

# Biodiversity Strategy





# Global Context of Biodiversity



The Convention on Biological Diversity (CBD) defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems."

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. As such, biodiversity generates considerable socio-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.

This changed way of looking at biodiversity as an "asset" that makes critical contributions to sustainable development has since influenced approaches to biodiversity conservation and sustainable use which are now reflected in the Strategic Plan for Biodiversity, 2011-2020, and the Aichi Biodiversity Targets as well as the GEF-6 biodiversity focal area strategy. This evolution in thinking was reaffirmed at the thirteenth meeting of the Conference of the Parties of the CBD (CBD/COP 13) with the adoption of the "Cancun Declaration on Mainstreaming the Conservation and Sustainable Use of Biodiversity for Well-being", that recognizes that the management of this asset requires full engagement of all government ministries, and most critically, from the agriculture, fisheries, forestry, and tourism sectors.

Governments, civil society organizations, the private sector, indigenous peoples and local communities, and others have made some progress in conserving and sustainably using biodiversity and ecosystems at local and national levels, but not at the scale necessary to stem the ongoing tide of biodiversity loss. The Strategic Plan for Biodiversity,

<sup>1</sup> 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.

2011-2020, and its associated Aichi Biodiversity Targets direct the global community's response to reverse these trends. However, a recent analysis of national reports on progress against all 20 Aichi Targets demonstrates limited achievements to date.

The five main direct drivers of biodiversity loss are: habitat change (loss, degradation, and fragmentation), overexploitation or unsustainable use, invasive alien species (particularly in island ecosystems), climate change, and pollution<sup>2</sup>. These critical drivers of biodiversity loss are intensifying, particularly habitat loss driven by the expansion of agriculture.

Based on current assessments of biodiversity status and the magnitude of the pressures being exerted on biodiversity and with few countries on track to achieve the Aichi Targets, 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.

### CBD/COP 13 Guidance to the GEF

At the CBD/COP 13, Parties agreed a Four-year Framework of Program Priorities for the Seventh Replenishment Period (2018-2022) of the GEF Trust Fund (Decision CBD/COP/DEC/XIII/21). The Four-year Framework includes specific program priorities to be addressed by the GEF-7 biodiversity focal area investments and other associated GEF programming. 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." The Fouryear Framework thus points directly to the opportunities for synergy, inherent in the unique institutional design of the GEF, which serves as a financial mechanism for multiple multilateral environmental agreements.

The GEF-7 biodiversity focal area investments and associated programming strategies fully embody integrated approaches to achieve the biodiversity conservation and sustainable use outcomes of the Four-year framework while supporting the implementation

of all of the biodiversity-related conventions in a synergistic way. Implementation of the GEF-7 Four-year Framework is supported through the biodiversity focal area investments and other integrated programming, particularly through the Impact Program on Food Systems, Land Use and Restoration, Sustainable Cities, Sustainable Forest Management (SFM) and through the International Waters Focal Area Strategy (see Table 2).

Collectively, these investments seek to deliver impact at scale by addressing key underlying drivers of biodiversity loss as well as direct drivers/pressures while responding to the biodiversity mainstreaming agenda of COP 13 and the most challenging elements of the Strategic Plan for Biodiversity, 2011-2020. As a whole, they provide the most comprehensive strategic response in GEF's history to the five greatest direct drivers/pressures of biodiversity loss.

### GEF-7 Biodiversity Focal Area Investments and Associated Programming

The goal of the GEF-7 biodiversity focal area strategy is to maintain globally significant biodiversity in landscapes and seascapes. To achieve this goal, GEF investments will contribute to the following three objectives identified in the CBD COP 13 Guidance to the GEF:

- Mainstream biodiversity across sectors as well as landscapes and seascapes;
- Address direct drivers to protect habitats and species; and
- Further develop biodiversity policy and institutional frameworks.

The Biodiversity Focal Area Investments, the Food Systems, Land Use, and Restoration Impact Program, the Sustainable Cities Impact Program, the Sustainable Forest Management Impact Program, and the International Waters Focal Area Investments will collectively contribute to achieving this goal and the three objectives as presented below in Table 2, which summarizes how the GEF-7 Biodiversity Focal Area Investments and Associated Programming respond to the Four-Year Framework of Program Priorities for GEF-7. (The results framework for the Focal Area Investments and Associated Programming is presented in Annex 1. Please also note that Annex 2 provides detailed

<sup>2</sup> Millennium Ecosystem Assessment 2005, Ecosystems and Human Well-being: Synthesis, Island Press, Washington DC.

TABLE 2. CBD GUIDANCE AND DELIVERY MECHANISM IN GEF-7

#### **CBD GUIDANCE FOR GEF-7: FOUR YEAR DELIVERY MECHANISM** FRAMEWORK OF PROGRAM PRIORITIES **FOCAL AREA INVESTMENTS** I. Mainstream biodiversity across sectors as well as landscapes and seascapes **Biodiversity Mainstreaming in Priority Sectors** Global Wildlife Program (preventing the extinction of known A. Improve policies and decision-making, informed by biodiversity and threatened species, and wildlife for sustainable development) ecosystem values Natural Capital Assessment and Accounting B. Manage biodiversity in landscapes and seascapes Sustainable Use of Plant and Animal Genetic Resources C. Harness biodiversity for sustainable agriculture **Inclusive Conservation IMPACT PROGRAMS** Food systems, Land Use, and Restoration Impact Program Sustainable Cities Impact Program Sustainable Forest Management Impact Program (Amazon, Congo Basin, Dryland Sustainable Landscapes) **OTHER FOCAL AREAS** International Waters/Sustainable Fisheries II. Address direct drivers to protect habitats and species **FOCAL AREA INVESTMENTS** Prevention, Control and Management of Invasive Alien Species D. Prevent and control invasive alien species (focus on islands) E. Reduce pressures on coral reefs and other vulnerable coastal and marine ecosystems Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate F. Enhance the effectiveness of protected area systems G. Combat illegal and unsustainable use of species, with priority action on OTHER FOCAL AREAS threatened species International Waters/Coastal and Marine Protected Areas III. Further develop biodiversity policy and institutional framework **FOCAL AREA INVESTMENTS** H. Implement the Cartagena Protocol on Biosafety Implementing the Cartagena Protocol on Biosafety I. Implement the Nagoya Protocol on Access to Genetic Resources and Implementing the Nagoya Protocol on Access and Benefit Sharing Benefitsharing Support for national reporting and NBSAP development J. Improve biodiversity policy, planning, and review

programming optionsfor the expected outcomes of the Four-year Framework of Program Priorities).

The GEF-7 Biodiversity Focal Area Strategy is presented below. In its entirety, the set of programming options included in the strategy respond directly to the GEF-7 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. Also, programming options include investments through Impact Programs capable

of delivering more returns per unit of investment by seeking systemic responses to problems that emerge from more than one sector. They will make significant and synergistic contributions to the GEF-7 Four-year framework of program priorities and the associated expected outcomes as agreed at COP 13.





## **Biodiversity Across** Sectors as well as Landscapes and Seascapes<sup>3</sup>



The GEF defines biodiversity mainstreaming as: "the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally."

