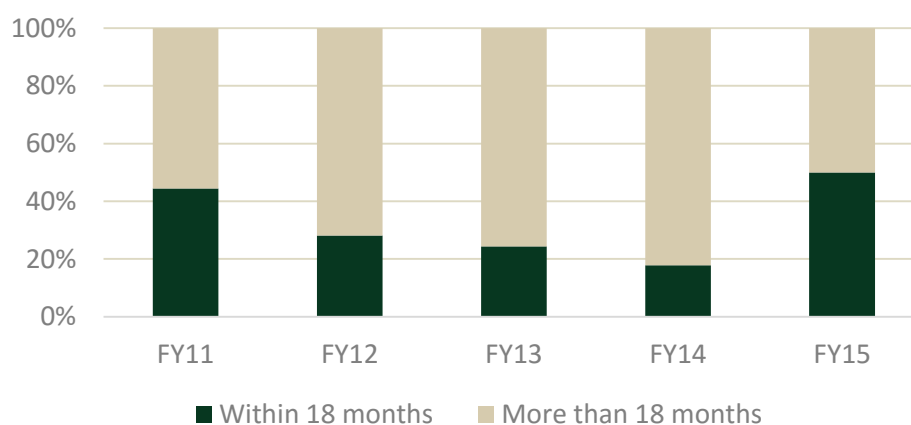
Current State: Opportunities and Constraints

45. Following the Policy Recommendations adopted by the Participants to GEF-6, and subsequent Council decisions, effective measures have been introduced to accelerate project preparation. In June 2015, when the Council decided on a one-time cancellation of long-overdue projects, there were 95 projects approved in GEF-5 and before that had not yet been submitted for CEO Endorsement/ Approval (*Joint Summary of the Chairs, 48th Council Meeting*). Of these 95 projects, 86 were submitted on time with complete documentation, seven projects were cancelled, and two projects were exempt based on extraordinary circumstances beyond the control of the parties. Of the 86 projects that were submitted on time, 75 (87 %) had been Endorsed/ Approved as of mid-February 2017. Beyond the one-time cancellation of long-overdue projects, the Cancellation Policy adopted in October 2014 (OP/PL/01) – with mandatory deadlines for the submission of requests for CEO Endorsement/ Approval – has seen full compliance to date: no full-sized projects have been cancelled for failing to meet the 18-month time limit.

46. GEF-7 presents an opportunity to build on the reforms introduced in GEF-6 with a view to further reducing the time elapsed from Council Approval to CEO Endorsement. While the

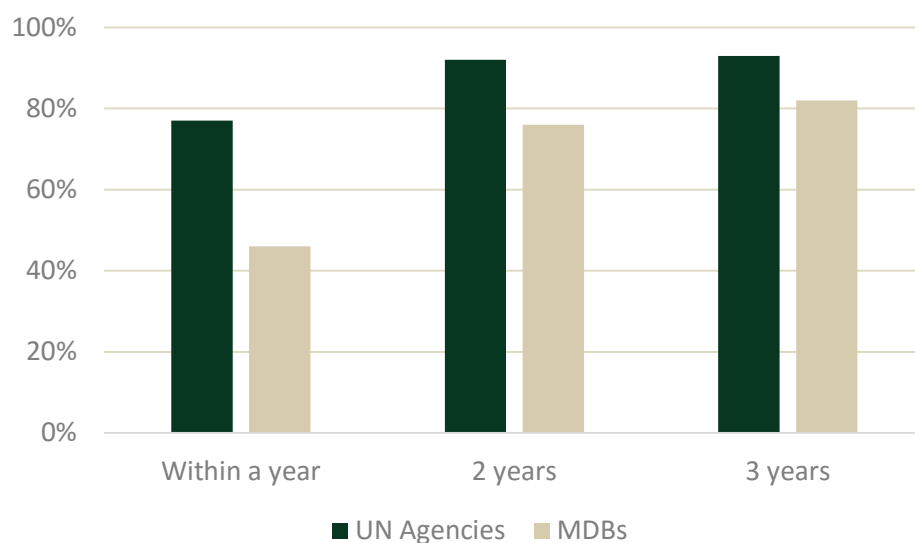
Cancellation Policy has encouraged recipient countries and Agencies to ensure the timely submission of final project documentation for CEO Endorsement/ Approval, early indications suggest that time elapsed between submission and Endorsement/ Approval remains substantial. Indeed, of the 50 full-sized projects approved by the Council in fiscal year 2015, excluding program child projects, only 25 projects (50 %) had received CEO Endorsement within 18 months from Council Approval (see Figure 3.9. below). Indeed, even with the Cancellation Policy, the GEF falls far short of the 18-month time standard for project preparation, which was reaffirmed in the same Policy.

Figure 3.9. Early indications suggests that recent measures to accelerate project preparation have had a positive impact, although significant room for improvement remains (Share of full-sized projects endorsed within 18 months of Council Approval, by fiscal year of approval)



47. **In addition, more could be done to ensure the timely start of project and program implementation.** The Secretariat, in consultation with the Agencies, has used the date of first disbursement as a proxy for the start of project implementation on the ground. The latest analysis of the first disbursements, which was summarized in the October 2016 GEF Corporate Scorecard, is based on an analysis of 559 full-sized projects and 242 medium-sized projects that received CEO Endorsement/ Approval in fiscal years 2011 to 2015. The analysis found that only 70 % of projects reached first disbursement within one year from CEO Endorsement/ Approval, and 9 % of projects had still not completed their first disbursement after three years. In general, UN Agencies tend to have faster first disbursement rates than MDBs and IFIs. More than three-quarters of project implemented by UN Agencies reached first disbursement within one year from Endorsement/ Approval, compared with 46 % of projects implemented by MDBs and IFIs (see Figure 3.10. below).

Figure 3.10. UN Agencies tend to be faster in starting project implementation, but evidence suggests delays are frequent across most Agencies (share of projects that complete their first disbursement within one, two and three years from CEO Endorsement/ Approval)



48. **Related to the need to improve the availability, accessibility, quality and timeliness of results information across all GEF-financed activities (see paragraphs 34—45 above), there is significant scope to improve the level, quality and timeliness of reporting on operational and financial progress.** An important starting point for this is to enhance compliance with existing reporting requirements. The submission rate for project implementation reports by GEF Agencies ranged from 83 % to 94 % in fiscal years 2011 to 2016, whereas the submission rate of mid-term reviews by replenishment period varied from none for GEF-1 projects to 59 % for GEF-4 projects (see tables 3.6 and 3.7 below).

Table 3.6. Submission rates for project implementation reports have been high in recent years

	FY11	FY12	FY13	FY14	FY15	FY16
Number of projects with PIRs due	1	60	185	300	418	581
Number of projects with PIRs submitted	0	50	173	267	375	512
Submission rate	0	83%	94%	89%	90%	88%

Table 3.7. The majority of projects began submitting mid-term reviews only in GEF-4

	Pilot Phase	GEF-1	GEF-2	GEF-3	GEF-4	GEF-5
Number of completed FSPs	90	107	161	271	153	1
Number of MTRs submitted	1	0	3	60	91	0
MTR submission rate for completed FSPs	1%	0%	2%	22%	59%	0%

Looking Forward: Options for Policy and Institutional Improvements

49. **There are several ways in which the GEF could seek to further accelerate project preparation and implementation.** One option to further reduce the time elapsed between Council Approval and CEO Endorsement/ Approval would be to update the Cancellation Policy to include deadlines for actual CEO Endorsement/ Approval, rather than for the submission of complete documentation alone. To encourage Agencies to seek ways to speed up their internal processes with a view to ensuring the timely launch of project implementation, some portion of the Agency fee could be withheld until a project reaches an agreed implementation milestone, such as the submission of a mid-term review. Moreover, to ensure a better flow of information on operational and financial delivery, the GEF could review its guidelines and requirements for project-level reporting during implementation to set clear expectations across the Partnership regarding the frequency, completeness and quality of reporting. In addition, and as discussed above, the GEF needs to strengthen its information management systems to enable a more efficient and more consistent capture, processing and communication of operational and financial information throughout the project cycle.

50. **Closely related to efforts to improve operational efficiency, the Council adopted in June 2016 a Project and Program Cycle Policy to clarify and consolidate relevant rules and procedures.** The timely completion and roll-out of guidelines to accompany the new Policy will be critical to improve stakeholders' understanding of the GEF's project cycle and, ultimately, to ensure a smoother review and processing of funding requests. To this end, the Secretariat is currently developing, in consultation with Agencies, STAP and the Trustee, additional instructions, procedural steps, and explanatory information to help all relevant stakeholders understand and implement the policy.

51. **Ultimately, the effective and efficient operation of the GEF relies on continued, strong collaboration across the Partnership, including member countries, Agencies, executing partners and others.** As a result, any steps to improve the GEF's operational efficiency and business processes would have to be designed and implemented in close collaboration with key stakeholders.

Enhancing Transparency in Governance and Operations

52. **The GEF holds a solid track record on transparency, and its basic policies and practices remain sound.** Transparency is enshrined in the GEF Instrument, which provides, *inter alia*, that "[the GEF] shall provide for full disclosure of all non-confidential information". Building on this principle, the GEF's basic approach has remained the same since its inception, and it is captured in the 2011 Council information document, GEF/C.41/Inf.03, *GEF Practices on Disclosure of Information*. The GEF discloses all non-confidential information regarding its governance and operations, and it works with a presumption in favor of disclosure unless there is a compelling reason for confidentiality. Indeed, Transparency International's 2016 *Progress Update on the GEF's Anti-Corruption Policies and Practices* gave the GEF a high transparency rating.

53. **At the same time, as key aspects of the GEF's transparency, integrity and accountability policies and procedures have remained largely unchanged over the past two decades, and some of these could be refreshed in light of evolving best practice.** Transparency International's Progress Update recommends, among other things, that the Council adopt an ethics and conflict of interest policy, clearer rules regarding the use of executive sessions at Council meetings, and enhanced observer participation in Council meetings. Following Council discussion on these recommendations in October 2016, work is underway to address some of them in the near term (*Joint Summary of the Chairs, 49th Council Meeting*). Specifically, an ad-hoc working group of interested Council Members is working to produce a draft *Policy on Ethics and Conflict of Interest for Council Members, Alternates, and Advisers* to be presented to the Council at its 52nd meeting in May 2017. The Secretariat, as discussed above (see Paragraph 36), is developing an updated policy on stakeholder engagement and access to information with a view to presenting a draft policy to the Council in December 2017, and it is working with Agencies to facilitate access to GEF and Agency policies and procedures.

54. **Perhaps more importantly – and as pointed out in above discussions on results and operational monitoring – the GEF could further strengthen its transparency by improving its systems to capture, store, analyze and communicate information on results, operational progress and financing across its Partnership, and to the general public.** As described above, doing so could entail a series of steps to strengthen relevant policies and procedures, continued investment in an upgraded information and communication infrastructure, and sufficient, dedicated resources to enable effective, on-going maintenance and oversight of its information management and communication systems. Previously underutilized technology, such as geospatial tools, could also be more effectively harnessed for this purpose.

