

Information Note

Supporting Connectivity Conservation at National Levels: National Biodiversity Strategies and Action Plans (NBSAPs) and Implementation of the Kunming-Montreal Global Biodiversity Framework



Introduction

In early 2023, the Secretariat of the Convention on Biological Diversity (CBD) began publishing a compilation of decisions by the Conference of the Parties (CoP) relevant to each target of the Kunming-Montreal Global Biodiversity Framework (GBF) that is intended to guide Parties to access funding from the Global Environment Facility (GEF) (see: <https://www.cbd.int/financial/>). In this information note, the Center for Large Landscape Conservation (CLLC) and the IUCN WCPA Connectivity Conservation Specialist Group (CCSG) provide a selection of this guidance relevant to the connectivity and infrastructure-related provisions of GBF.

This resource is intended to help governments and partners further understand the importance of connectivity in the GBF and identify opportunities for advancing connectivity conservation at national and subnational levels through National Biodiversity Strategies and Action Plans (NBSAPs) and Global Environment Facility (GEF) financing. This includes [multiple opportunities for accelerating action](#) through the 11 Integrated Programs (IPs) under the eighth replenishment of the GEF Trust Fund (GEF-8, July 2022 to June 2026).



Background

Kunming-Montreal GBF

The 15th Conference of the Parties (CoP-15) to the Convention on Biological Diversity (CBD) adopted the [Kunming-Montreal Global Biodiversity Framework](#) (GBF) as decision 15/4 on 18 December 2022. This milestone agreement, along with its [Global Monitoring Framework](#), now serves as the strategic plan for implementation of the Convention for 2022-2030. The Kunming-Montreal Framework emphasizes the fundamental contribution that ecological connectivity makes to healthy functioning ecosystems and species, and its benefit to people, by [including connectivity](#) in a number of goals and targets to be advanced globally by the 196 signatory countries.

NBSAPs

As per decision 15/4, successful implementation of the GBF is to be supported by effective mechanisms of planning, monitoring, reporting, and review, which includes National Biodiversity Strategies and Action Plans (NBSAPs). Further, in [decision 15/6](#), CoP-15 requests Parties to revise and update their NBSAPs, aligned with the GBF and its goals and targets, “including those related to means of implementation” and to submit them by CoP-16. Parties “not in a position” to submit their revised NBSAPs by CoP-16 are requested to “communicate national targets reflecting, as applicable, all the goals and targets of the Kunming-Montreal Global Biodiversity Framework” as a standalone submission by CoP-16.

In Paragraphs 8 and 9 of the same decision, the CoP urges “all Parties to use the [headline indicators, supplemented by component and complementary indicators](#) and other national indicators in relevant national planning processes, including national biodiversity strategies and action plans, according to their national circumstances.” It also encourages “Parties to adopt the revised or updated NBSAPs as policy and/or legal instruments and to mainstream them (or elements thereof) with broader strategies and plans, such as national sustainable development plans, national development plans, poverty reduction strategies and other relevant national sectoral and cross-sectoral plans, in line with national circumstances and priorities.”

(For more on Decision 15/6, see: <https://www.cbd.int/nbsap/post-cop15.shtml>):

Future work

In the months ahead, CLLC, CCSG, and partners look forward to providing more specific recommendations for implementing these provisions with the best-available approaches, tools, and actions. We remain available to collaborate in a diversity of ways to:

- Increase understanding about ecological connectivity science, policy, and practice;
- Assess and monitor effects of various sectoral impacts on the connectivity of terrestrial, freshwater, and marine ecosystems including wildlife species and habitats;
- Identify, prioritize, plan, and manage for conserving connectivity values;
- Apply science-based solutions for avoiding and mitigating fragmentation; and
- Enhance capacity to measure and report progress.