GEF-7 provides nine entry points for countries to mainstream biodiversity across sectors and within production landscapes and seascapes:

- Biodiversity Mainstreaming in Priority Sectors;
- Global Wildlife Program;
- Natural Capital Assessment and Accounting;
- Sustainable Use of Plant and Animal Genetic Resources;
- Inclusive Conservation;
- Food Systems, Land Use & Restoration Impact Program;
- Sustainable Cities Impact Program;
- Sustainable Forest Management Impact Program; and
- International Waters Focal Area/Sustainable Fisheries.

### **Biodiversity Mainstreaming in Priority** Sectors

GEF will continue to focus primarily on supporting the following suite of activities to advance biodiversity mainstreaming:

 Spatial and land-use planning to ensure that land and resource use is appropriately situated to maximize production without undermining or degrading biodiversity. A review of GEF experience in supporting biodiversity mainstreaming identified investments in spatial and land use planning to be a critical first step that sets the stage for future more comprehensive mainstreaming investments in production landscapes and seascapes. Linking the objective of sustaining protected areas and their conservation objectives with targeted investments in spatial and land use planning in the surrounding geographies will continue to be a key element of GEF's biodiversity mainstreaming

strategy given the successes with this approach at various scales in a variety of implementation environments in the GEF portfolio;

- Improving and changing production practices to be more biodiversity-positive with a focus on sectors that have significant biodiversity impacts (agriculture, forestry, fisheries, tourism, extractive industries (gas, oil, and mining) and infrastructure development) through technical capacity building and implementation of financial mechanisms (certification, payment for environmental services, biodiversity offsets etc.) that incentivize actors to change current practices that may be degrading biodiversity; and
- Developing policy and regulatory frameworks that remove perverse subsidies and provide incentives for biodiversity-positive land and resource use that remains productive but that does not degrade biodiversity.

Successful biodiversity mainstreaming initiatives in the GEF portfolio have often been a long-term process requiring multiple and complementary projects that span numerous GEF funding phases. In order for biodiversity mainstreaming to generate impacts at the scale necessary to advance progress in achieving the related Aichi Biodiversity Targets, a series of investments by GEF that are strategically nested within a larger-scale national planning and management framework is often required. Project proponents will be encouraged to take advantage of opportunities provided through the impact programs to mainstream biodiversity in the agriculture and forestry sectors. Countries may also submit proposals in the target sectors of forestry, fisheries, tourism, infrastructure, as well as extractives (gas, oil, and mining), that are aligned with the suite of activities identified above (spatial and land-use planning, improving and changing production practices, policy and regulatory frameworks, and financial mechanisms).

### Global Wildlife Program

As the illegal killing of wildlife is experiencing a slight decline in some regions of the world, the global community must continue to fight this important threat with sustained and comprehensive efforts addressing both the supply and the demand side of the problem. The increasing scale of wildlife trafficking is intrinsically linked to the growing involvement of transnational organized crime networks. Indeed, organized crime groups, specifically those with smuggling capabilities, find wildlife trafficking attractive because of its low risks,

high profits, and weak penalties due to the low priority it is afforded by enforcement authorities. In GEF-6, the GEF launched the "Global Wildlife Program" which is establishing the groundwork for reducing poaching and curtailing the illegal wildlife trade. While these investments are important and significant, the GEF-7 Global Wildlife program must continue building on those initial investments, notably through two components. Component 1 (Preventing the Extinction of Known Threatened Species) will continue to sustain and complement those efforts by increasing the focus on the demand side in Asian Countries as well as greatly enhancing the regional coordination efforts required to bring all the relevant stakeholders to the table for the best overall impact, which was a limitation in the original GEF-6 program. In component 2 (Wildlife for Sustainable Development), the GEF will build on some of the initial successes and promote long-term sustainability in areas where poaching has subsided. This will be pursued by ensuring that local communities that are living inside and outside of conservation areas benefit from economic development that strengthened wildlife tourism can deliver.

## Preventing the Extinction of Known Threatened Species

Component 1 of the Global Wildlife program will address both the supply and demand aspect of poaching to build monitoring and enforcement capacity to staunch the demand for these products and promote the improvement of enforcement of existing laws.

GEF will support strengthening decision-making processes including legislation and its implementation, strategic planning, and capacity of national agencies in Africa engaged in reducing poaching and illegal trade of tusks, horns, and associated by-products. Support will also include the development of strategic plans to combat illegal wildlife trade that is occurring online. Support will include 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 (including airports and seaports) through cross-sectoral collaboration. GEF will also support the preparation of action plans where governments commit to an adequate budget for their implementation, effectively contributing to the sustainability of these activities. GEF will also support efforts to increase cooperation within and between law enforcement agencies and relevant international

organizations and to mobilize political support for environmental law enforcement.

Most importantly, efforts must be made to 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. The erosion of the rule of law and the use of illegal trade to finance conflict impacts disproportionately on women and children who are most affected by conflict and violence, loss of livelihoods and crime. GEF will increase its support activities, particularly in Asia, to catalyze high-level political will to fight wildlife trafficking, and secure the shared commitment of government (at national and local levels), private land owners, local communities, and international stakeholders.

The program will make a concerted effort to respond to the threat of extinction of species that are critical for the ecological and economic sustainability of many protected areas in sub-Saharan Africa. This will not preclude the submission of proposals from other countries or regions where poaching and illegal trade poses an imminent danger to a threatened species. For example, wildlife poaching and illegal trade in Eurasia, including Asia, Russia, and Central Asia, is also increasing dramatically. The demand for high-value wildlife products in Asian markets has helped fuel a dramatic upsurge of poaching of Asian elephants and rhinos, as well as tigers and other wildlife. GEF will complement anti-poaching work in Africa through a similar array of interventions at source sites for rhino and elephants and other wildlife in Asia. Efforts will include:

- Strengthening national legislation, institutions, and law enforcement to reduce poaching;
- Strengthening science-based wildlife monitoring, education and awareness: and
- Reducing demand for illegal wildlife products.

### Wildlife for Sustainable Development

Component 2 of the Global Wildlife program will examine ways of turning the current and future increases in wildlife numbers and wildlife-based land uses into a contributor to sustainable development. Indeed, a growing body of evidence shows that wildlife-based land uses (including eco-tourism), can contribute favorable socio-economic benefits compared to

livestock farming in isolated semi-arid environments, including sustainable livelihoods, improved infrastructure to access and enjoy protected areas and wildlife, and enhanced representation of women and other marginalized groups in the decision-making and management systems of communities. In some areas where grazing used to occur, wildlife tourism is now generating four times as much income as livestock, and sixteen times the revenue in wages.

This component is restricted to Africa in GEF-7 where the opportunity to realize the benefits that wildlife tourism can deliver to local communities is most promising. Between 2000 and 2014, the number of jobs in Africa attributable to the tourism sector nearly doubled from 11.6 million to 20.5 million, which represents 8.1% of total employment in the region thus demonstrating that tourism is becoming an increasingly important part of the economy, particularly in rural areas.4 In addition, by concentrating in Africa, GEF-7 support will build on the investments and results of the GEF-6 "Global Wildlife Program" which will help sustain progress in reducing poaching and curtailing the illegal wildlife trade by ensuring that local communities that are living inside and outside of conservation areas benefit from the economic development that wildlife tourism has the potential to deliver.