Bolstering the GEF's Efforts to Address Gender Equality

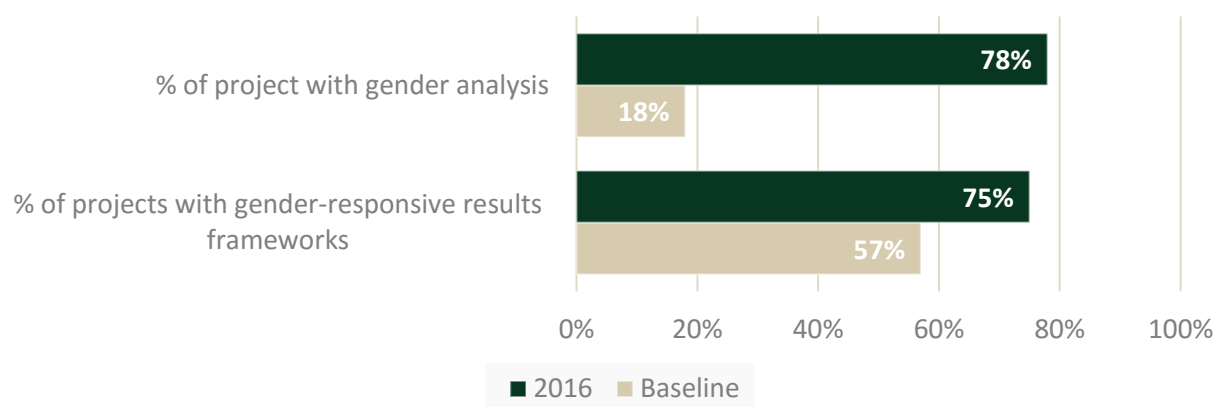
55. **Equality for women and girls is a strategic and operational imperative for the GEF.** The principal drivers of the deterioration of the global environment are closely intertwined with gender inequality and social exclusion. As a result, efforts to address environmental degradation, and those to combat gender inequality, can be mutually supportive. This is reflected in

commitments across the MEAs that the GEF serves, as well as in Agenda 2030, which recognizes gender equality and women’s empowerment as a sustainable development goal in its own right as well as a catalyst for reaching all other goals. The GEF’s approach to gender in GEF-7 will build on progress and lessons learned in GEF-6 in a manner that (i) acts on emerging guidance from the conferences of the parties to relevant MEAs, and (ii) effectively responds to the proposed ambition for GEF-7 by moving beyond gender mainstreaming alone towards a strategy that leverages key entry points to maximize positive gender and social outcomes in support of the proposed programming directions.

Current State: Opportunities and Constraints

56. **When the GEF adopted its Policy on Gender Mainstreaming in 2011 (SD/PL/02), a minority of projects considered gender in their design** (see Figure 3.11. below). Today, just five years later, there is growing evidence that the GEF and its Agencies have made significant progress on gender mainstreaming: an analysis of 160 Endorsed or Approved projects found that 78 % had conducted some form of gender analysis during preparation. The analysis further revealed that 75 % of projects addressed gender in their results frameworks (compared with a baseline of 57 %). The analysis further found that 30 % of projects included a gender action plan and or reference to specific planned gender activities.

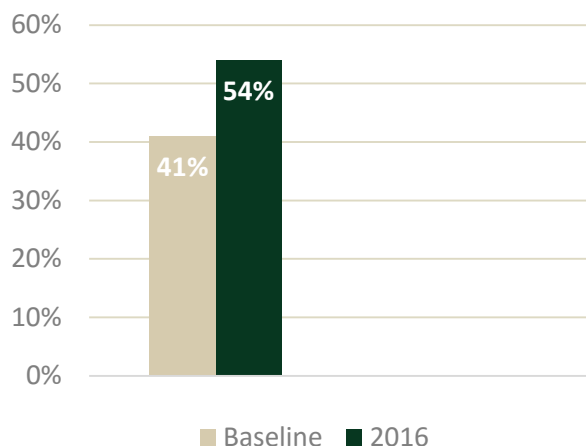
Figure 3.11. Since 2008, the GEF has seen considerable progress on gender mainstreaming



57. **Beyond project design, analysis suggests an increasing attention to gender in project monitoring and evaluation.** A review of 151 mid-term reviews and terminal evaluations shows a steady upward trend in projects that include information on gender in monitoring and evaluation reports, from a baseline of 41 % to 54 % in 2016 (see Figure 3.12. below). The analysis also found that 31 % of projects reported on sex-disaggregated indicators, mainly related to the share of women and men as direct beneficiaries of the project. This is a notable improvement from the

cohort of projects examined as part of the 2014 Annual Monitoring Review, where the share was estimated at 24 %.

Figure 3.12. An increasing share of projects include information on gender in M&E



58. **Overall, these trends suggest that the GEF’s efforts to strengthen gender mainstreaming are making a difference.** There are likely several factors contributing towards this progress, including the GEF’s policy on gender mainstreaming and increased attention to gender among Agencies and MEAs. The Gender Equality Action Plan (GEAP), developed in 2015 in response to the GEF-6 Policy Recommendations and implemented through a partnership of Agencies, MEA Secretariats and other stakeholders, has also contributed to improved monitoring and reporting, capacity development, knowledge generation and learning among Agencies and partners.

Looking Forward: Options for Policy and Institutional Improvements

59. **The shift towards a limited number of carefully selected Impact Programs presents an opportunity to strengthen the GEF’s focus on gender. In particular, the GEF should pursue a more strategic approach to gender that helps deliver equitable and sustainable environmental outcomes across key programs.** The GEF will take advantage of the timely update of the GEF’s policy and guidelines on gender, expected in 2017, to enter GEF-7 with a clearer ambition and framework on gender that goes beyond minimum requirements. While the updated policy will form a key pillar in the GEF’s approach to gender, the following, additional strategic elements will help the GEF effectively address gender dimensions across the proposed programming priorities.

- (a) **Launch a more targeted approach to promote positive gender and social outcomes.** There are important entry points for gender and social inclusion across the GEF-7 programming directions. Effectively leveraging these entry points and ensuring positive gender outcomes will require the GEF to adopt targeted efforts that go beyond gender mainstreaming. Relevant measures could range from upstream analytical and technical

support and guidance to stronger learning and knowledge sharing as well as enhanced partnerships at different levels.

- (b) **Establishing a stronger monitoring system to capture strategic gender outcomes.** This could include complementing the GEF-6 reporting framework on gender with a set of a small number of gender-disaggregated indicators in the GEF-7 results framework. This would allow the GEF to more systematically and accurately report on concrete results and relevant, positive gender outcomes across key programming areas. The likely update of GEAP in GEF-7 is expected to provide an additional opportunity for the GEF to improve qualitative reporting and strengthen its ability to evaluate its gender mainstreaming approaches and institutional impacts.

Enhancing the GEF's Knowledge Management Systems

60. **Knowledge is a primary asset of the GEF partnership.** Thanks to a diverse portfolio of projects and programs that include pilots, demonstrations, innovative instruments and unique integrated approaches, and an extensive network of partners, the GEF is in a unique position to facilitate the capture, transfer and uptake of lessons, expertise and best practice in order to more effectively address global environmental challenges and influence decision-making regarding the global environment.

Current State: Opportunities and Constraints

61. **One of the policy recommendations of the GEF-6 Replenishment negotiations was for the GEF to: (1) improve the uptake of lessons learned in its projects and programs through the establishment of a learning platform; and to (2) develop a comprehensive work plan for building a Knowledge Management (KM) System “to improve the GEF partnership’s ability to learn by doing and thereby, enhance its impact over time”.** As a follow up, the Council approved the KM Approach Paper in June 2015, which lays out steps to put in place systematic KM processes that would facilitate, enable and support the generation, use and dissemination of knowledge within the GEF. The Secretariat has been implementing the action plan included in the KM Approach Paper and has also developed a *KM Roadmap* for the GEF, which outlines the gaps, opportunities, key steps to strengthen KM across the GEF Partnership by improving (1) information management and sharing, and (2) collaboration and learning across the Partnership. The Secretariat is currently working, with guidance from the GEF KM Advisory Group, to identify options for putting in place an IT-based knowledge and learning platform that would be functional in GEF-7.

Looking Forward: Options for Policy and Institutional Improvements

62. **The GEF’s objective for further enhancing KM in GEF-7 is to operationalize and fully utilize a knowledge and learning platform to support evidence-based decision-making across the Partnership, and to facilitate the capture, customization and sharing of information on best**

practices and lessons learned from GEF-financed projects, especially in support of the proposed Impact Programs.

63. **For GEF-7, the key focus of the KM work would be to:** (a) operationalize and implement an IT-based knowledge and learning platform, in collaboration with GEF partners, to facilitate the capture, curation, analysis and sharing information on best practices and lessons learned from GEF-financed projects and programs; (b) strengthen/ expand communities of practice to facilitate uptake of lessons and best practices, especially in the context of impact programs; and (c) more systematically integrate knowledge capture, dissemination and learning into GEF project design, implementation and reporting.

64. **Finally, there is an opportunity to deploy up-stream strategic communication to enhance the transformational change sought by GEF-7.** Beyond sharing facts, messages and knowledge about the underlying drivers of environmental degradation, a strategic communication approach can be used to selectively leverage support for the objectives of GEF-7 programming, both at design and at implementation stages.

Mainstreaming Climate and Disaster Risk Screening Across all GEF Investments

65. **GEF investments are increasingly exposed to risks associated with, *inter alia*, climate change and natural disasters, but GEF funding also contributes towards the resilience of human and natural systems in the face of these risks. GEF-7 needs to introduce a systematic approach to addressing these risks and reinforcing the GEF's contributions to resilience.** The need to systematically identify and address climate and disaster -related risks across GEF investments was identified by STAP and recognized by the GEF Council in 2010 (GEF/C.39/Inf.18, *Enhancing Resilience to Reduce Climate Risks: Scientific Rationale for the Sustained Delivery of Global Environmental Benefits in GEF Focal Areas*). More recently, the UNFCCC COP requested the GEF to “to take into consideration climate risks in all its programs and operations, as appropriate, keeping in mind lessons learned and best practices” (2016). While the Secretariat reviews projects for a range of relevant risks, including those associated with climate change, it has not applied a consistent approach or methodology to do so. Meanwhile, some Agencies have put in place advanced systems and capabilities to screen their investments for climate and disaster risks, which could offer useful lessons for the wider Partnership.

66. **As a starting point, measures to mainstream climate and disaster risk screening across all GEF investments should be informed by a more complete, up-to-date understanding of the extent to which such risks are currently identified and addressed, and of the relevant policies, procedures and tools applied across the GEF Partnership.**

67. **Depending on how well climate and disaster risks are addressed at present, there are different ways in which the GEF could seek to ensure that all investments adequately consider the risks associated with climate change and natural disasters for their successful implementation and sustainability.** One of these would be to establish a minimum standard, applicable to all Agencies, for identifying and addressing climate and disaster risks. The standard

could be based on Agencies' existing systems, reflecting best practice and relevance for the GEF's needs. As it did for its fiduciary and safeguards standards, the GEF could carry out an independent assessment to ensure that Agencies' relevant systems, procedures and capabilities meet the agreed standard on climate and disaster risk screening, and monitor compliance on a regular basis. At the project level, the GEF could require all projects to provide information on how the Agency's risk screening tool or methodology has been applied. The GEF's minimum standard could also take into account the different levels of risk typically associated with different types of projects, and waive or significantly ease the screening requirement for certain projects. An alternative approach would be to strengthen project-level review and approval criteria for risk identification and management, possibly associated with specific guidelines and tools to help Agencies meet relevant criteria for relevant projects.

68. Recognizing the considerable expertise and experience present across the Partnership on climate and disaster risk screening, identifying the appropriate way forward among these and other options would require close consultation among Agencies and other stakeholders.

69. The above options would complement, but not replace, a more comprehensive, systems approach to resilience in the face of multiple risks and hazards, which has been piloted in the context of selected GEF-6 programs. Looking beyond the immediate risks of climate change and natural disasters to the successful implementation and outcomes of GEF-financed projects, the IAPs on Food Security and Sustainable Cities have embarked on more comprehensive efforts to understand and enhance the resilience of systems in the face of evolving risks and trends. These efforts include piloting the Resilience, Adaptation Pathways and Transformation Assessment Framework (RAPTA), developed by STAP and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Reviewing the Balance of Grants and Concessional Loans

70. In view of the significant changes to both the context within which the GEF operates, and the GEF itself, since its inception, there may be a need to assess whether an increasing share of GEF funding should be provided in the form of concessional loans rather than grants. According to the GEF Instrument, the GEF can deploy concessional financing in forms other than grants, consistent with guidance from the conferences of the parties to the MEAs it serves, where relevant, and on terms determined by the Council (*Instrument for the Establishment of the Restructured Global Environment Facility*, paragraph 9[c]).