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CLLC and IUCN WCPA-CCSG highlights of guidance relevant to connectivity and infrastructure-related provisions of GBF goals and targets¹

GOAL A: *The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050; Human induced extinction of known threatened species is halted, and, by 2050, extinction rate and risk of all species are reduced tenfold and the abundance of native wild species is increased to healthy and resilient levels; The genetic diversity within populations of wild and domesticated species, is maintained, safeguarding their adaptive potential.*

TARGET 1 (SPATIAL PLANNING): *Ensure that all areas are under participatory integrated biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities*

Relevant guidance from the CoP for accessing GEF funding:

- Integrate biodiversity and ecosystems functions and services in **spatial planning across cities, landscapes – including inland waters – and seascapes**, to conserve, enhance, restore and sustainably use biodiversity and ecosystem functions and services; (XII/9, para. 3; XII/19, para. 4(a); 14/3, para. 13(m); Convention on Wetlands (CBD/SBI/3/6/Add.3, 16 February 2021))
- Promote the application of integrated spatial planning in order to better **integrate protected areas into broader land and seascapes** and relevant sectors and plans, including aiming at poverty eradication, and to reduce the impacts of local stressors, especially the combined and cumulative effects of multiple stressors; (IX/18A, para. 4(a); XII/22, para. 8; XII/23, annex, para.8.4a; XII/23, annex, para. 10b; XIII/9, para. 3; XIII/11, annex II, para. 5.3)
- Apply **marine spatial planning** tools, as appropriate, in accordance with Parties' national planning and strategies, for better integration of conservation objectives in marine and other sectoral development programmes, and in overall plans for economic development; (X/29, para. 78; XII/22, para. 8)
- Include approaches to conserve, enhance and sustainably use biodiversity and ecosystem functions and services in upstream decisions on investments in the energy and mining, **infrastructure**, manufacturing and processing sectors, through integrated spatial planning; (14/3, para. 13(b))
- Strengthen capacities of subnational and local governments to incorporate biodiversity into urban and other spatial planning processes, such as urban, peri-urban, land-use and **infrastructure** planning, including “green infrastructure”; (XII/9, para. 3)
- Reducing the adverse impacts on wild migratory animals from energy installations and **linear infrastructure**, including roads, railways, fences, and pipelines as outlined in Resolutions 11.24 (Rev.COP13) and 11.27 (Rev.COP13) and integrate migratory wildlife considerations into any

¹ Sources: <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf>; <https://www.cbd.int/financial/>

spatial planning including in strategic and environmental impact assessments;
(CBD/SBI/3/6/Add.3, 16 February 2021)

- Integrate migratory wildlife considerations into any spatial planning including in strategic and environmental impact assessments to reduce the adverse impacts on wild migratory animals from energy installations and **linear infrastructure**, including roads, railways, fences, and pipelines; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021))
- Engage with relevant stakeholders and sectors as well as indigenous peoples and local communities in the development and implementation of spatial planning; (XIII/9, para. 3(d))
- See all T1 guidance at <https://www.cbd.int/financial/t01.shtml>

TARGET 2 (RESTORATION): *Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and **connectivity**.*

Relevant guidance from the CoP for accessing GEF funding:

- Ecosystem restoration is included in the following guidance to the Global Environment Facility: country-driven activities, including pilot projects, aimed at projects related to ecosystem conservation, restoration of degraded lands and marine environments and overall **ecosystem integrity** that take into account impacts of climate change. (Decision X/24, annex, paragraph 4.23; decision X/25, paragraphs 21 and 22; and also decision X/33, paragraphs 6 and 16; decision XI/21, paragraph 4; XIII/21, annex II, para. 4)
- Develop and implement ecosystem restoration action plans and include existing goals and commitments on restoration, including those promoted under other relevant processes, in national biodiversity strategies and action plans, including in reef, coastal and marine ecosystems as well as urban environments, taking into account the ecosystem approach and the **integration of ecosystem restoration into broader planning processes, such as spatial and landscape planning**; (XI/16, para.2(h); XII/19, para. 4(a); XIII/5, paras. 2, 3, 5; 14/1, para. 14(k); III/11, para. 15; XI/15, para. 2(b); X/31B, para. 26(b); XII/19, para. 4(c); 14/5, para. 4(c))
- Promote **large-scale restoration** activities, noting also the cumulative benefits of small-scale restoration activities that can collectively contribute to biodiversity conservation, climate-change adaptation and mitigation, and reducing desertification, in the context of sustainable development; (XI/16, para.2(i); XII/19, para. 4(d))
- Identify, analyze and address both underlying and direct causes of ecosystem degradation or **fragmentation**, degraded ecosystems that have the potential for ecosystem restoration, opportunities to link poverty eradication and ecosystem restoration, and areas that are important for both biodiversity conservation and for climate-change mitigation and/or adaptation, including carbon sequestration and maintenance of carbon stocks; (XI/16, para.1(b), 1(c) and 1(h); X/31B, para. 14(d); XIII/3, para. 55)
- Develop and strengthen monitoring of ecosystem degradation and restoration, with a view to selecting priority ecosystems for restoration, based on their conservation and ecosystem service value and impact on other ecosystems or habitats, and determining progress towards restoration targets; (XII/19, para. 4(g); VIII/1, annex, priority actions 1.1.3.1, 1.1.3.2, 1.1.2.1, 1.1.2.6)