Furthermore, realizing the objectives of the Global Wildlife Program requires the convergence of a number of factors that are present in Africa more than in any other region where the GEF invests: a) a growing demand for a wildlife-based tourism product, b) significant wildlife populations, c) large wilderness areas needed to sustain viable populations in perpetuity, and; d) private sector partners (primarily tourism operators) with the expertise and willingness to engage in wildlifebased tourism.

While there is great potential in Africa, a number of barriers exist that prevent wildlife from contributing more robustly to economic development in areas where the economy is dominated by food aid, grants and urban remittances. First, policy makers do not yet view wildlife economically as they don't fully understand the drivers of tourism demand, visitor needs, or how to manage wildlife tourism successfully. Second, sectoral transformation depends on reversing colonial wildlife policies so that a higher proportion of tourism revenues

<sup>4</sup> Tourism for Development. 20 reasons sustainable tourism counts for development. Knowledge Series, The World Bank Group, 2017.



return to the parks and the communities that co-exist with wildlife. Third, many of the world's protected areas lack the basic conservation infrastructure, air or road access, the right to retain revenues, and investor-friendly conditions. Fourth, many protected area management policies were established with the idea of keeping people away from wildlife. And lastly, the demand for wildlife products must be severely curtailed or eliminated so that the reduced pressure on wildlife can give way to practices that sustainably use wildlife for economic and social development.

The GEF will support the development or improvement of a wildlife-based economy where several key factors converge to enable wildlife to make significant contributions to sustainable development. These factors include: 1) wildlife populations growing or stable; 2) governments demonstrating political will to build a wildlife-based economy; 3) large conservation areas covering sufficient area to support ecologically viable populations and genetic diversity—including Trans Frontier Conservation Areas (TFCAs); 4) wildlife tourism operators willing to engage with government and private sector authorities managing protected areas to generate economic benefits for conservation and local communities; and 5) mechanisms for local communities living inside and/or outside of the protected areas to benefit directly and indirectly from wildlife and protected area management. 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 USD 10 billion of tourism revenues.

GEF support will be focused at the national and regional scales. At the national level, the GEF will support:

- The development of policy frameworks that help unlock the potential for self-financing conservation areas (i.e. National Parks, Nature and Game Reserves, etc.) and viable wildlife tourism within a framework of Community Based Natural Resources Management (CBNRM), and that better regulate the sustainable non-extractive use of wildlife;
- Improving protected area management and infrastructure to ensure the conservation of biodiversity and other natural assets in support of the wildlife-based economy;
- 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.); and
- Engagement with the private sector to assist governments and local communities with the development, management and marketing operations

through the appropriate modalities (i.e. Public-Private partnerships, Private-Community partnerships, or Public-Private-Community partnerships).

At the regional level, the GEF will support wildlife for sustainable development activities in large scale conservation areas in sub-Saharan Africa in general and in the South African Development Community countries in particular.

### **Natural Capital Assessment and** Accounting (NCAA)

Biodiversity generates considerable value through the provision of goods such as food, water, and materials, and services such as climate regulation, pollination, disaster protection, and nutrient cycling. 5 The Millennium Ecosystem Assessment and The Economics of Ecosystems and Biodiversity (TEEB) were significant steps to make the "value" of nature (however that value may be defined) more visible, countable, and measurable. Other related efforts to provide frameworks and approaches for internalising environmental externalities into economic and development decision-making include the United Nations System of Environmental-Economic Accounting (SEEA), World Bank's Wealth Accounting and Valuation of Ecosystem Services (WAVES) initiative, the Inclusive Wealth Index: http://inclusivewealthindex.org, and the Natural Capital Coalition's Natural Capital Protocol. As part of this evolution of thinking about nature's contributions to societies, economies and 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. Although a number of approaches are currently being used to identify, measure, and value natural capital, these exercises have too rarely influenced decision making and policy instruments to: 1) mitigate the drivers of natural capital degradation and biodiversity loss; and/or 2) increase financing for management of natural capital and biodiversity.

GEF's support to natural capital assessment and accounting will be implemented amidst the backdrop of recent progress made with the SEEA and global

standardized frameworks and tools for natural capital assessment for both private and public sectors.<sup>6</sup> Natural capital "assessments" are spatial assessments of stocks of natural capital and/or delivery of ecosystem services, which are often accompanied by assessing change under different scenarios with decision-makers and stakeholders. Depending on methodologies applied, the data from such assessments can serve as an input to the construction of national accounts that reflect these values. Both natural capital assessments and accounts are required to advance policy dialogue and to aid in decision-making, including the allocation of financing for management of natural capital and biodiversity. They are interlinked, and each have their own advantages and disadvantages.

When designed and implemented appropriately, natural capital assessments are focused on and have proven effective in informing regional, national, or sectoral plans as well as finance and policy mechanisms. However, they are too often one-time exercises that are not mainstreamed and institutionalised, so are not yet significantly affecting important budgetary and policy decisions at the national level, especially government and private sector investment strategies. National natural capital accounts can in principle help fill this gap from a public sector perspective, but it takes considerable time and data to populate national accounts. There is a risk that natural capital accounting efforts can lead to significant data collection without a specific target decision or policy question in mind, so to be most impactful, they should be co-developed with specifically targeted decision-makers and stakeholders.

Therefore, GEF projects will design and link the natural capital assessment and accounting exercises to respond to specific target decisions or policy questions to help ensure their practical relevance as well as the institutionalization and use of natural capital accounting for the medium- and long-term. GEF projects will aim to build the capacity of countries to identify, measure,

6 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 orderto facilitate the integration of environmental and economic statistics. The Natural Capital Protocol and beta version of the Protocol toolkit provides guidelines to the private sector for NCAA for businesses.

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.

and value natural capital, including biodiversity, and to integrate the understanding of this value into decision making and policy instruments to: 1) mitigate or eliminate harmful incentives leading to the degradation of natural capital assets or to identify positive financial and other policy incentives for the maintenance or enhancement of these assets; and 2) enhance financing for sustainable management and restoration of natural capital, including through affecting public and private financial flows. This may include expanding the use of green finance mechanisms and solutions, as appropriate (e.g., green bonds, blue bonds, etc.). Within the context of this GEF programming area, the aim is to support natural capital assessments and accounting that can inform decisions about the use of green finance mechanisms to sustain and restore natural capital which would include financial products and services provided by the banking sector.

Project interventions will undertake a four-phase process: 1) baseline diagnosis of institutional capacity to undertake natural capital assessment and accounting (legal, policy, planning and institutional framework to identify gaps, data, governance and capacity needs); 2) review of expenditures on natural capital management, assessment of finance needs for natural capital management and of appropriate finance solutions; 3) implementation of natural capital assessments and accounting; and 4) incorporation of natural capital into policy, planning, and decision-making. When appropriate, GEF will work with countries already engaged in relevant initiatives such as World Bank/WAVES, UNDP/BIOFIN, the Natural Capital Project, UNEP Financial Inquiry, etc. and will complement these efforts.