Current State: Opportunities and Constraints

71. Since its inception, the GEF has overwhelmingly been a grant-making institution. The GEF has so far made relatively limited use of financial instruments with a potential for reflows: since GEF-3, only 17 GEF projects with a potential reflows have been approved (see Table 3.8.), the majority in the form of equity, private sector debt financing or guarantees. This is equivalent to less than 2 % of GEF funding approvals to date. The GEF has practically no experience of

providing concessional loans to governments⁶¹. GEF has provided funding towards another 80 projects that deploy as non-grant instruments without reflows to the GEF – mainly in the form of seed funding for revolving loans.

Table 3.8. The GEF has made limited use of non-grant instruments with reflows
(US\$m)

Replenishment Cycle	No. of Projects	GEF Amount	Co-financing	Expected Reflow	Reflows received
GEF-3	2	30	129	26	8
GEF-4	1	30	1,000	23	0
GEF-5	5	70	907	91	0
GEF-6	9	89	1,637	106	0
Total	17	216	3,673	245	8

72. **The eligibility criteria and financial terms of concessional loans to governments are set out in the GEF’s Policy on Non-Grant Instruments (2014, FI/PL/02). Importantly, not all Agencies are eligible to manage loan projects.** According to the Policy, a GEF Partner Agency is eligible to provide GEF concessional finance, if it can demonstrate, *inter alia*, an ability to accept financial returns and monitor compliance with non-grant instrument repayment terms, and if it holds a track-record of lending or financing arrangements with public sector recipients and an established relationship with the beneficiary countries’ Ministry of Finance or equivalent.

Looking Forward: Options for Policy and Institutional Improvements

73. **The rationale for a greater use of concessional loans to governments should be examined carefully in view of the proposed strategy for GEF-7, and broader changes to the GEF’s delivery model.** Ultimately, the balance of grants and concessional finance, and the option of making greater use of concessional loans to governments, should be addressed in terms of impact.

74. **A greater use of concessional loans could offer several advantages.** First, loans could allow the GEF to begin to differentiate the terms of its financing, by providing a greater share of

⁶¹ In October 2016, the Council approved the *South West Indian Ocean Fisheries Governance and Shared Growth* project (GEF ID: 9563), where the GEF provides a loan of US\$5 million alongside an IBRD guarantee to support the issuance by the Government of the Seychelles of Blue Bonds to attract private sector investment. However, due to the innovative and potentially unique nature of this non-grant investment, it is not representative of the possible advantages and disadvantages of an expanded use of concessional loans.

its financing as loans when engaging in high income and upper middle income countries⁶². A greater use of concessional loans would also entail that recipient governments would finance a larger share of project costs, thereby providing higher leverage of GEF resources. Finally, loans would enhance the long-term financial sustainability of the GEF.

75. **At the same time, a greater use of concessional loans has a number of disadvantages.** One important disadvantage of substituting grants for loans would be to constrain the range of activities that the GEF can support, and the range of partners with whom the GEF can work. The GEF pursues global environmental benefits in various ways, many of which are only feasible with grant funding. These include, *inter alia*, support towards institutional capacity development, policy and regulatory reform, private sector risk sharing and aggregation costs, convening multi-stakeholder coalitions, and promoting knowledge exchange. In order for the GEF to effectively catalyze resources, actions and commitments for systems change, it seems critical that it remains responsive and agile, with an ability to provide incremental financing to fill gaps and complement the work of others. A shift from grants to loans would inevitably constrain that ability. Moreover, by limiting the number of Agencies with whom the GEF can work, and possibly the types of counterparts that can execute GEF-financed activities, loans would make it more difficult to implement the new engagement model proposed above (see paragraphs 19–33). More broadly, a continued, strong emphasis on grants may be more consistent with the fact that the GEF supports countries only with the ultimate objective of safeguarding global public goods.

76. **In addition, there are important questions about feasibility.** The experience from the NGI pilot in GEF-6 suggests that the demand from countries to access concessional loans over and above their national allocations may be limited, and therefore there is a risk that the GEF's presence in certain countries would decline. Moreover, the GEF's risk-management capabilities may not be sufficiently developed in their current form to allow it to effectively manage a loan portfolio.

⁶² Of the 143 recipient countries that received a STAR allocation in GEF-6, 29 are low income countries (LIC), 50 are lower middle income countries (LMIC), 53 are upper middle income countries (UMIC), nine are high income countries (HIC) and two are not classified (World Bank lending groups for fiscal year 2017).

ANNEXES

ANNEX 1. BIODIVERSITY

Table A1.1. Response to direct drivers/pressures of biodiversity loss (+=significant contribution, -= small or indirect contribution)

Direct Drivers	Habitat Loss	Over-exploitation/ unsustainable use	Climate change (primarily addressed through CC)	Invasive Species	Pollution
Impact Programs					
Agricultural commodities	+	-	+	-	-
Amazon Sustainable Landscapes	+	+	+	-	-
Circular economy	-	+	-		+
Inclusive Conservation	+	+	+	-	-
Environmental Security	+	+			
Green Infrastructure	+				
Landscape restoration	+	-	+	+	-
Natural capital	+	+	+	-	+
Healthy Oceans for Sustainable fisheries	+	+		+	+
Wildlife for Sustainable Development	+	+	-	-	
Biodiversity- specific investments					
Sustainable use of plant & animal genetic resources	+	+			-
Invasive alien species	-	-	-	+	
Protected area systems	+	+	+	-	-
Preventing Species Extinction	+	+			
Biosafety	+	-	-	-	-
ABS	-	+	-	-	
National reporting	-	-	-	-	-

Table A1.2. Mapping of the GEF-7 Four Year Framework of Program Priorities and Outcomes for GEF-7 to Delivery through Impact Programs and Biodiversity Complementary Investments

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
<p>I. Mainstream biodiversity across sectors as well as within production landscapes and seascapes</p> <p>A) Improve policies and decision-making, informed by biodiversity and ecosystem values</p> <p>Expected Outcome 1: Financial, fiscal, and development policies, as well as planning and decision-making⁶³ take into account biodiversity and ecosystem values,⁶⁴ in the context of the different tools and approaches used by Parties to achieve the Aichi Biodiversity Targets.</p> <p>Expected Outcome 2: Identified significant incentives, including subsidies, harmful for biodiversity are eliminated, phased out, or reformed, consistent and in harmony with the Convention and other international</p>	<p>The Natural Capital Impact Program (NCIP) will begin building the capacity of 25 countries to implement and institutionalize natural capital accounting systems, using the UN System of Experimental Environmental Accounts, as well as other tools and approaches used by Parties to recognize, measure, and account for natural capital, including biodiversity, demonstrate its value, and enable these value to be integrated into policy and decision-making.</p> <p>One of the critical barriers to realizing outcomes one and two is that few countries have received the support and/or capacity building required in order to undertake natural capital accounting, including biodiversity, as well as other tools and approaches used by Parties, in a statistically rigorous way that is comparable to other national accounts used in Government policy and decision-making. The Natural Capital Impact Program aims to eliminate this barrier and facilitate the incorporation of these values into policy and decision-making, including the identification of incentives and subsidies that are harmful to biodiversity so that they can be phased out, reduced or eliminated.</p> <p>The GEF's work on the fisheries sector through the Healthy Oceans for Sustainable Fisheries Impact Program aims to achieve regional agreements to reduce subsidies in Large Marine Ecosystems with the most depleted fish stocks and prohibit destructive fish subsidies that undermine achieving sustainable fisheries while promoting incentives through the fishery value chain. The IP will support implementation of mechanisms for traceability for important</p>

⁶³ At spatial, non-spatial, sectoral, national and subnational levels.

⁶⁴ See decision X/3, paragraph 9(b)(ii).

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
<p>obligations and taking into account national socioeconomic conditions.</p> <p>Expected Outcome 3: Economic sectors affecting significant biodiversity adopt sustainable supply chains and/or clean production processes, thus minimizing their impacts on biodiversity.</p>	<p>commercial fish value chains. Finally, the IP will support the implementation of sustainability standards for private aquaculture.</p> <p>The Landscape Restoration Impact Program includes work on elimination of perverse incentives and policies that hamper restoration or lead to further deforestation/degradation. This might include agricultural subsidies that negatively affect biodiversity, e.g. tax exemptions for Rubber plantation in SE Asia.</p> <p>The Agricultural Commodities Supply Chain Impact Program is advancing an integrated supply chain approach to tackle the underlying root causes of deforestation from agriculture commodities. Such an approach addresses the entire commodity supply chain in a coordinated fashion in order to foster sustainability and achieve transformational impact, and ultimately generate global environmental benefits that include reduced greenhouse gas emissions, reduced biodiversity loss, and sustainable forest management. The GEF-7 Impact Program will build on the GEF-6 Program, “Taking Deforestation out of Commodity Supply Chains”, which promotes sustainability in the entire supply chain of beef, oil palm and soy. The GEF-6 program is establishing multi-stakeholder platforms to engage global and national supply chain actors, (including financial institutions), stimulating market demand for deforestation-free commodities, strengthen the enabling environment, and supporting the uptake of sustainable and biodiversity-friendly practices by producers. The program is anchored in regions and countries with potential for rapid expansion of the commodities, and interventions were prioritized to maximize potential for generating significant global environmental benefits. Building on this framework, the GEF is now well positioned to expand its catalytic role on taking deforestation out of commodity supply chains in two ways during GEF-7: 1) deepening engagement on beef, oil palm, and soy commodities supply chains within existing and across new geographies, and 2) broadening focus to include additional commodities associated with tropical deforestation, particularly cocoa and coffee, and with a range of new actors.</p>

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
	<p>The Circular Economy Impact Program seeks to support the decoupling of environmental pressure from economic growth through improved product design, material use, industrial process change, waste management and recycling. The Impact Program will work on the entire supply chain from extraction to processing to consumption to waste management. One priority system of the Impact Program will plastic packaging given its relevance to and impact on many of GEF's mandates (GHGs, chemicals and specifically POPs, and marine biodiversity). Support will be focused on fostering new materials and designs, promoting existing standards and efficient production, and improving waste collection and management, thereby reducing the impact of marine debris on marine biodiversity.</p>
<p>I. Mainstream biodiversity across sectors as well as within production landscapes and seascapes</p> <p>B) Manage biodiversity in landscapes and seascapes</p> <p>Expected Outcome 4: Loss, fragmentation, and degradation of significant natural habitats, and associated extinction debt, is reduced, halted or reversed, and conservation status of known threatened species is improved and sustained, including through monitoring, spatial planning, incentives⁶⁵, restoration, and strategic establishment of protected areas and other measures.</p>	<p>The following impact programs and biodiversity-related response investments will reduce, halt or reverse loss, fragmentation and degradation of natural habitats through an array of strategies.</p> <p>The Agricultural Commodities Supply Chain Impact Program is advancing an integrated supply chain approach to tackle the underlying root causes of deforestation from agriculture commodities resulting in reduced forest fragmentation and degradation of forest ecosystems (see above).</p> <p>In order to have a significant impact in reducing deforestation and promote efficient land use in the Amazon region, the Amazon Sustainable Landscapes Impact Program, building on GEF-6 experience, will continue to focus on addressing the complex set of drivers of deforestation and barriers to sustainable land use in the Amazon biome while expanding the reach of the GEF-6 ASL Program to include the remaining GEF-eligible countries that are part of the Amazon biome to become involved: Bolivia Ecuador, Guyana, Suriname, and Venezuela. The program aims at generating scalable results in reducing deforestation and the loss and fragmentation of natural habitats as well as preventing the extinction of threatened species and improving their conservation status through four inter-related interventions: a) increase conservation and protection of biodiversity through expansion of protected areas and more effective management;</p>

⁶⁵ As referred to in Aichi Biodiversity Target 3.