- Rehabilitate and restore degraded inland water ecosystems and their services to enhance the conservation status of inland water biological diversity and the **connectivity of inland water ecosystems with terrestrial and marine ecosystems**, applying integrated watershed, catchment and river basin management strategies; (IV/4, annex I, para. 9(a); VII/4, annex, goal 1.3; X/28, para. 10(h), (l), 44; 14/5, para. 8)
- Develop and implement programmes to restore degraded mountain ecosystems and protect natural dynamic processes and maintain biological diversity in order to enhance the capacity of mountain ecosystems to resist and adapt to climate change, or recover from its negative impacts including, inter alia, by **establishing corridors and taking appropriate measures to maintain ecological functions of natural corridors, where appropriate, to enable vertical migration of species**, ensuring minimal viable population sizes to enable genetic adaptation to changing environmental conditions, and including socio-economic considerations, especially in relation to indigenous and local communities (VII/27, annex, action 1.2.1 and 1.2.11)
- Restore marine and coastal habitats that are vulnerable to the effects of climate change or which contribute to climate-change mitigation, such as degraded mangrove, seagrass and coral reef ecosystems that provide protection against tidal and storm surges and damage (e.g. mangroves, coral reefs, and sand dunes) and to help prevent run-off and siltation, working closely with civil society and local stakeholders; (X/29, para. 13(j), 71-72; X/33, para. 8(t); VIII/1, annex, priority action 1.1.3.4, 7.2.2.1, 8.1.1.2; XII/19, para. 6)
- Promote forest restoration, including reforestation and afforestation, in line with the ecosystem approach and sustainable forest management, to minimize the **negative impacts of forest fragmentation** on forest biodiversity, enhance their capacity to resist to, and recover from and adapt to climate change, and restore ecosystem services, including in degraded secondary forests and in forests established on former forestlands and other landscapes, such as in plantations; (IX/5, para. 1(k), 2(g); V/4, para. 10; VI/22, annex, programme element 1, goal 1, activity (i), goal 2, objective 3-5, goal 3, objective 1, and programme element 3, goal 3, activity (c))
- Rehabilitate and restore habitats of threatened species and degraded ecosystems, as appropriate, as a contribution to building **ecological networks, ecological corridors** and/or buffer zones, ecological integrity of protected areas and recovery of endangered species; (III/9, para. 6; XI/16, para.1(i); XIII/3, para. 17(a); X/31B, para. 26(a); VII/28, annex, goal 1.2 and 1.5)
- Restore and maintain **ecological connectivity, especially for the conservation and sustainable management of migratory species and their habitats**, which has been defined as the “unimpeded movement of species and the flow of natural processes that sustain life on Earth”; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021))
- Restore and maintain **global flyways**, indigenous wild-capture fisheries stocks in preference to other aquaculture developments, lost or fragmented pollinator habitats to address the drivers of wild and managed pollinators decline in all ecosystems including the most vulnerable biomes and agricultural systems; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021); 14/6, para. 4; VI/5, annex II, para. 2.3; VII/4, annex, goal 1.4)
- See all T2 guidance at <https://www.cbd.int/financial/t2.shtml>

TARGET 3 (CONSERVATION): *Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas... are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures.*

Relevant guidance from the CoP for accessing GEF funding:

- Community conserved areas, national and regional **systems of protected areas**, further development of the portfolio on protected areas towards comprehensive, representative and effectively managed protected area systems addressing system wide needs, country driven early action activities of the programme of work on protected areas to enable its full implementation, projects that demonstrate the role-protected areas play in addressing climate change, and address the long-term financial sustainability of protected areas, including through different mechanisms and instruments. (Decision X/24, annex, para. 4.4; X/25, paras. 10 and 11; XI/5, para. 18; X/31, paras. 9, 10 and 13; XI/24, paras. 1 and 3; XIII/21, annex II, para. 15)
- Develop a long-term action plan or reorient, as appropriate, relevant existing plans, including national and/or regional targets, for the extent, representativeness and effectiveness of national **systems of protected areas**, and incorporate them into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans; (X/31A, para. 1(b); VII/28, paras. 7 and 23, annex, goal 1.1)
- Identify and explore options to protect areas of particular importance for biodiversity and ecosystem services, considering ecological representativeness, **connectivity, integration with the wider landscape and seascape**, habitats of threatened, endemic and migratory species, wild relatives of cultivated crops and wild edible plants, coverage expansion, centres of origin or centres of genetic diversity, management under collective action, and full and effective participation of indigenous peoples and local communities; (XIII/2, para. 5(b); X/31A, para. 1(a) and 1(h); VIII/24, para. 29; XI/24, para. 1(f))
- Increase the coverage, quality, representativeness and **connectivity**, where appropriate, of inland water ecosystems and their key hydrological features in protected area systems through the designation or extension of inland-water protected areas within the framework of integrated catchment/watershed/riverbasin management and maintain or enhance their resilience and sustain ecosystem services including through the use of existing designation mechanisms available and being applied under biodiversity related conventions, such as the World Heritage Convention and the Ramsar Convention on Wetlands; (X/31B, para. 25; X/28, para. 10(c), 10(d); VII/4, annex, goal 1.2; Convention on Wetlands (CBD/SBI/3/6/Add.3, 16 February 2021))
- Increase spatial coverage and management effectiveness of marine protected areas and other area-based conservation measures including noise and ocean acidification considerations, in coral reefs and closely associated ecosystems, in cold-water areas, in areas meeting ecologically or biologically significant areas (EBSA) criteria and in areas in need of protection to ensure maximum adaptive capacity of biodiversity, and **integrate marine protected areas into the wider seascape** to strengthen a range of measures for longterm appropriate management of marine protected areas, incorporate good governance principles and increase the resilience of coastal and marine ecosystems; (IV/5, annex, programme element 3 ; V/3, annex, C and para. 6; VIII/21, para. 5; VIII/24, para. 11; IX/20, para. 26 and 27; X/29, para. 13(a), 13(b), 15, 29, 32, 33, 67, 7, 8;

- X/31B, para. 21, 23, 24; XI/24, para. 1(b); XII/22, para. 8; XII/23, annex, para. 8.3, 8.4 and 3(h); XIII/11, annex II, para. 5.3; 14/8, para. 6; VII/28, annex, goal 1.1)
- Develop strategies and priority targets for effective enforcement of sustainable forest management and protected area regulations, promote, establish and maintain and/or develop **connected national or regional forest protected area networks**, including complementary restoration areas, and apply spatial and land-use planning tools to identify areas of particular importance to the sustainable use and conservation and restoration of forest biodiversity, including in buffer zones; (IX/5, para. 1(h); V/4, para. 10; VI/22, annex, programme element 1, goal 3, objective 3 and programme element 2, goal 1, objective 2; VIII/19A, para. 7; XIII/3, para. 55)
 - Take action to establish or expand protected areas in any **large, intact or relatively unfragmented** or highly irreplaceable natural areas, or areas under high threat, as well as areas securing the most threatened species in the context of national priorities, and taking into consideration the conservation needs of **migratory species**; (VII/28, annex, goal 1.1)
 - Establish and strengthen regional initiatives, action plans and networks on protected areas, transboundary protected areas and collaboration between neighboring protected areas across national boundaries, in regard to planning and management practices, **connectivity** as well as to development across national borders; (XIII/2, para. 9(d); XI/24, para. 1(h); X/31A, para. 4, 5, 6; VII/28, para. 27, and annex, goal 1.3; IX/18A, para. 6(f), 11-12; VII/28, para. 13 and annex, goal 1.1; IX/18A, para. 6(c))
 - Support conservation strategies that promote the establishment and maintenance of networks of climate resilient sites for **migratory species**; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021))
 - Improve inter-agency and intersectoral coordination, through multisectoral advisory committees, especially for mainstreaming protected areas and biodiversity and **integrating protected areas into wider land- and seascapes, including using protected areas as natural solutions in ecosystem-based approaches to climate change adaptation and mitigation**; (XI/24, para. 1(d) and 1(i); X/31A, para. 1(e); X/31B, para. 30(a) and 32(e); IX/18A, para. 5(b))
 - Integrate improved design and management approaches for comprehensive and integrated protected area systems (including buffer zones, **corridors** and restored landscapes) into national strategies and action plans for addressing climate change, including through existing national adaptation strategies and plans, exploring funding opportunities for protected area design, establishment and effective management in the context of efforts to address climate change; (X/31B, para. 14(e); IX/18B, para. 3(h))
 - Increase restoration activities to improve the effectiveness of protected area systems in biodiversity conservation and enhance their resilience to climate change and other stressors, including **connectivity tools such as ecological corridors and conservation measures in and between protected areas and adjacent landscapes and seascapes**; (X/31B, para. 20; X/31B, para. 26(a)-(b))
 - See all T3 guidance at <https://www.cbd.int/financial/t3.shtml>