In addition, it is expected that GEF support will help address some of the key challenges to green finance

Green finance comprises the: a) financing of public and private green investments (including preparatory and capital costs) in environmental goods and services (such as water management or protection of biodiversity and landscapes), prevention, minimization and compensation of damages to the environment and to the climate (such as energy efficiency or dams), b) the financing of public policies (including operational costs) that encourage the implementation of environmental and environmental-damage mitigation or adaptation projects and initiatives (for example feed-in-tariffs for renewable energies); and c) components of the financial system that deal specifically with green investments, such as financial instruments for green investments (e.g. green bonds and structured green funds), including their specific legal, economic and institutional framework conditions. Source: Lindenberg, N. 2014. Definitions of Green Finance. German Development Institute.

mechanisms becoming more firmly established, such as informing the design of government policies that provide incentives to generate positive externalities through green investments (beneficial to natural capital) while establishing appropriate disincentives for the production of negative externalities from environmentally damaging investments.

The program will be implemented within a global context where businesses are increasingly recognizing that by including natural capital considerations in their decisions, they can create greater value for themselves and protect the natural capital that is material to their economic interests. For example, many corporations and other organizations around the world are now using the Natural Capital Protocol as a standardized framework to help incorporate the assessment and valuation of natural capital in decision-making. The protocol was developed by the Natural Capital Coalition and now includes a supplement geared towards the finance sector to guide development of policies that encourage green investment.

Therefore, the implementation of natural capital assessment and accounting processes will aim to facilitate a dialogue between the public and private sectors at the national level to create greater certainty for businesses with regards to their operations and investment plans vis-à-vis natural capital. In this way, private sector interests and investor requirements can provide added impetus to governments to use the information generated on natural capital in development planning and policy making while bringing needed durability to government-led approaches due to the long-term perspectives of business interests that seek consistency and certainty. In addition, natural capital assessment and accounting undertaken at the national level will provide the opportunity to share best practice and information between the public and private sectors and their approaches to natural capital accounting and valuation, and could, among other things, help streamline the process of using business data 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.

The recognition that environmental risks need to be more firmly integrated in the financial system has been growing rapidly. For example, the Financial Stability Board's Taskforce on Climate-related Financial Disclosure has been 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. However, those initiatives and measures are mostly focused on climate risks while risks to broader natural capital, including biodiversity, forest and land, are not generally firmly taken into accout. Against this background, the GEF will extend support to countries that have already identified the need to transition towards green finance, and will inform them of possible options to tailor global financial innovation to local needs, and will foster the broader adoption of national green finance instruments and support enhanced alignment of national financial regulation with environmental sustainability considerations. This way, MEA guidance can be mainstreamed in financial sectors at the national and sub-national levels from the outset and ensure that MEA objectives are implemented in a catalytic fashion at the systemic level instead of leaving it to the vagaries of the market to consider MEA priorities on an ad hoc basis.

Through the Sustainable Cities Impact Program, the GEF will also promote the use of natural capital assessments and accounting as an input to integrated urban planning and the sustainability of cities with regards to their impact and reliance on biodiversity and associated ecosystem services.

### Sustainable Use of Plant and Animal **Genetic Resources**

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 for 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.

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 and sustainable use, through farmer management, of plant genetic resources in Vavilov Centers of Diversity. 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. This focus will complement the thematic and geographic focus of the "Sustainable Food Systems, Land Use, and Restoration Impact Program".

Locations for wild relatives of 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) have been mapped.<sup>8</sup> These centers of crop genetic diversity are likely to contain priority sites for other crop gene pools. GEF investment in CWR reserves would focus on these areas; however, support 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.9

The GEF will also support in-situ conservation and sustainable use, through farmer management (focusing on Vavilov Centers of Diversity for plant genetic resources). 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 production landscapes helps improve sustainability and resilience.

Results from these investments may also generate important co-benefits for the International Treaty on Plant Genetic Resources for Food and Agriculture.

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

<sup>9</sup> 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.

### **Inclusive Conservation**

It is estimated that nearly a quarter of the Earth's surface and vast ocean areas are managed by indigenous peoples and local communities (IPLCs) and these areas hold 80% of the Earth's biodiversity. In addition, an estimated 37.7 billion metric tons of carbon is contained in lands where IPLCs have full legal tenure. In

To date, IPLCs' efforts to maintain their territories have been critically important in providing global environmental benefits. Recent studies have shown that when the rights of IPLCs to their land and natural resources are respected, deforestation rates are lower than in government-managed areas and that local participation in conservation management can improve biodiversity outcomes.<sup>12,13</sup>

Because of their role as stewards of the global environment, the GEF has sought to support IPLCs since its pilot phase. In recent Annual Monitoring Reports, about 17% of GEF full-and medium-size projects have substantive IPLCs engagement. The GEF's Small Grants Program (SGP) has historically provided about 15% of its grants to IPLC organizations , and the successes in these small projects show the potential impact of larger investments.

Building on this foundation, the GEF will work with indigenous peoples and local communities, national governments, NGOs, and others to strengthen the capacity of IPLCs to conserve biodiversity.

GEF projects funded with the regional/global set aside will focus in geographies where IPLC territories that are home to globally significant biodiversity, and that may also include important carbon stocks, are under threat.

Project investments will focus on:

- Site-based conservation and sustainable use;
- Sustainable financing of IPLCs-driven conservation; and
- 10 Sobrevila, C. 2008. The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners. World Bank.
- 11 Stevens, C. et al. Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change. WRI.
- 12 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.
- 13 Social and Ecological Synergy: Local Rulemaking, Forest Livelihoods, and Biodiversity Conservation Lauren Persha et al. Science 331, 1606 (2011).

 Capacity development for IPLC organizations and integration of diverse knowledge systems to achieve conservation and sustainable natural resource management outcomes.

## Food Systems, Land Use and Restoration Impact Program

The Food Systems, Land Use and Restoration Impact Program aims to transform food value chains by supporting countries to meet their growing food demands through higher productivity gains from crops and livestock, while at the same time avoiding the potential resulting loss of biodiversity and ecosystem services, erosion of crop and livestock genetic diversity, overexploitation of water resources, overuse of chemical fertilizers and pesticides, and inefficient practices that lead to GHG emissions, food loss and waste.

Building on the GEF-6 programs on commodities, food security, and restoration, this impact program will allow several entry points for countries to implement sustainable land use plans that can meet their multiple objectives of food production and sustainable natural resource management. Depending on the context and decisions guided by integrated land use planning, the Program may support countries committed to better managing biodiversity in production landscapes and harnessing biodiversity for sustainable agriculture. Therefore, the IP will make acontribution to Outcome 5 of the Four-year Framework: "Biodiversity supporting key agricultural ecosystems, such as through pollination, biological pest control, or genetic diversity, is conserved and managed, contributing to sustainable agricultural production."

### **Sustainable Cities Impact Program**

Through the Sustainable Cities Impact Program, the GEF will also promote integration of biodiversity conservation priorities into urban planning, specifically to safeguard globally significant biodiversity and associated ecosystem services affected by urbanization. Therefore, the IP will make a countribution to Outcome One of the Four-year Framework "Financial, fiscal, and development policies, as well as planning and decisionmaking take into account biodiversity and ecosystem values, in the context of the different tools and approaches used by Parties to achieve the Aichi Biodiversity Targets".