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
	<p>b) enhance sustainable land use by improving forest and land management and reducing carbon emissions from deforestation in the respective project areas; c) strengthen incorporation of biodiversity management principles into selected government sectors that are drivers of deforestation (i.e., agriculture, extractive industries and infrastructure) through sectoral agreements and/or instruments; d) capacity building and regional cooperation. Additional areas of investment could include formalization or regulation of the ASGM sector and improved management of freshwater resources.</p> <p>The Inclusive Conservation Impact Program will also contribute to this outcome through support to Indigenous Peoples and Local Communities (IPLCs) in the sustainable and effective conservation and management of natural resources, both terrestrial and marine. The IP will directly support site-based conservation and sustainable financing mechanisms of indigenous and community-driven conservation in critically important ecosystems, including Indigenous and Community Conserved Areas (ICCAs), community-based fisheries management, and other effective area-based conservation measures. The program will support enhanced conservation of at least 25 million hectares and the improved management of habitat for at least 100 IUCN Red List threatened species.</p> <p>The world is expected to invest around \$90 trillion in infrastructure over the next 15 years, more than our entire current inventory today. The negative impact of this infrastructure on biodiversity will be significant if not properly designed or managed. The GEF has identified critical priority interventions which can influence large-scale planned infrastructure projects in more than one hundred GEF recipient countries. The major focus of the Green Infrastructure Impact Program will be to convene and support build coalitions willing to foster innovative and integral solutions for green infrastructure investment; support country efforts to build capacity and enabling environments; and work with private sector and other investors to make sustainability practices the new normal. Successfully transforming infrastructure to include sustainability planning and criteria that will protect natural resources through reducing habitat loss and protecting watersheds and coastal zones will result in significant contributions to biodiversity conservation. The program can also foster explicit inclusion of biodiversity offsets and other mechanisms in these criteria to ameliorate negative impacts of projects.</p>

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
	<p>Landscape Restoration Impact Program: While the main emphasis of the IP is on restoring ecosystem functionality, in order to contribute to biodiversity conservation, the criteria for selection of the 15 – 25 target landscapes will include the potential of restoration to enhance globally important biodiversity and facilitate connectivity amongst protected areas or other area-based conservation measures. Furthermore, in countries that develop relevant Natural Capital Accounts under the Natural Capital Impact Program and where restoration opportunities exist, natural capital valuations will inform the use of risk and return frameworks for deciding on investments in landscape restoration. The outcome in the 15 – 25 selected landscapes would be a total area of 60 – 100 million hectares covered by integrated land use plans that benefit biodiversity through increasing and enhancing habitats, reducing forest fragmentation, and reducing deforestation in High Conservation Value Forests and other key ecosystems.</p>
<p>I. Mainstream biodiversity across sectors as well as within production landscapes and seascapes</p> <p>C) Harness biodiversity for sustainable agriculture</p> <p>Expected Outcome 5: Biodiversity supporting key agricultural ecosystems, such as through pollination, biological pest control, or genetic diversity, is conserved and managed, contributing to sustainable agricultural production.</p>	<p>The Food Systems Impact Program (FSIP) will support sustainable intensification through diversified agricultural production systems that reduce direct pressure on biodiversity and ecosystem services while increasing on-farm species diversity and sustainable use of agrobiodiversity. The IP will focus on geographies where negative externalities from food production are a major factor negatively impacting biodiversity and natural capital.</p> <p>One biodiversity investment will complement the FSIP. First, Securing Agriculture’s Future: Sustainable Use of Plant and Animal Genetic Resources will focus on the conservation and sustainable use of plant genetic diversity, including crop wild relatives, with a geographical focus on Vavilov Centers of Diversity. In addition, the investment will support actions to conserve the wild relatives of domesticated livestock, not solely focusing on breeds.</p>
<p>II. Reduce direct drivers of biodiversity loss</p> <p>D) Prevent and control invasive alien species</p>	<p>Biodiversity Complementary Investment: “Prevention, Control and Management of Invasive Alien Species” (focus on islands)” will build capacity of countries to design and implement management frameworks to prevent, control and manage invasive alien species with a focus on invasion pathways.</p>

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
Expected Outcome 6: Management frameworks for invasive alien species are improved	Under the Landscape Restoration Impact Program , restoration of terrestrial and coastal ecosystems may include targeted eradication, management or control of Invasive Alien Species that have a negative impact on globally valuable biodiversity, including particular threatened species, as well as on ecosystem services underpinning agriculture, fisheries and other economic sectors.
II. Reduce direct drivers of biodiversity loss E) Reduce pressures on coral reefs and other vulnerable coastal and marine ecosystems Expected Outcome 7: Anthropogenic pressures on vulnerable coastal and marine ecosystems, including coral reefs, mangroves and seagrass beds, and associated ecosystems, including pollution, overfishing and destructive fishing, and unregulated coastal development, are reduced, thus contributing to ecosystem integrity and resilience.	The Healthy Oceans for Sustainable Fisheries Impact Program will be implemented under three main themes of action: Sustainable Fisheries and Aquaculture, Resilient and Productive Ecosystems, and Healthy and Clean Oceans. Under these themes, the IP aims to support these biodiversity-specific actions: a) sustainable fisheries through governance reforms and improved fisheries management plans; b) Ridge-to-Reef coastal zone management measures; c) catalyze investment, policy reforms, Public-private partnership to reduce land-based pollution d) implementation of sustainable standards for private aquaculture; e) coral restoration; f) increasing the area of Marine Protected Areas (MPAs) focusing on globally important habitats; g) strengthening effective management and governance of MPAs; and h) restoration of degraded coastal ecosystems. The IP specifically targets coral reefs, mangroves, salt marshes, and seagrass beds as critical coastal and marine ecosystems that merit special attention within the context of the activities identified above. These actions are identified through Transboundary Diagnostics Analyses and Strategic Action Programs in 23 large Marine Ecosystems covering the coastal and marine ecosystems of 112 GEF-recipient countries.
F) Enhance the Effectiveness of Protected Area Systems Expected Outcome 8: The area of protected areas under effective and equitable management is significantly increased,	The biodiversity complementary investment, Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate will strengthen the three fundamental aspects of protected area system sustainability: sustainable finance, ecosystem representation, and capacity building leading to effective management. GEF will continue to promote the participation and capacity building of indigenous peoples and local communities, especially women, in the design, implementation, and management of protected

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
<p>including development of sustainable financing.</p> <p>Expected Outcome 9: The ecological representativeness of protected area systems, and their coverage of protected areas, and other effective area-based conservation measures, of particular importance for biodiversity is increased, especially habitats for threatened species.</p>	<p>area projects through established frameworks such as indigenous and community conserved areas.⁶⁶ GEF will also promote protected area co-management between government and indigenous peoples and local communities where such management models are appropriate.</p> <p>The Inclusive Conservation Impact Program will also contribute to this outcome through support to Indigenous Peoples and Local Communities (IPLCs) in the sustainable and effective conservation and management of natural resources, both terrestrial and marine. The IP will directly support site-based conservation and sustainable financing mechanisms of indigenous and community-driven conservation in critically important ecosystems, including Indigenous and Community Conserved Areas (ICCAs), community-based fisheries management, and other effective area-based conservation measures. The program will support enhanced conservation of at least 25 million hectares and the improved management of habitat for at least 100 IUCN Red List threatened species.</p> <p>The Wildlife for Sustainable Development Impact Program will support conservation and sustainable use of wildlife as an engine of economic growth in at least 3 large wildlife landscapes in Africa. This will provide habitats to over half the world's elephants, many other species of antelope that are disappearing faster than elephants, and the recovery of predators, especially lions and wild dogs that require large habitats. Scale will enhance ecosystem function, including the recovery of ancient migration routes, and the conservation and recovery of the full suite of flora and fauna biodiversity that is usually associated with large, interact wildlife habitats. The program would target remaining large wilderness areas, most of which include areas within various countries, such as, for example, the Okavango- Zambezi (Angola, Botswana, Namibia, Zambia); the Greater Limpopo (Mozambique, South Africa and Zimbabwe); Malawi-Zambia TFCA; Serengeti-Mara (Tanzania and Kenya); Kagera (Rwanda, Tanzania and Uganda); Niassa-Selous, or Odzala (Congo, Cameroon and CAR). Several of these landscapes are important regional water</p>

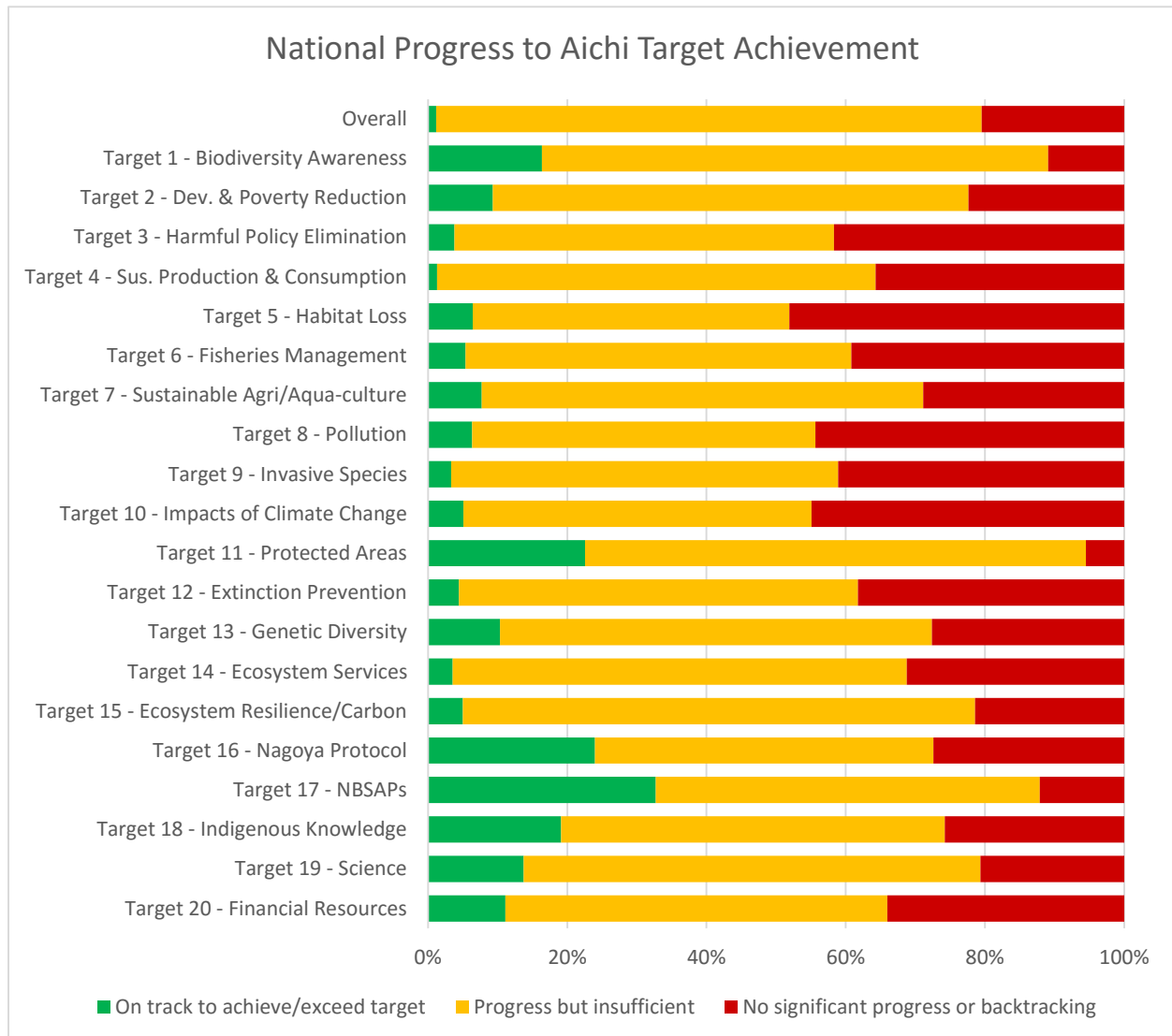
⁶⁶ Indigenous and Community Conserved Areas are natural sites, resources and species' habitats conserved in voluntary and self-directed ways by indigenous peoples and local communities.

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
	<p>catchments, especially KAZA and Luangwa, and they are huge landscapes with intact habitats of forest, savanna, swamp, and therefore carbon.</p>
<p>II. Reduce direct drivers of biodiversity loss</p> <p>G) Combat illegal and unsustainable use of species, with priority action on threatened species</p> <p>Expected Outcome 10: Illegal, unregulated and unsustainable taking, and/or trafficking of species of flora and fauna, including marine species, is significantly reduced and both demand and supply of related products is addressed, with priority action on threatened species.</p>	<p>While other GEF investments actively address many of the threats to species (i.e. habitat destruction and fragmentation, over-exploitation, climate change, and introduction of invasive alien species), additional efforts are required to prevent the extinction of the unprecedented number of species that have seen their numbers and distribution ranges reduced dramatically due to illegal, unregulated and unsustainable taking, and/or trafficking. The biodiversity complementary investment, Preventing the Extinction of Known Threatened Species, addresses this need. In countries where there is significant pressure on threatened wildlife species, GEF will help build the capacity of environmental authorities, law enforcement agencies and the judiciary to reduce poaching inside and outside of protected areas. Investments in these areas is crucial, as the poaching and trafficking of wildlife goes hand in hand with other illegal trafficking of threatened species, as has been well documented on the east coast of Africa with fine woods. This support will include strengthening decision and policy-making processes including legislation geared towards limiting and punishing illegal activity. GEF will also enhance science-based wildlife monitoring, communications, knowledge sharing, education and awareness. In demand countries, raising awareness and other behavioural change approaches to reduce demand will be supported.</p>
<p>III. Strengthen biodiversity policy and institutional frameworks</p> <p>H) Implement the Cartagena Protocol on Biosafety</p> <p>Expected Outcome 11: The number of ratifications of the Cartagena Protocol on Biosafety and the Nagoya–Kuala Lumpur</p>	<p>The Biodiversity-response related investment, “Implementing the Cartagena Protocol on Biosafety”, will continue GEF’s support to build capacity to implement the CPB prioritizing the implementation of activities that are identified in country stock-taking analyses and in the COP guidance to the GEF. By the end of GEF-6, as many as 64 countries will have received support for implementation of their National Biosafety Frameworks (NBFs); however, another 71 eligible countries have yet to request support to implement their NBFs. GEF-7 will provide the opportunity for these countries to seek support for these initial phases of basic capacity building. In addition, the GEF will support the ratification and implementation of the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the CPB.</p>

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
<p>Supplementary Protocol on Liability and Redress is increased.</p> <p>Expected Outcome 12: National implementation of the Cartagena Protocol on Biosafety and the Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress is enhanced.</p>	
<p>III. Strengthen biodiversity policy and institutional frameworks</p> <p>I) Implement the Nagoya Protocol on Access to Genetic Resources and Benefit-sharing</p> <p>Expected Outcome 13: The number of ratifications of the Nagoya Protocol is increased.</p> <p>Expected Outcome 14: Number of countries that have adopted legislative, administrative or policy measures on access and benefit-sharing to implement the Protocol is increased, including, inter alia and as appropriate, measures for mutual implementation with other relevant international agreements, coordination in transboundary genetic resources and associated traditional knowledge, and/or procedures to issue internationally recognized certificates of compliance.</p>	<p>The biodiversity complementary investment, Implementing the Nagoya Protocol on Access and Benefit Sharing, will support national and regional implementation of the Nagoya Protocol and, if still required in specific countries, targeted capacity building to facilitate ratification of the Protocol. As such, the GEF will support core activities to comply with the provisions of the Nagoya Protocol including 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 and implementation of a strategy and action plan for the implementation of ABS measures. (e.g. policy, legal, and regulatory frameworks governing ABS, National Focal Point, Competent National Authority, Institutional agreements, administrative procedures for Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT), monitoring of use of genetic resources, compliance with legislation and cooperation on trans-boundary issues); and, building capacity among stakeholders (including indigenous peoples and local communities, especially women) to negotiate between providers and users of genetic resources. The GEF will also enhance national implementation of the Nagoya Protocol through regional collaboration. 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 and the FAO Commission on Genetic Resources for Food and Agriculture.</p>

GEF-7 Four Year Framework of Program Priorities	Delivery Through Impact Programs and Biodiversity Complementary Investments
<p>III. Strengthen biodiversity policy and institutional frameworks</p> <p>J) Improve biodiversity policy, planning, and review</p> <p>Expected Outcome 15: Parties meet their reporting obligations under the Convention and the Protocols, through submission of relevant national reports and of relevant information through the clearing-houses.</p> <p>Expected Outcome 16: National policy and institutional frameworks are reviewed, their implementation and effectiveness assessed, and gaps identified and addressed by the frameworks.</p> <p>Expected Outcome 17: The review and, as appropriate, revision and update, of national biodiversity strategies and action plans in the light of a successor framework to the Strategic Plan for Biodiversity 2011-2020, is implemented, incorporating an enhanced focus on achieving policy coherence.</p>	<p>Countries will be able to access the set-aside funds to implement enabling activities. Enabling activity support could be provided for all GEF-eligible countries to revise their NBSAP, and/or to produce the National Report to the CBD as well as national reporting obligations under the Cartagena Protocol and Nagoya Protocol that will be identified during upcoming COPs and COP-MOPs and that will come due during the GEF-7 period. This support will enable the incorporation of an enhanced focus on achieving policy coherence supportive of the CBD.</p>

Figure A1.1. National Progress to Aichi Target Achievement⁶⁷



⁶⁷ <http://www.birdlife.org/campaign/national-commitments-fall-short-action-needed-safeguard-nature> Analysis conducted by RSPB, BirdLife, WWF, CI and TNC based on CBD data.

Biodiversity Complementary Investments

Priority Cluster I. Mainstream biodiversity across sectors as well as within production landscapes and seascapes

Priority C) Harness biodiversity for sustainable agriculture

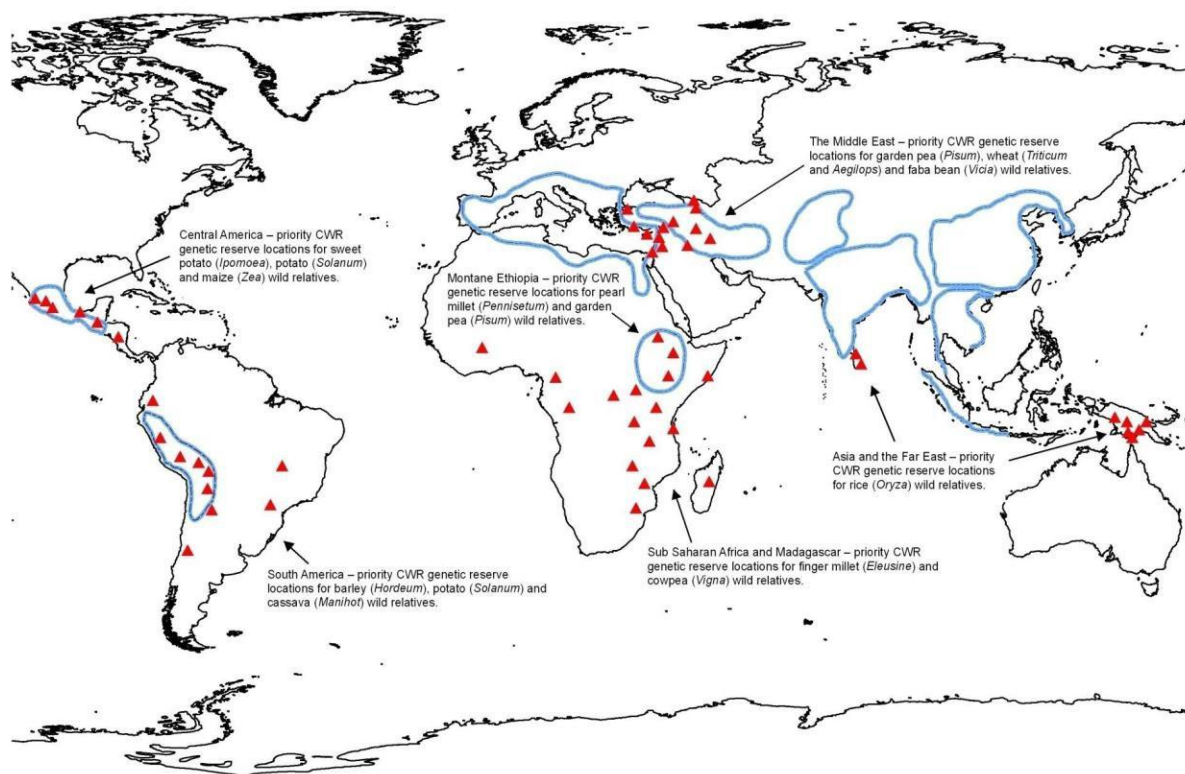
Biodiversity Complementary Investment: Securing Agriculture's Future: Sustainable Use of Plant and Animal Genetic Resources

1. The conservation and sustainable use of the genetic diversity of cultivated plants, domesticated animals, of their wild relatives and of other socio-economically and culturally valuable species, including aquatic, forest, microbial and invertebrate genetic resources, is central to achieving food security and nutrition of a growing world population, improving rural livelihoods, developing more sustainable agriculture practices, and improving ecosystem function and the provision of ecosystem services in production landscapes. As climates and production environments change, in often unpredictable ways, genetic diversity is also essential to providing the necessary adaptability and resilience.
2. Crop and animal genetic diversity in many production systems have eroded significantly. Threats to genetic diversity are associated with the continuing use of unsustainable approaches that drive excessive use of fertilizers and pesticides, pollution of aquifers and waterways, declining levels of groundwater, and mismanagement of soils.
3. Land use changes and fragmentation threaten wild relatives of domestic plants and animals. There has also been significant loss of crop wild relatives (genetic and species diversity) from production and natural ecosystems.
4. Under this targeted investment, the GEF focus is three-fold. First, GEF will provide support to establish protection for Crop Wild Relatives (CWR) in-situ through CWR Reserves. Second, the GEF will support in-situ conservation, through farmer management, of plant genetic resources in Vavilov Centers of Diversity. This focus will complement the thematic and geographic focus of the Food Systems Impact Program. Third, the GEF will also support conservation and sustainable use of animal genetic resources and actions to conserve the wild relatives of domesticated livestock, not solely focusing on breeds.
5. Figure A1.2. identifies priority genetic reserve locations for wild relatives for 14 major global food crops (finger millet, barley, sweet potato, cassava, banana/plantain, rice, pearl millet, garden pea, potato, sorghum, wheat, fava bean, cowpea and maize).⁶⁸ The centers of crop genetic diversity indicated by the enclosed lines are likely to contain other priority sites for other crop gene pools. GEF investment in CWR reserves would focus on these areas; however, support

⁶⁸ Second State of the World's Plant Genetic Resources for Food and Agriculture. 2009 FAO, Rome.

to managing priority CWR reserves mapped and identified at national level that complement global level assessments undertaken by FAO and others would also be eligible if the CWR in question were of global significance.⁶⁹

Figure A1.2. Priority genetic reserve locations for wild relatives for 14 major global food crops



6. GEF will also support in-situ conservation, through farmer management, in Vavilov Centers of Diversity, given their global importance. This approach allows continuing evolution and adaptation of cultivated plants and domesticated animals and also meets the needs of rural communities, including indigenous peoples and local communities, especially women, who often depend on agricultural biodiversity for their livelihoods through its contribution to food security and nutrition, medicines, fodder, building materials and other provisioning services as well through support for ecosystem function. Women’s participation will be particularly critical, given the primary role that women play in agrobiodiversity management. In-situ conservation in

⁶⁹ A global approach to crop wild relative conservation: securing the gene pool for food and agriculture, 2010, Kew Bulletin, Vol. 65: 561-576. Maxted, Nigel et. al.

production landscapes helps improve sustainability and resilience. A recent analysis confirmed that agricultural biodiversity played a central role in the strategies adopted by rural communities adapting to climate change⁷⁰. Results from these investments may also generate important co-benefits for the International Treaty on Plant Genetic Resources for Food and Agriculture.