### Sustainable Forest Management (SFM) **Impact Program**

The global community recognizes the importance of forests for their role in sustaining biodiversity, their ability to provide a range of important environmental services and their potential to contribute to many countries' sustainable development plans. The SFM Program will focus on biomes of global importance for biodiversity and humanity: the Amazon, the Congo Basin, and Drylands, which will include forests and trees outside forests in dryland landscapes, where transformative impacts and multiple environmental benefits can be achieved. These three geographies host globally important biodiversity, store large amounts of carbon, and provide livelihoods to forest dependent communities. Investments in the SFM IP in GEF-7 will advance the work under the Biodiversity Focal Area in supporting the protection of High Conservation Value (HCV) forests and managing biodiversity in forested landscapes at the ecosystem scale.

### Sustainable Fisheries/International Waters Focal Area Strategy

GEF support through the International Waters Focal Area will promote sustainable fishing practices and strengthen ecosystem governance both at national and regional level to maintain productivity while sustaining biodiversity within fisheries. GEF-7 will build on, strengthen, and expand existing partnerships and address national and shared fisheries by supporting existing governance goals and targets established through Regional Fisheries Management Organizations (RFMOs), the 2009 Port State Measures Agreement and the FAO Voluntary Small-Scale Fisheries Guidelines. The IW strategy will therefore make a significant contribution to Outcome 7 of the Four-year Framework: 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.





## **Address Direct Drivers to Protect** Habitats and Species<sup>14</sup>



GEF-7 provides three main entry points for countries to address direct drivers of biodiversity loss:

- Prevention, Control and Management of Invasive Alien Species.
- Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate.
- International Waters Focal Area/Coastal and Marine Protected Areas

### Prevention, Control and Management of **Invasive Alien Species**

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, 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. The intensities and global patterns of disturbance are changing more rapidly today than ever before; however national level responses and legislation to prevent the introduction of IAS remains woefully inadequate. IAS can exert a heavy economic toll on national governments, industries, and the private sector. For example, global estimates of the annual economic damage from invasive species worldwide totals more than USD 1.4 trillion or 5% of the global economy. 15 IAS can impact human health through disease epidemics, and pathogens and parasites may themselves be IAS or may be introduced by invasive vectors.

Islands are particularly susceptible to the impacts of IAS. Islands have 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.

15 Pimentel, D., McNair, S., Janecka, J., Wightman, J., Simmonds, C., O'Connell, C., Wong, E., Russel, L., Zern, J., Aguino, T. and Tsomondo, T. 2001. Economic and environmental threats of alien plant, animal, and microbe invasions. Agriculture, Ecosystems and Environment 84: 1-20. 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. Furthermore, the contained nature and relatively small size of islands enables the implementation of costeffective response measures to prevent introductions, and to control and manage IAS that become established. Therefore, during GEF-7 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.

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

GEF support to the establishment and management of protected area systems and associated buffer zones and biological corridors has arguably been one of 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 socio-economic and environmental benefits beyond the existence value of biodiversity.

GEF support aims to strengthen three elements of a sustainable protected area system: 1) 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; 2) sufficient and predictable financial resources available, including external funding, to support protected area management costs; and 3) sustained individual and institutional capacity to manage protected areas such that they achieve their conservation objectives.<sup>16</sup>

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. <sup>17</sup> GEF will also promote protected area co-management between government and indigenous peoples and local communities where such management models are appropriate.

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. However, 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.

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.

- 16 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.
- 17 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.

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, GEF's experience 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 to achieve financial sustainability.

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 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.

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) standard. The GEF will continue to support investments to increase the representation of globally significant terrestrial and inland water, and coastal and marine ecosystems in protected area systems per the KBA standard, including all under-protected biomes such as the tropical and subtropical moist broadleaf forests found in the Himalayan region, temperate grasslands, savannas and shrublands found in South America. along with other priority biomes.

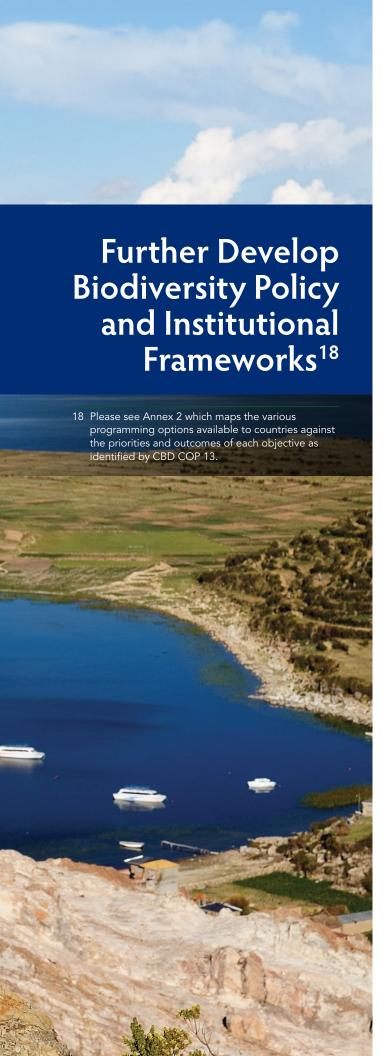
GEF will support efforts to address the marine ecosystem coverage gap within national level systems through the creation and effective management of coastal and near shore protected area networks, including no-take zones, to conserve and sustainably use marine biodiversity.

### Coastal and Marine Protected Areas/ International Waters Focal Area Strategy

Key coastal and marine habitats, such as deltas, mangroves, salt marshes, sea grasses and coral reefs, are essential to many nations' economic development and are important repositories of biodiversity. They sustain fisheries, provide coastal protection, sequester carbon, filter run-off water, and are tourist attractions. Through the International Waters Focal Area Strategy, GEF will support the establishment of new coastal and marine protected areas and improve the management effectiveness of existing marine protected areas and restore degraded key marine habitats, with the context of existing TDA-SAPs and in Large Marine Ecosystems.







GEF-7 provides three main entr points for countries to strengthen biodiversity policy and institutional frameworks:

- Implement the Cartagena Protocol on Biosafety.
- Implement the Nagoya Protocol on Access and Benefit Sharing.
- Improve Biodiversity Policy, Planning, and Review.

### Implement the Cartagena Protocol on **Biosafety**

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.

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 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.

The GEF will support the ratification of the Protocol by the countries that have not done so and also support the implementation of National Biosafety

Frameworks in these remaining countries. 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 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.

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.

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.



### Implement the Nagoya Protocol on **Access and Benefit Sharing**

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization provides a legal framework for the effective implementation of the third objective of the Convention on Biodiversity (CBD). The Protocol was adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting on 29 October 2010 in Nagoya, Japan, entered into force on 12 October 2014, and 102 parties have ratified the Protocol to date.

The successful implementation of ABS at the national level has the potential to make considerable contributions to biodiversity conservation and sustainable use, and thus is relevant to successful implementation of the Strategic Plan for Biodiversity. As such, projects developed 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.

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:

- Stocktaking and assessment. GEF will support gap analysis of ABS provisions in existing policies, laws and regulations, stakeholder identification, user rights and intellectual property rights, and assess institutional capacity including research organizations;
- Development 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 transboundary issues);

- Development (or revision) of national measures to implement and enforce the Protocol (e.g. the legislative, administrative or policy measures on access and benefit-sharing); and
- Building capacity among stakeholders (including indigenous peoples 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.

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.

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.