7. GEF will focus on innovations to current production systems and practices that:
 - (a) Maintain and strengthen different production systems and their elements, including agriculture practices based on local and traditional knowledge, that allow continued evolution and adaptation (adequate population sizes, seed systems, movement of useful materials, and access to ex-situ materials);
 - (b) Link genetic diversity maintenance to improved food security and economic returns for rural communities and farmers (including local market access and market regulations);
 - (c) Develop policies, strategies, legislation, and regulations that shift the balance in agricultural production in favor of diversity rich approaches. These include support for the adoption of appropriate fiscal and market incentives to promote or conserve diversity on-farm and across the production landscape;
 - (d) Strengthen capacity of the agricultural development, extension and research communities and institutions that are needed for in-situ conservation, so that agricultural biodiversity is embedded in sustainable intensification and adaptation to climate change; and
 - (e) Strengthen the capacities of community and smallholder organizations, and farmers (both men and women) to participate in the identification, development, and implementation of solutions

Priority Cluster II. Reduce direct drivers of biodiversity loss

Priority D) Prevent and control invasive alien species

Biodiversity Complementary Investment: Prevention, Control and Management of Invasive Alien Species

8. Invasive alien species (IAS) are non-native organisms that cause, or have the potential to cause harm to the environment, economy and human health. The globalization of trade, travel,

⁷⁰ Dunja Mijatovic, Frederik Van Oudenhoven, Pablo Eyzaguirre, and Toby Hodgkin. 2012, The role of agricultural biodiversity in strengthening resilience to climate change: towards an analytical framework. International Journal of Agricultural Sustainability.

and transport is greatly increasing the rate at which IAS move around the world, as well as the diversity and number of species being moved.

9. IAS can exert a heavy economic toll on national governments, industries, and the private sector. For example, the estimated damage from invasive species worldwide totals more than \$1.4 trillion or 5% of the global economy.⁷¹ IAS can impact human health through disease epidemics, and pathogens and parasites may themselves be IAS or may be introduced by invasive vectors.

10. Despite the various COP decisions identifying the need for Parties to address IAS as a priority biodiversity management problem, only 12 projects benefiting 30 countries focused on IAS had been submitted for funding prior to GEF-6. During GEF-6, in response to the focus that the biodiversity strategy placed on addressing the threat of IAS on island ecosystems, two new regional projects in the Caribbean and Pacific and three national projects were developed covering ten additional countries.

11. Islands are particularly susceptible to the impacts of IAS. Islands are recognized as having exceptionally high numbers of endemic species, with 15% of bird, reptile and plant species on only 3% of the world's land area. The conservation significance of islands is highlighted by global analyses showing that 67% of the centers of marine endemism and 70% of coral reef hotspots are centered on islands.

12. The isolated nature of islands can also provide some advantages in efforts to minimize the spread and impact of IAS in a cost-efficient manner. Terrestrial and freshwater IAS have difficulty colonizing islands on their own accord. Furthermore, the contained nature and relatively small size of islands enables the implementation of cost-effective response measures to prevent introductions, and to control and manage IAS that become established. Therefore, during GEF-7 GEF support will focus on island ecosystems. 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 on islands such as the provision of water. The focus also responds to the opportunity offered by the stronger interest to advance IAS management on the part of island states and countries with island archipelagos, and the opportunity that island ecosystems provide to demonstrate success in addressing the problem of IAS. Such success may in turn generate greater attention and interest in the comprehensive pathways management approach being promoted through these investments.

13. GEF will support the implementation of comprehensive prevention, early detection, control and management frameworks that emphasize a risk management approach by focusing

⁷¹ Pimentel, D., McNair, S., Janecka, J., Wightman, J., Simmonds, C., O'Connell, C., Wong, E., Russel, L., Zern, J., Aquino, T. and Tsomondo, T. 2001. Economic and environmental threats of alien plant, animal, and microbe invasions. *Agriculture, Ecosystems and Environment* 84: 1-20.

on the highest risk invasion pathways. 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 strongly engage with island states to advance this agenda, projects submitted by continental countries that address IAS management through the comprehensive pathways approach outlined above will also be supported.

Priority F) Enhance the effectiveness of protected area systems

Biodiversity Complementary Investment: Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate

14. GEF support to the establishment and management of protected area systems and associated buffer zones and biological corridors has arguably been GEF's greatest achievement during the last 25 years. Supporting the management of protected areas is not only a sound investment in biodiversity conservation and sustainable use, but also provides significant additional economic and environmental benefits beyond the existence value of biodiversity.

15. GEF support aims to strengthen these three elements of a sustainable protected area system: a) effective protection of ecologically viable and climate-resilient representative samples of the country's ecosystems and adequate coverage of threatened species at a sufficient scale to ensure their long term persistence; b) sufficient and predictable financial resources available, including external funding, to support protected area management costs; and c) retained individual and institutional capacity to manage protected areas such that they achieve their conservation objectives.⁷²

16. A protected area system is only sustainable if the status of protected areas in the system does not change. Therefore, GEF will also support legal reviews of conservation/environmental legislation to help countries ensure that the laws and policies governing changes to protected areas are comparable to those that governed establishment of PAs in the first place. Often there are sophisticated procedures for establishing PAs but very simple methods for enacting protected area downgrading, downsizing, and degazetting (PADDD).

17. GEF will continue to promote the participation and capacity building of indigenous peoples and local communities, especially women, in the design, implementation, and management of protected area projects through established frameworks such as indigenous and community conserved areas.⁷³ GEF will also promote protected area co-management between

⁷²A protected area system could include a national system, a sub-system of a national system, a municipal-level system, or a local level system or a combination of these.

⁷³ Indigenous and Community Conserved Areas are natural sites, resources and species' habitats conserved in voluntary and self-directed ways by indigenous peoples and local communities.

government and indigenous peoples and local communities where such management models are appropriate.

18. Developing climate-resilient protected area systems remains a challenge because the scientific understanding and technical basis for informed decision-making on adaptation or resiliency measures are in their nascent stages; despite this significant challenge, GEF will continue to support the development and integration of adaptation and resilience management measures as part of protected area management projects.

19. GEF has been investing in improving financial sustainability of protected area systems for the past decade, but system-wide funding gaps remain at the national level in many GEF-eligible countries that have received GEF support. Restricted government budgets in many countries have reduced the financial support for protected area management and many are chronically underfunded and understaffed. Thus, new financing strategies for protected area systems are critical to reduce existing funding gaps and improve management. Furthermore, protected area agencies and administrations are often ill-equipped to respond to the commercial opportunities that protected areas provide through the sustainable use of biodiversity. Hence targeted capacity building is also required.

20. Although considerable progress has been made in implementing GEF's protected area finance and management strategy in many countries, the application of the strategy has been uneven regarding the systematic closing of the financing gap at national level. Therefore, continued support is called for as well as the consideration of new strategies and innovations in GEF-7, including elements of the "project for finance permanence" approach.⁷⁴ The GEF-7 strategy prioritizes the development and implementation of comprehensive, system-level financing solutions. Previous GEF projects have too often been focused on business plans and strategy development, with minimal project resources or time dedicated to actual implementation of the financing strategies. In addition, experience in the portfolio since has demonstrated the need for a long-term plan for reducing the funding gap for protected area management, thus, individual GEF projects must be part of a larger sustainable finance plan and context, and countries may require a sequence of GEF project support over a number of GEF phases. In GEF-7, all investments will be required to present the GEF investment in the context of a long-term financing strategy and explain how a GEF-7 investment contributes to that plan and reduce the funding gap over time.

21. GEF-supported interventions will use tools and revenue mechanisms that are responsive to specific country situations (e.g., conservation trust funds, systems of payments for environmental services, debt-for-nature swaps, economic valuation of protected area goods and

⁷⁴ Project finance for permanence (PFP) brings concentrated organizational and financial resources to bear on large-scale, long-term conservation programs. By designing projects for permanent protection, creating strong organizations and inter-organizational agreements, and using tested financial processes such as rigorous financial plans and a single closing, PFP builds a strong foundation for the permanence of ecologically important places

services, access and benefit sharing agreements, etc.) and draw on accepted practices developed by GEF and others. GEF will also encourage national policy reform and incentives to engage the private sector (concessions, private reserves, etc.) and other stakeholders to improve protected area financial sustainability and management.

22. GEF support will contribute to the achievement of Aichi Target 11 to conserve 17% of terrestrial and inland water, and 10% of coastal and marine areas. However, new protected areas established with GEF support must be globally significant, as defined by the Key Biodiversity Area (KBA) Standard⁷⁵. According to the December 2016 update of the Protected Planet Report, 14.8% of the world's terrestrial and inland waters, 12.7 % of the coastal and marine areas within national jurisdiction, and approximately 5.1% of the global ocean are covered by protected areas. In areas beyond national jurisdiction, marine protected areas make up only 0.25% of the total area.⁷⁶ The GEF will continue to support investments to increase the representation of globally significant terrestrial and inland water, and marine ecosystems in protected area systems per the KBA standard.

23. GEF will support efforts to address the marine ecosystem coverage gap within national level systems through the creation and effective management of coastal and near shore protected area networks, including no-take zones, to conserve and sustainably use marine biodiversity. In GEF-7, most of this support will be provided through the Impact Program on Sustainable Fisheries and Healthy Oceans.

Priority G) Combat illegal and unsustainable use of species, with priority action on threatened species

Biodiversity Complementary Investment: Preventing the Extinction of Known Threatened Species

24. This biodiversity complementary investment builds on experiences gained from GEF-6 support to species conservation and, in particular, the Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development Program.

25. According to IUCN, as of 2013 there were over 20,000 threatened species globally. While other GEF investments actively address many of the threats to species (i.e. habitat destruction and fragmentation, over-exploitation, climate change, and introduction of invasive alien species), additional efforts are required to prevent the extinction of the unprecedented number of species that have seen their numbers and distribution ranges reduced dramatically due to the illegal,

⁷⁵ The KBA Standard is formally taken to include the definitions, the criteria and thresholds, delineation procedures used to identify Key Biodiversity Areas. KBAs are sites that contribute to the global persistence of biodiversity, including vital habitat for threatened plant and animal species in terrestrial, freshwater, and marine ecosystems.

⁷⁶ UNEP-WCMC and IUCN (2016). Protected Planet Report 2016. UNEP-WCMC and IUCN: Cambridge UK and Gland, Switzerland

unregulated and unsustainable taking, and/or trafficking of species. These species are not only valuable in themselves, but represent an important part of the economy of indigenous peoples and local communities.

26. While African elephants and rhinos have received considerable global attention lately and considerable GEF investment in GEF-6, there are other mammals under severe pressure including cats (e.g. lions, tigers, and snow leopards), non-human primates (e.g. great apes, monkeys) and pangolins.

27. In Asia, illicit trade in skins, bones and body parts is the largest current threat for the survival of wild tiger, snow leopard and other Asian big cat species, pushing them towards extinction in some places. The population of wild tigers has declined from an estimated 100,000 in 1900 to less than 4,000 in 2016 with possible extinction of four some sub-species. Since 2007, all breeding tiger populations have disappeared from Cambodia, Laos and Viet Nam.

28. For primates, current information shows that approximately 60% of species are now threatened with extinction and 75% have declining populations. This alarming situation results from direct pressures on their populations and their habitats, mainly through hunting for the global and local markets, the expansion of agriculture and cattle ranching, and the development of infrastructure, mainly roads.

29. Pangolins, an endangered scaly-skinned mammal highly sought after for meat and scales, are thought to be the world's most heavily trafficked mammal, illegally traded in the millions. Nearly 20 tons of pangolin scales were seized from illegal shipments originating from Africa between 2013 and 2016; sales came from as many as 39,000 pangolins.

30. Other taxonomic groups that are equally or more significantly impacted by poaching and illegal trade and require urgent attention include reptiles (e.g. freshwater turtles and tortoises), and birds (e.g. parrots, toucans, owls, hornbills, and birds of paradise).

31. Marine species are also being severely poached including marine turtles (all seven endangered with three critically so: leatherbacks, hawksbill, and Kemp's Ridley turtles), rays and a quarter of the world's shark species. Turtles are slaughtered for their eggs, meat, skin and shells; rays for their gills; and sharks for their fins.