### Improve Biodiversity Policy, Planning, and Review (Enabling Activities)

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



# Food Systems, Land Use and Restoration Impact Program



The global food system's impact on biodiversity, ecosystems, and ecosystem services is overwhelming. With 40% of the planet's landmass (excluding deserts, permanent ice, and lakes) being used to grow food, the potential for environmental degradation will only increase as agriculture continues to expand. At the same time, nearly 2 billion hectares of cropland, grazing land, forests, and woodlands are degraded. This has negative impacts on ecosystem services, including the provision of freshwater, food, fuel and fiber, clean air and water, climate regulation, and biodiversity habitat.

The GEF has committed to play its part by promoting holistic and system-wide approaches in its programming, which will help countries reconcile competing social, economic, and environmental objectives of land management, and move away from unsustainable and irreconcilable sectoral approaches. Through the Food Systems, Land Use and Restoration Impact Program, GEF will help countries pursue comprehensive and systemwide approaches to underpin the transformation of food and land use systems. Implementation of these strategies will seek to help countries meet the growing demand for increased crop and livestock production, while minimizing the risk of further expansion of farmland into important forests and ecosystems, erosion of genetic diversity, overexploitation of land and water resources, overuse of chemical fertilizers and pesticides, and inefficient agricultural practices that lead to greenhouse gas emissions and food loss and waste.

GEF funding will be used to support countries in ensuring productive lands are embedded within landscapes that are providing ecosystem services and protecting the natural ecosystems and soil on which they depend. Food production landscapes

will be anchored around a sound, comprehensive land use plan that will simultaneously meet a full range of local needs, including water availability, nutritious and profitable crops for families and local markets, and enhancing human health; while also contributing to national economic development and policy commitments (e.g. NDCs, LDN, Aichi targets for biodiversity conservation, Bonn Challenge); and delivering globally to the maintenance of biodiversity, climate change mitigation and adaptation, and provision of food and commercial commodities to international supply chains. Three areas for action will be pursued in order to foster transformational impact at scale: 1) promoting sustainable food systems to tackle negative externalities in value chains, 2) promoting deforestation-free agricultural commodity supply chains and 3) promoting large-scale restoration of degraded landscapes for sustainable production and ecosystem services. These priorities are not mutually exclusive and can be fostered through comprehensive land use planning. Where food and ecological systems are integrated within landscapes, implementation at scale of a suite of related strategies and interventions will recognize the interconnectedness of these objectives, by engaging them simultaneously as part of the specific landscape needs.

This systems design of the Food Systems, Land Use and Restoration Impact program aims to protect our planet's biophysical processes and resources, absorb greenhouse gas emissions, provide nutritious and affordable food for the growing number of people worldwide, and strengthen the resilience and prosperity of rural populations.



## Sustainable Cities Impact Program



The world is urbanizing at a rapid pace. Nearly 50% of the global population live in cities and by 2050 it is expected to increase to 70%. Moreover, most of this growth will be concentrated in developing countries, with nearly 90% of the increase from cities in Asia and Africa. Cities are therefore the best place to start addressing three mega-trends that drive global environmental degradation: urbanization, a rising middle class, and population growth.

Cities produce 80% of the world's gross domestic product (GDP). They consume over 75% of global energy supply and generate 70% of greenhouse gas emissions. They are increasingly choked by traffic, air pollution, and waste production. Meeting the production and consumption needs of urban populations strains rural and urban ecosystems both locally and globally. Physical expansion of urban areas can directly compromise the provision of vital ecosystem services provided by forests and biodiversity such as clean air, water catchment integrity, storm water control, and energy conservation.

If managed well, compact, resilient, inclusive, and resource-efficient cities could become drivers of green economy, contributing to both local livability and global environmental benefits. The GEF's Sustainable Cities Impact Program aims to bring about opportunities for greater integration, efficiency, synergy, and increased returns of investment in cities. It will support an integrated approach to promote cross-sectoral and holistic urban planning and implementation. It will directly support city-level investments to pursue spatially integrated solutions for interdependent

urban systems that generate multiple global environmental benefits, including the following:

- Decarbonization of cities;
- Prevent habitat loss / degradation in peri-urban areas;
- Promote a circular economy approach that addresses material and design engineering, consumer use, and recovery and recycling; and
- Promoting resilient urban design to absorb potential shocks from climate and other global changes.

In addition to supporting projects at city level, through the Global Platform on Sustainable Cities (GPSC) the GEF aims to create a strong network of cities that will act as global ambassadors for urban sustainability. The platform will strengthen opportunities for cutting-edge support, learning, and knowledge sharing. The Global Platform will support cities by expanding access to technical expertise and finance and facilitate knowledge sharing among cities through existing major global city networks, financial institutions, and technology providers.

Further, the program will also play an important role in advancing the cause of urban sustainability in policy, both nationally and globally. It will encourage the integration of ideas into local policy and institutional arrangements and facilitate stronger synergies between national and city governments. Through these, the program will contribute to global policy discourse, including the Sustainable Development Goals.



# The Sustainable Forest Management Impact Program



The Sustainable Forest Management Impact Program will focus on these three key biomes and address challenges associated with sustainably managing and protecting forests and drylands. The novelty of this Impact Program resides in the fact that GEF will be aiming at maintaining the ecological integrity of entire biomes by concentrating efforts, focus, and investments, as well as ensuring strong regional cross-border coordination. Three biomes are identified as priorities in GEF-7: the Amazon, the Congo Basin, and Drylands

The Amazon Sustainable Landscapes Program (ASL)

With a commitment of US\$113 million from the Global Environment Facility during GEF-6, the ASL aims to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover. The theory of change for the ASL posits that if: (i) an adequate area of the Amazon is conserved under various regimes (protected areas and indigenous lands); (ii) agriculture, degraded, and forest lands are managed sustainably and with zero illegal deforestation tolerance; (iii) national policies and strategies support sustainable development that minimizes deforestation and loss of ecosystem services; and (iv) capacity of and regional cooperation between key players is improved; then the protection of the Amazon's biodiversity and the integrity of its ecosystem services can be achieved. To that end the program is currently composed of four key components and objectives as listed below:

 Integrated Amazon Protected Areas: to increase conservation and protection of biodiversity through the implementation of large-scale initiatives influenced by the strategies and approaches of the successful Amazon Region Protected Areas Program in Brazil (ARPA). The ASL Program will catalyze protected areas creation, and improve management and sustainable financing at the protected area system-wide level;

- Integrated Landscape Management: to contribute to climate change resilience and enhance sustainable land use by improving forest and land management and reducing carbon emissions from deforestation in the respective project areas;
- Policies for Protected and Productive Landscapes:
  to 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 that engage
  private sector actors; and
- Capacity Building and Regional Cooperation: to maximize the efficiency of the broader approach through shared capacity building and training initiatives. The component supports south-south learning through expert technical exchanges, fosters intergovernmental cooperation around identified policy or technical thematic issues, and develops and implements program-wide training and communication strategies.

The current program includes four national projects in Brazil, Colombia, and Peru and a regional coordinating project, all currently under implementation. A snapshot of each project is presented here. Together, these projects aim to improve management of 82 million hectares of landscapes, promote sustainable land management practices in 8.5 million hectares, and support actions that will directly help reduce CO<sup>2</sup> emissions by 166 million tons. These targets can be achieved through the collaborative efforts of the country governments, national and

international partners, and the GEF agencies: the World Bank Group (WBG) as lead agency, the World Wide Fund for Nature (WWF), and the United Nations Development Programme (UNDP).