32. In countries where there is significant pressure on threatened wildlife species, GEF will help build the capacity of environmental authorities, law enforcement agencies and the judiciary to reduce poaching inside and outside of protected areas. Since the killing of most wildlife and trafficking of live animals or their parts is illegal, the GEF will invest in a suite of activities in support of law enforcement and the judiciary to tackle the "chain of custody" of the illegally traded wildlife. Investments in these areas is crucial, as the poaching and trafficking of wildlife goes hand in hand with other illegal trafficking of threatened species, as has been well documented on the east coast of Africa with fine woods, such as Chanfuta (*Afzelia bella*), Umbila (*Pterocarpus angolensis*), Mondzo (*Combretum imberbe*) and Pau Ferro (*Swartzia fistuloides*).

33. This support will include strengthening decision and policy-making processes including legislation geared towards limiting and punishing illegal activity. This may include development of strategic plans to combat illegal trade when governments commit to an adequate budget for plan implementation to help ensure the sustainability of these investments.

34. GEF will also enhance science-based wildlife monitoring, communications, knowledge sharing, education and awareness. The GEF will be particularly sensitive to the needs of local communities as their livelihoods will be affected severely by the depletion wildlife as a source of protein and cash when sold in the local markets. In demand countries, raising awareness and other behavioural change approaches to reduce demand will be supported.

35. The design of GEF projects will take into consideration the “Convention on International Trade in Endangered Species of Wild Fauna and Flora” (CITES) with regards to international trade in specimens of wild animals and plants that threatens their survival.

Priority Cluster III. Strengthen biodiversity policy and institutional frameworks

Priority H) Implement the Cartagena Protocol on Biosafety

Biodiversity Complementary Investment: Implementing the Cartagena Protocol on Biosafety

36. The Cartagena Protocol on Biosafety (CPB) seeks to ensure an adequate level of protection in the field of the safe transfer, handling, and use of living modified organisms resulting from modern biotechnology that may have adverse effects on biological diversity. While rooted in the precautionary approach, the CPB recognizes modern biotechnology as having great potential for the promotion of human well-being, particularly in meeting critical needs for food, agriculture, and health care. The Protocol sets the parameters to maximize the benefit that biotechnology has to offer, while minimizing the possible risks to the environment and to human health.

37. 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 recently adopted 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 recently adopted Strategic Plan for Biosafety, 2011-2020 agreed at COP-MOP 6. By the end of GEF-6, as many as 64 countries will have received support for implementation of their National Biosafety Frameworks (NBFs); however, another 71 eligible countries have yet to request support to implement their NBFs. GEF-7 will provide the opportunity for these countries to seek support for these initial phases of basic capacity building.

38. The implementation of National Biosafety Frameworks in these remaining countries will be undertaken when the characteristics of the eligible country, as assessed in the stock-taking analysis, recommend a national approach for the implementation of the CPB in that country. 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. GEF will provide support to eligible countries through regional or sub-regional cooperation projects such as those using regional and sub-regional networks to build capacity for the detection of living modified organisms, with a view to facilitating the sharing of experiences and lessons learned, and harnessing associated synergies. GEF experience has shown that these kinds of approaches are effective where stock-taking assessments support the potential for coordinating biosafety frameworks, interchange of regional expertise, and capacity building in common priority or focal areas to develop the capacities of groups of countries lacking competences in relevant fields.

39. The GEF will support thematic projects addressing some of the specific provisions of the Cartagena Protocol. 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.

40. 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.

Priority I) Implement the Nagoya Protocol on Access to Genetic Resources and Benefit sharing

Biodiversity Complementary Investment: Implementing the Nagoya Protocol on Access and Benefit Sharing

41. The Nagoya Protocol on Access and Benefit Sharing (ABS) provides a legal framework for the effective implementation of the third objective of the Convention on Biodiversity (CBD). Ninety-two CBD parties have signed and 25 have ratified the Nagoya Protocol.⁷⁷ The Protocol entered into force on 12 October 2014.

42. 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, and entered into force on 12 October 2014. There are 89 parties as of today.

43. The successful implementation of ABS at the national level has the potential to make considerable contributions to biodiversity conservation and sustainable use, and thus is relevant to successful implementation of the Strategic Plan for Biodiversity. As such, projects developed

⁷⁷ The Nagoya Protocol was adopted by the Parties of the Convention of Biodiversity at the 11th meeting of the Parties on 29th October, 2010 in Nagoya, Japan and it entered into force on 12 October 2014.

for funding under other GEF modalities will be encouraged to explore the potential and relevance of ABS to contribute to specific project and program objectives.

44. GEF will support national and regional implementation of the Nagoya Protocol and, if still required in specific countries, 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:

- (a) 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.
- (b) Development and implementation of a strategy and action plan for the implementation of ABS measures. (e.g. policy, legal, and regulatory frameworks governing ABS, National Focal Point, Competent National Authority, Institutional agreements, administrative procedures for Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT), monitoring of use of genetic resources, compliance with legislation and cooperation on trans-boundary issues); and
- (c) Building capacity among stakeholders (including indigenous and local communities, especially women) to negotiate between providers and users of 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 the participation in the ABS Clearing-House mechanism as soon as the Clearing-house is operational, including in its piloting.

45. The GEF will also enhance national implementation of the Nagoya Protocol through regional collaboration. Regional collaboration would 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.

46. 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 and the FAO Commission on Genetic Resources for Food and Agriculture.

J) Improve biodiversity policy, planning, and review

Biodiversity Complementary Investment: Enabling Activities

47. Enabling activity support will be provided for all GEF-eligible countries to revise their NBSAP, and/or to produce the National Report to the CBD as well as national reporting obligations under the Cartagena Protocol and Nagoya Protocol that will be identified during upcoming COPs and COP-MOPs and that will come due during the GEF-7 period.

ANNEX 2. CHEMICALS AND WASTE

Table A2.1. Expected Outcomes from investments in chemicals and waste

Convention	Main Sector	Chemical	Actions required	Expected Outcomes
Stockholm	<p>Industry and Agriculture</p> <p>Waste incinerators, including co-incinerators of municipal, hazardous or medical waste or of sewage sludge</p> <p>Cement kilns firing hazardous waste</p> <p>Production of pulp using chlorine</p> <p>Metallurgical industry</p> <ul style="list-style-type: none"> • Secondary copper production • Sinter plants in the iron and steel industry • Secondary aluminum production • Secondary zinc production <p>Open burning of waste, including burning of landfill sites</p>	<p>Industrial POPS:</p> <p>Hexachlorobenzene (HCB), Polychlorinated Biphenyls (PCBS), Hexabromobiphenyl, Hexabromocyclododecane (HBCD), Hexabromodiphenyl Ether and Heptabromodiphenyl Ether (HBDE), Hexachlorobutadiene, Pentachlorobenzene (PeCB), Perfluorooctane Sulfonic Acid, Its Salts and Perfluorooctane Sulfonyl Fluoride (PFOS/PFOA), Polychlorinated Naphthalenes (PCN), Tetrabromodiphenyl Ether</p>	<p>Implementation of Best Available Technologies and Best Environmental Practices to eliminate the emissions of unintentionally produced POPS.</p> <p>Investments to phase out the use of POPS chemicals in industrial and agricultural applications and phase out production of POPS chemicals.</p> <p>Sound Management of POPs and POPs containing/contaminated waste and environmentally sound</p>	<p>Elimination of over 100,000 tons of solid and liquid POPs and POPs containing and contaminated material.</p> <p>Reduction of at least 2,000 gTEQ of unintentionally produced POPs from sectors identified in the Stockholm Convention.</p> <p>Strengthening the capacity of sub-national, national and regional institutions to enable the sound management of chemicals and waste.</p> <p>Strengthen, and where appropriate create, the enabling environment to allow for private sector intervention in the sound management of chemicals and waste along all</p>

	<p>Thermal processes in the metallurgical industry</p> <p>Residential combustion sources</p> <p>Fossil fuel-fired utility and industrial boilers</p> <p>Fire installations for wood and other biomass fuels</p> <p>Chemical production processes, especially production of chlorophenols and chloranil</p> <p>Crematoria</p> <p>Motor vehicles, particularly burning lead gasoline</p> <p>Destruction of animal carcasses</p> <p>Textile and leather dyeing (with chloranil) and finishing (with alkaline extraction)</p> <p>Shredder plants for the treatment of end of life vehicles</p> <p>Smoldering of copper cables</p> <p>Waste oil refineries</p> <p>Vector Control</p> <p>Pest Management</p> <p>Power Generation and distribution</p>	<p>and Pentabromodiphenyl Ether (PBDE)</p> <p><i>Unintentionally Produced POPs (UPOPs):</i></p> <p>Hexachlorobenzene (HCB), Pentachlorobenzene (PeCB), Polychlorinated biphenyls (PCB), Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCCD/PCDF)</p> <p><i>Agricultural POPs:</i></p> <p>Aldrin, Chlordane, DDT, Dieldrin, Endrin, Heptachlor, Hexachlorobenzene, Mirex, Toxaphene, Alpha Hexachlorocyclohexane (HCB), Beta Hexachlorocyclohexane, Chlordecone, Lindane, Pentachlorophenol and Its Salts and Esters (PCP), Endosulphan and its Related Isomers.</p>	<p>disposal of these materials.</p>	<p>points of the production and supply chain.</p>
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	<p>Insulating Coatings for electrical wires</p> <p>Flame Retardants</p>			
Minamata	<p>Products</p> <p>Mercury containing products:</p> <ul style="list-style-type: none"> • Batteries • Switches and relays • Compact fluorescent lamps • Linear fluorescent lamps • High pressure mercury lamps • Cosmetics • Medical devices • Dental amalgams <p>Manufacturing</p> <p>Manufacturing processes that use mercury or mercury compounds:</p> <ul style="list-style-type: none"> • Chlor-alkali production • Acetaldehyde production • Vinyl chloride monomer production • Polyurethane production <p>Extractives (mining)</p> <ul style="list-style-type: none"> • Artisanal and small-scale gold mining (ASGM) • Primary mercury mining 	Mercury	<p>Elimination of mercury in artisanal and small scale gold mining sector.</p> <p>Elimination of primary mining of mercury.</p> <p>Reducing/eliminating the emission of mercury from coal fired power plants and industrial boilers, production of non-ferrous metals, waste incineration and production of cement.</p> <p>Elimination of the use of mercury that are included in products.</p> <p>Elimination of mercury as a catalyst in the production of chlorine, acetylene and vinyl chloride monomers.</p> <p>Development of environmentally sound storage of mercury and</p>	<p>Elimination of 1000 tons of mercury from intentional use and unintentional emissions.</p> <p>Strengthening the capacity of sub-national, national and regional institutions to enable the sound management of chemicals and waste.</p> <p>Strengthen, and where appropriate create, the enabling environment to allow for private sector intervention in the sound management of chemicals and waste along all points of the production and supply chain</p>

	Industrial (atmospheric emissions) Point source emissions of mercury and mercury compounds to the atmosphere: <ul style="list-style-type: none"> • Coal-fired power plants • Coal-fired industrial boilers Smelting and roasting processes used in the production of non-ferrous metals • Waste incineration • Cement clinker production 		mercury containing products.	
Montreal Protocol	Products Refrigerants used in industrial, commercial, domestic and mobile (transport) heating and cooling. Foam blowing agents Fire-fighting Medical and aeronautical aerosols Industrial Solvents	Hydrochlorofluorocarbons Hydrofluorocarbons	Phase out of the production and consumption of HCFC and HFC in countries with economies in transition.	Phase out of (X ODP tons of HCFC) and phase out of (X metric tons of HFC). Introduction and promotion through private sector of low-GWP natural refrigerants solutions Pilot demonstration of sustainable solutions for Recovery and Recycling and Disposal of ODSs and HFCs to reduce demand for HCFCs and HFCs

				<p>Compliance with the Montreal Protocol.</p> <p>Strengthening the capacity of sub-national, national and regional institutions to enable the sound management of chemicals and waste.</p> <p>Strengthen, and where appropriate create, the enabling environment to allow for private sector intervention in the sound management of chemicals and waste along all points of the production and supply chain</p>
SAICM	<p>Lead in the manufacture of Paints and Pigments</p> <p>Harmful chemicals in products including endocrine disrupting chemicals and nano-materials</p> <p>Highly/Severely Hazardous Pesticides listed in Annex III under the Rotterdam Convention and that are used on agricultural products in the global supply chain</p>	<p>Lead</p> <p>Endocrine Disrupting Chemicals</p> <p>Harmful chemicals used in commercial and domestic products.</p> <p>Nano-materials</p> <p>Highly/Severely Hazardous Pesticides listed in Annex III of the Rotterdam Convention</p>	<p>Phase out the use of lead in the manufacture of paints and pigments by 2020.</p> <p>Strengthening the enabling environment in which the private sector can work towards eliminating the use of harmful chemicals in the production of products.</p> <p>Elimination of the use of highly/severely</p>	<p>Globally lead is no longer used in the production of paint and pigments.</p> <p>The private sector is facilitated to produce products that do not contain chemicals of global concern.</p> <p>The use of highly hazardous pesticides is eliminated in at least 30% of its applications.</p> <p>Strengthening the capacity of sub-national, national and</p>

			hazardous pesticides in agriculture.	<p>regional institutions to enable the sound management of chemicals and waste.</p> <p>Strengthen, and where appropriate create, the enabling environment to allow for private sector intervention in the sound management of chemicals and waste along all points of the production and supply chain</p>
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ANNEX 3. CAPACITY-BUILDING INITIATIVE FOR TRANSPARENCY (CBIT)

48. The Capacity-building Initiative for Transparency (CBIT) launched in GEF-6 will be mainstreamed in the GEF-7 Climate Change Investment Framework to support projects that enhance the transparency for action and support in light of the Paris Agreement and countries' NDCs and adaptation actions.