Congo Basin Sustainable Landscapes (CBSL)

Central Africa contains more than 2.87 million km<sup>2</sup> of forest ecosystems, comprised of both humid and dry forests. The region's 2.27 million km<sup>2</sup> of remaining closed canopy tropical forest represents one-fifth of the what remains in the world for this highly valuable forest type, and, after the Amazon, is the earth's second largest area of contiguous moist tropical forest. Central Africa's Congo basin is defined by the watershed of the Congo river and primarily covers Cameroon, Central Africa Republic, the Democratic republic of Congo, Equatorial Guinea, Gabon, and the Republic of Congo. The forest habitats provided by the Congo Basin are the largest on the entire African continent and are home to an extraordinary diversity of life. Endemic and emblematic species include Great Apes (chimps, bonobos, gorillas) and the forest elephants, among others. Congo Basin forests provide vital regional and global ecological services, such as carbon sinks, basin catchments, and regulators of climate. These forests ecosystems also provide livelihoods and services to 60 million people who live in or near the forests, and fulfill social and cultural functions essential to local indigenous populations. Agriculture is mainly small-scale and combines various annual and perennial crops (cassava, maize, groundnut, banana, vegetables, and tuber), alternating with short or long-term fallows depending on local land availability.

The main objective of the CBSL will be to incorporate environmental management principles in forest management through landscape approaches at different levels (local, national, and transboundary). The notions of connectivity, corridors, and their governance will be considered

in a inclusive way with local communities. Innovative mechanisms and partnerships will be developed to improve law enforcement against illegal logging and poaching of global important biodiversity.

A political and technical process already exists in the Congo Basin between Heads of State, Ministries, partners, and various stakeholders<sup>19</sup>. There will be little need to finance coordination of agencies per se under the CBSL program, but it will be essential to support and strengthen some of the existing networks to foster cooperation and maximize synergies. The regional level will also be operational to deliver support in additional landscapes, corridors, and countries to address key threats to endangered species, globally important forest habitats, and forest dependent peoples.

The program will help address transboundary and regional issues that cannot be addressed through national actions alone (e.g. carbon leakage effect, illegal timber exploitation, wildlife poaching and trafficking), and will focus on a few transboundary landscapes in the heart of the Congo Basin.

#### Dryland Sustainable Landscapes

Drylands are a vital part of the earth's human and physical environments, encompassing grasslands, agricultural lands, and forests. They cover approximately 40% of the world's land area and support two billion people, 90% of whom live in developing countries where women and children are highly vulnerable to the impacts of land degradation and drought. They harbour important global biodiversity, much of which is endemic, and store significant amounts of carbon. Drylands also provide much of the world's grain and livestock, many tree products and vegetable species, as well as globally important agro-biodiversity. A recent paper in

19 COMIFAC: Central Africa Forests Commission, https:// www.comifac.org/, CBFP: Congo Basin Forests Partnership, http://pfbc-cbfp.org/home.html

Science<sup>20</sup> comments on the important link between forests and drylands, arguing that the extent of forest has been grossly underestimated: "Forests in drylands are much more extensive than previously reported and cover a total area similar to that of tropical rainforests or boreal forests. This increases estimates of global forest cover by at least 9%, a finding that will be important in estimating the terrestrial carbon sink." While dryland landscapes are not as geographically distinct as the Amazon or the Congo Basin, they do represent a globally important biome and an important element of the global ecosystem.

Selection criteria as outlined below will allow that important forest and shrubland biomes could be covered (e.g. Miombo, Mopane, and Fynbos woodlands, Savanna tropical grasslands and open woodlands, Dry Central Andes grassland and shrublands, Cerrado, Caatinga, and Mato Grosso seasonal forests; Central Asian rangelands and steppe forests, although the program will address such biomes through a landscape approach aiming for potential multiple GEBs.

The main goal of the Dryland Sustainable Landscapes program is to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management of production landscapes, addressing the complex nexus of local livelihoods, land degradation, climate change, and environmental security.

The Dryland Sustainable Landscapes program will apply UNCCD's LDN tool to advance sustainable land and forest management aiming at avoiding further land degradation and desertification and improving the quality and maintenance of ecosystem services. This will be done by tackling

the root causes of land degradation, promoting the sustainable management of production landscapes in drylands, and addressing the complex nexus of local livelihoods, land degradation, climate change, biodiversity and environmental security.

The program will generate multiple environmental benefits and enhance local livelihoods. A landscape approach will help to tailor implementation packages to a wide range of dryland landscapes contexts. Drylands encompass critical landscapes for potential global environmental benefits, especially through (i) building resilience to climate change in environments particularly vulnerable to anticipated impacts of climate change; (ii) sequestering carbon, managing watersheds (leading, inter alia to reduced sediment yields and conserving scarce water resources); and (iii) protecting rare and endangered biodiversity.

The three main objectives of the program are: 1) integrated landscape management with particular focus on sustainable forest management and restoration, rangelands, and livestock production; 2) the promotion of diversified agro-ecological food production systems in drylands; and 3) the creation of an enabling environment to support the first two objectives.

<sup>20</sup> Jean-François Bastin et al. (2017). The extent of forest in dryland biomes. *Science*. Vol. 356, Issue 6338, pp. 635-638. doi: 10.1126/science.aam6527



# Annex 1 Biodiversity Focal Area and Associated Programming Investments Results Framework



GOAL	IMPACTS <sup>19</sup>	INDICATORS	MEANS OF VERIFICATION
Maintain globally significant biodiversity in landscapes and marine habitat	Biodiversity conserved and habitat maintained in national protected area systems and other effective area-based conservation measures  Conservation and sustainable use of biodiversity in production landscapes and marine habitat	Intact vegetative cover and degree of fragmentation in national protected area systems and other effective area-based conservation (hectares)  Intact vegetative cover and degree of fragmentation in production landscapes (hectares)  Coastal zone habitat and marine habitat intact in marine protected areas and productive marine habitat (hectares and km).	Remote sensing and, where possible, supported by visual or other verification methods.
OBJECTIVES	OUTCOMES	INDICATORS	MEANS OF VERIFICATION
1) Mainstream biodiversity across sectors as well as within production landscapes and marine habitat and 2) Reduce direct drivers of biodiversity loss	Landscapes and marine habitat under improved management (excluding protected areas)	Area of landscapes under improved management to benefit biodiversity (hectares, non-certified)  Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations (hectares)  Area of High Conservation Value Forest (HCVF) avoided (hectares)  Area of land restored (forest, natural grasslands and shrublands, wetlands) (hectares)  Area of marine habitat under improved practices to benefit biodiversity (hectares)  Number of fisheries that meet national or international third-party certification that incorporate biodiversity considerations  Number of Large Marine Ecosystems with reduced nutrient pollution and hypoxia  Globally over-exploited fisheries moved to more sustainable levels (metric tons)	GEF portal reporting
	Terrestrial habitat under improved conservation and sustainable use (million hectares)  Marine habitat under improved conservation and sustainable use (million hectares)	Terrestrial protected areas created <sup>20</sup> (hectares)  Terrestrial protected areas under improved management effectiveness (hectares)  Marine protected areas created (hectares)  Marine protected areas under improved management effectiveness (hectares)	GEF portal reporting
3) Strengthen biodiversity policy and institutional frameworks	NBSAPs revised as appropriate Protocols to CBD (Cartagena and Nagoya) under implementation	NBSAPs revised following COP guidance (proportion of GEF eligible parties successfully revising) Ratifications of protocols, supplementary protocols (number) Degree of implementation of Cartagena and Nagoya Protocol	GEF database, Reports posted on CBD website, in-depth reviews of portfolio

<sup>19</sup> Long term effects of the portfolio investment, target area for impacts and outcomes would be 1.2 billion hectares.