49. Paragraph 84 of the COP decision adopting the Paris Agreement decided to establish "a Capacity-building Initiative for Transparency in order to build institutional and technical capacity, both pre- and post-2020" that "will support developing country Parties, upon request, in meeting enhanced transparency requirements as defined in Article 13 of the Agreement in a timely manner."

50. The CBIT, as per paragraph 85 of the COP decision adopting the Paris Agreement, will aim:

- (a) To strengthen national institutions for transparency-related activities in line with national priorities;
- (b) To provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement;
- (c) To assist in the improvement of transparency over time.

51. 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.

52. The purpose of the framework for transparency of actions is to provide a clear understanding of climate change action in light of the objective of the Convention as set out in its Article 2, including clarity and tracking of progress towards achieving Parties' individual nationally determined contributions, and Parties' adaptation actions, including good practices, priorities, needs and gaps, to inform the global stocktake under Article 14 of the Paris Agreement.

53. Specifically, each Party is required to provide the following information:

- (a) A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases, prepared using good practice methodologies accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties servicing as the meeting of the Parties to the Paris Agreement;
- (b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.

54. The Paris Agreement also states that countries should provide information on climate change impacts and adaptation under Article 7 of the Agreement.

55. The purpose of the framework for transparency of 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.

56. Developed country Parties shall, and other Parties that provide support should, provide information on financial, technology transfer, and capacity-building support provided to developing country Parties under Articles 9, 10, and 11 of the Agreement, and developing country Parties should provide information on financial, technology transfer, and capacity building support needed and received under these Articles.

57. The CBIT will support activities aligned with its aim at the national and regional/global levels.

National level support

58. Developing countries can request resources to implement the priority needs to build capacity to meet enhanced transparency requirements as defined in Article 13 of the Paris Agreement at the national level. The portfolio of support may include a range of activities included in the following non-exhaustive list.

59. Activities to strengthen national institutions for transparency-related activities in line with national priorities:

- (a) Support to national institutions to lead, plan, coordinate, implement, monitor, and evaluate policies, strategies, and programs to enhance transparency, including identification and dissemination of best/good practices for institutional strengthening and national network of practitioners;
- (b) Support on how to integrate knowledge from transparency initiatives into national policy and decision-making; and
- (c) Assistance with deployment and enhancement of information and knowledge management structure to meet Article 13 needs.

60. Activities to provide relevant tools, training, and assistance for meeting the provisions stipulated in Article 13:

- (a) Access to tools, templates, and applications to facilitate the use of improved methodologies, guidelines, datasets, and database system tools and economic models needed for implementation of enhanced transparency-related activities;
- (b) Country-specific training and peer exchange programs on transparency activities, such as establishing domestic MRV systems, tracking nationally determined contributions (NDCs), enhancement of greenhouse gas (GHG) inventories and economic and emissions

projections, including methodological approaches, data collection, and data management, and adaptation monitoring, evaluation, and communication measures;

- (c) Development of country-specific emissions factors and activity data;
- (d) Assistance in quantifying and reporting impact of policy measures;
- (e) Clarifying key NDC information, e.g. baseline projections including for business as-usual targets, and reporting progress towards achieving their NDCs; and (i) Assistance in quantifying and reporting on support provided and received.

61. Activities to assist with improvement of transparency over time:

- (a) Capacity needs assessment for transparency, in particular to assess institutional arrangements for data collection, analysis, and reporting: the assessment supports mapping of current baseline and planned reporting and related activities, including associated institutions, tools, methodologies, MRV systems, associated data systems; and
- (b) Support to introduce and maintain progress tracking tools for transparency related actions and progress towards targets/goals.

62. Recently completed analyses, such as identification of capacity building needs as identified in the technical analysis of Biennial Update Reports through the international consultation and analysis (ICA), is expected to inform this exercise. If a country has carried out a GEF National Capacity Self-Assessment (NCSA) for Global Environmental Management recently, the NCSA findings should also be utilized. Assessments done by other organizations should also be utilized as appropriate.

Regional and global level support

63. Global coordination platform: A global, cross-cutting CBIT program coordination platform was established during GEF-6 to support the CBIT management with the engagement of the GEF Secretariat. The platform will enable coordination, maximize learning opportunities, and enable knowledge sharing to facilitate transparency enhancements. The platform will engage countries, the GEF Partner Agencies, and other relevant entities and institutions with related programming activities to enhance partnership of national, multilateral, and bilaterally supported capacity-building initiatives. The start-up phase of the global coordination platform was approved during GEF-6.⁷⁸

⁷⁸ The project document can be accessed here: <https://www.thegef.org/project/cbit-global-coordination-platform>

64. Additional elements will also be eligible for support at the regional and global level, as presented in the following non-exhaustive list:

- (a) Global assessment of transparency, and capacity needs and achievements as needed;
- (b) Development and sharing of best practices on establishing and enhancing transparency, and building capacity, building on existing best practice materials, sharing of tools, methodologies, and data, and technical consultations on lessons learned from ongoing/existing assessments;
- (c) Implementation of progress tracking tools in all participating countries;
- (d) Regional and global capacity building programs to enhance transparency, such as institutional and policy measures, tools, methodologies, and data, tracking progress and enhancements;
- (e) Exchange of transparency practitioners and experts, planners and implementers: south-south and north-south exchange of experiences and lessons learned;
- (f) Collaboration with ongoing Global Programs that support NDC implementation;
- (g) Collaboration with UNFCCC bodies on transparency and capacity building;
- (h) Collaboration with Intergovernmental Panel on Climate Change, including Taskforce on National Greenhouse Gas Inventories and other initiatives supporting UNFCCC processes; and
- (i) Contributions to knowledge management on transparency-related initiatives.

ANNEX 4: SAMPLE RESULTS – THE CASE OF THE LANDSCAPE RESTORATION IMPACT PROGRAM

Enhanced Results Framework

65. An enhanced Results Framework is under development to guide the management of the future GEF-7 portfolio, including to help effectively capture the results of the proposed Impact Programs and the Focal Area Complementary Investments.

66. The Results Framework will specifically include a single set of core indicators relevant to both the Impact Programs and Focal area investments. These indicators will be used to define expected results from programs and projects, to monitor implementation progress and the impact of GEF-financed interventions, and to track results in ways that are relevant to the priorities of the MEAs that the GEF serves.

Sample Case

67. A tentative example of how this enhanced approach would work is outlined below, using the Landscape Restoration Impact Program as an example. An indicative list of core indicators, expected to evolve further with technical work and consultations in the next few months, has been used to illustrate this case (future indicators will include enhanced capacity and social benefits indicators) (see Table A4.1).

68. The expected results outlined below assumes that the GEF would provide a total of US\$400 million to finance land restoration interventions on a total of 80 million ha land area relevantly selected, (i.e. 20 landscapes of 4 million ha each), at an estimated average cost of \$200/ha, with the GEF providing \$20/ha in incremental investment and complemented with a co-financing ratio of 1:9.

Expected Results

69. After 10 years, the main expected results from the land restoration investments are estimated to include the following:

- Biodiversity conservation/Land Restoration:
 - 48 million ha of production landscapes under improved management for biodiversity conservation, including 4 million ha of high conservation value forests.
 - 32 million ha of production landscapes under improved management, including 8 million ha of land restored.
- Decarbonization/Reduced emissions (using IPCC tier 1 values and assuming \$1.5 per tCO₂e).

- 200 million tCO₂e sequestered above ground and another 25 million tCO₂e below ground as soil organic carbon because of restorative activities such as reforestation, assisted natural regeneration, and agro-silvo-pastoral practices.
 - 50 million tCO₂e of avoided CO₂ emissions by reducing deforestation by 50%.
- International Waters (specific indicators under development):
 - Enhanced Water-Food-Energy security and conjunctive management of surface and groundwater in four basins.
 - Significantly reduced nutrient pollution and hypoxia in two large marine ecosystems.

Table A4.1. Expected Results across Proposed Core Indicators for the Landscape Restoration Impact Program in GEF-7

	Projected amount of investment in million USD →	400
	Tentative Core Indicators (work in progress as of March 7, 2017) ↓	Sample for Landscape Restoration
Biodiversity Conservation/ Land Restoration	Terrestrial protected areas created (m ha)	N/A
	Marine protected areas created (m ha)	N/A
	Terrestrial protected areas effectively managed (m ha)	N/A
	Marine protected areas effectively managed (m ha)	N/A
	Production landscapes under improved management for biodiversity conservation ⁷⁹ (m ha)	48
	Production seascapes under improved management for biodiversity conservation (m ha)	N/A
	Production landscapes under improved management ⁸⁰ (m ha)	32
	Area of high conservation value forest loss avoided (m ha)	tbd
De-Carbonization/ Reduced Emissions	Carbon stocks (soil organic carbon sequestered in million tons of CO ₂ e)	25
	Carbon sequestered above ground (million tons of CO ₂ e)	200
	Emissions avoided (million tons of CO ₂ e)	50
International Waters	Basins with enhanced water-food-energy security and conjunctive management of surface and groundwater (tbd)	tbd
	Large marine ecosystems with reduced nutrient pollution and hypoxia (tbd)	tbd
	Length of coastline under Integrated Coastal Management (km)	N/A
	Area of Marine Protected Area (m ha)	N/A
	Globally over-exploited fisheries moved to more sustainable levels (percent of fisheries, by volume)	N/A
Reduced Pollution/ Waste	Solid and liquid POPs and POPs containing materials (metric tons)	N/A
	POPs resulting from emissions (grams of toxic equivalent gTEQ)	N/A
	Mercury reduced (metric tons)	N/A
	ODP (HCFC) reduced / phased out (metric tons)	N/A
	Institutional capacity built for transparency-related activities (qualitative assessment on a scale of 1 - 4)	N/A
Enhanced Capacity	Indicator/s to monitor policy investments (tbd)	tbd
	Degree of support for low GHG development in the policy, planning and regulatory frameworks (qualitative rating on a scale from 1 - 10)	N/A
	Number of countries, in which development and sectoral planning frameworks that integrate measurable targets drawn from MEAs have been developed.	tbd
	Number of countries, in which functional environmental information systems are established to support decision making.	N/A
Social Benefits	Indicator/s to monitor how Indigenous Peoples benefit from intervention (tbd)	tbd
	Indicator/s to monitor the process of involvement of Civil Society	tbd
	Indicator/s to monitor gender aspects (tbd)	tbd

⁷⁹ This includes 4 million ha of high conservation value forests.

⁸⁰ This includes 8 million ha of land restored.

Primary

Impact Program contributes directly to outcomes on Core Indicators

Secondary

Impact Program contributes indirectly to outcomes on Core Indicators