<sup>20</sup> Per the GEF biodiversity focal area strategy, new protected areas created with GEF support must meet the Key Biodiversity Area criteria.

# Annex 2 Programming Options Available to Countries Against the Priorities and Outcomes of Each Objective as Identified by COP-13



### Objective 1. Mainstream biodiversity across sectors as well as within production landscapes and seascapes

A) IMPROVE POLICIES AND DECISION-MAKING, INFORMED BY BIODIVERSITY AND ECOSYSTEM VALUES	PROGRAMMING OPTIONS	
Expected Outcome 1: Financial, fiscal, and development policies, as well as planning and decisionmaking <sup>21</sup> take into account biodiversity and ecosystem values, <sup>22</sup> in the context of the different tools and approaches used by Parties to achieve the Aichi Biodiversity Targets.	BIODIVERSITY FOCAL AREA STRATEGY: Natural Capital Assessment and Accounting	
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 obligations and taking into account national socioeconomic conditions.	BIODIVERSITY FOCAL AREA STRATEGY: Natural Capital Assessment and Accounting Biodiversity Mainstreaming Impact Programs: Food Systems, Land Use, & Restoration International Waters Focal Area Strategy: sustainable fisheries	
Expected Outcome 3: Economic sectors affecting significant biodiversity adopt sustainable supply chains and/or clean production processes, thus minimizing their impacts on biodiversity.	IMPACT PROGRAMS: Food Systems, Land Use, & Restoration	
B) MANAGE BIODIVERSITY IN LANDSCAPES AND SEASCAPES	PROGRAMMING OPTIONS	
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, incentives <sup>23</sup> , restoration, and strategic establishment of protected areas and other measures.	BIODIVERSITY FOCAL AREA STRATEGY: Inclusive Conservation, Preventing the Extinction of Known Threatened Species and Wildlife for Sustainable Development  IMPACT PROGRAMS: Food Systems, Land Use, & Restoration  SUSTAINABLE FOREST MANAGEMENT IMPACT PROGRAM: Amazon Sustainable Landscapes, Dryland Forests, Congo Basin Landscape	
C) HARNESS BIODIVERSITY FOR SUSTAINABLE AGRICULTURE	PROGRAMMING OPTIONS	
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.	BIODIVERSITY FOCAL AREA STRATEGY: Securing Agriculture's Future: Sustainable Use of Plant and Animal Genetic Resources IMPACT PROGRAMS:	

- 21 At spatial, non-spatial, sectoral, national and subnational levels.
- 22 See decision X/3, paragraph 9(b)(ii).
- $23\,$  As referred to in Aichi Biodiversity Target 3.

### Objective 2. Reduce direct drivers of biodiversity loss

D) PREVENT AND CONTROL INVASIVE ALIEN SPECIES	PROGRAMMING OPTIONS
Expected Outcome 6: Management frameworks for invasive alien species are improved	BIODIVERSITY FOCAL AREA STRATEGY: Prevention, Control and Management of Invasive Alien Species
E) REDUCE PRESSURES ON CORAL REEFS AND OTHER VULNERABLE COASTAL AND MARINE ECOSYSTEMS	PROGRAMMING OPTIONS
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	BIODIVERSITY FOCAL AREA STRATEGY: Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate (Marine Protected Areas)  INTERNATIONAL WATERS FOCAL AREA STRATEGY: Coastal and marine protected areas and sustainable fisheries
F) ENHANCE THE EFFECTIVENESS OF PROTECTED AREA SYSTEMS	PROGRAMMING OPTIONS
Expected Outcome 8: The area of protected areas under effective and equitable management is significantly increased, including development of sustainable financing.  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.	BIODIVERSITY FOCAL AREA STRATEGY: Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate Inclusive Conservation  SUSTAINABLE FOREST MANAGEMENT IMPACT PROGRAM: Amazon Sustainable Landscapes Congo Basin Landscapes  INTERNATIONAL WATERS FOCAL AREA STRATEGY: Coastal and marine protected areas
G) COMBAT ILLEGAL AND UNSUSTAINABLE USE OF SPECIES, WITH PRIORITY ACTION ON THREATENED SPECIES	PROGRAMMING OPTIONS

### Objective 3: Strengthen biodiversity policy and institutional frameworks

H) IMPLEMENT THE CARTAGENA PROTOCOL ON BIOSAFETY	Programming Options
Expected Outcome 11: The number of ratifications of the Cartagena Protocol on Biosafety and the Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress is increased.	BIODIVERSITY FOCAL AREA STRATEGY: Implement the Cartagena Protocol on Biosafety
Expected Outcome 12: National implementation of the Cartagena Protocol on Biosafety and the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress is enhanced.	
I) IMPLEMENT THE NAGOYA PROTOCOL ON ACCESS TO GENETIC RESOURCES AND BENEFITSHARING	PROGRAMMING OPTIONS
Expected Outcome 13: The number of ratifications of the Nagoya Protocol is increased.  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.	BIODIVERSITY FOCAL AREA STRATEGY: Implement the Nagoya Protocol on Access and Benefit Sharing,
J) IMPROVE BIODIVERSITY POLICY, PLANNING, AND REVIEW	PROGRAMMING OPTIONS
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.	BIODIVERSITY FOCAL AREA STRATEGY: Countries will be able to access the focal area setaside funds to implement enabling activities.
Expected Outcome 16: National policy and institutional frameworks are reviewed, their implementation and effectiveness assessed, and gaps identified and addressed by the frameworks.	
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.	





### **About the GEF**

The Global Environment Facility (GEF) was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems. Since then, the GEF has provided \$17.9 billion in grants and mobilized an additional \$93.2 billion in financing for more than 4,500 projects in 170 countries. Today, the GEF is an international partnership of 183 countries, international institutions, civil society organizations and the private sector that addresses global environmental issues.

The GEF's 18 implementing partners are Asian Development Bank (ADB), African Development Bank (AfDB), Development Bank of Latin America (CAF), Conservation International (CI), Development Bank of Southern Africa (DBSA), European Bank for Reconstruction and Development (EBRD), Foreign Economic Cooperation Office—Ministry of Environmental Protection of China (FECO), Food and Agriculture Organization of the United Nations (FAO), Fundo Brasileiro para a Biodiversidade (FUNBIO), Inter-American Development Bank (IDB), International Fund for Agricultural Development (IFAD), International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Industrial Development Organization (UNIDO), West African Development Bank (BOAD), World Bank Group (WBG) and World Wildlife Fund U.S. (WWF-US).

### www.thegef.org

Production Date: November 2018

Design: Patricia Hord.Graphik Design

Printing: Professional Graphics Printing

Printed on Environmentally Friendly Paper

# www.thegef.org