TARGET 4 (THREATENED SPECIES): *Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.*

Relevant guidance from the CoP for accessing GEF funding:

- Establish new and/or expand existing protected areas, or take other effective areabased conservation measures, to give due consideration to areas that protect the habitats of species, in particular threatened, endemic and **migratory species**, including through such mechanisms as important bird and marine mammal areas, drawing on the IUCN Red List of Threatened Species, threatened, endemic, and ecologically or culturally important island species, and other species with an unfavorable conservation status (e.g., seabirds, marine turtles and dugong); (III/21, para. 8; VI/22, annex, programme element 1, goal 4, objective 4(b); VII/27, annex, action 1.2.3; VII/28, annex, goal 1.1; VII/4, annex, goal 1.3, activity 1.3.3; VIII/1, annex, priority action 1.2.1.6 and 4.1.1.1(b); XIII/2, para. 5(b)(iv); X/31A, para. 1(h); XIII/3, para. 17(a); Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021); VII/4, annex, goal 1.2, activity 1.2.3)
- Establish **corridors** and take appropriate measures to maintain ecological functions of natural corridors, where appropriate, to enable vertical migration of species, ensuring minimal viable population sizes to enable genetic adaptation to changing environmental conditions, and support species migration systems; (VIII/1, annex, priority action 1.2.1; VII/27, annex, action 1.2.1; Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021); X/30, para. 3)
- Develop closer collaboration for the conservation and sustainable use of transboundary forest ecosystems and populations of species, such as effective regional networks of protected areas for **migratory species**; (VI/22, para. 33; VII/28, annex, goal 1.3; IV/4, annex I, para. 9(k))
- Restore and maintain **ecological connectivity**, especially for the conservation and sustainable management of migratory species and their habitats, which has been defined as the “unimpeded movement of species and the flow of natural processes that sustain life on Earth”; (VIII/1, annex, priority action 1.1.2.6-1.1.2.7; VII/27, annex, action 1.2.10; Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021); VII/28, annex, goal 1.2)
- Improve monitoring, data collection and data analysis of species population sizes and trends, **migration** patterns and distribution, habitats and critical sites as well as of drivers of population changes; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021))
- Take specific measures for species that are vulnerable to climate change, including **migratory species**, and to maintain genetic diversity in the face of climate change; (X/33, para. 8(g))
- Identify and monitor the impacts of climate change on key species, species (e.g., corals) that are resilient to climate change in order to use those species for restoration, and identify and protect sites whose environmental conditions favor the maintenance and recovery of species and ecosystems under changed climate and sea level, including **networks of climate resilient sites for migratory species to facilitate the migration and dispersal of species with limited tolerance to altered climatic conditions**; (VIII/1, annex, priority action 7.1.1.1, 7.1.1.6, 7.1.2.1; X/30, para. 5; Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021); X/33, para. 8(g); IX/16A, para. 4(f); VIII/30, para. 4)

- Further advance in the analysis of the interlinkages between biodiversity and human health, such as the identification of microbiological biodiversity and pathogenic species, and support activities to **reduce risk of the emergence of zoonotic diseases by addressing habitat fragmentation** and destruction and risks from the direct use of **migratory species**, which can be responsible for the transmission of infectious diseases from wild animals to humans; (XIII/6, para. 8; Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021))
- Promote and support further research on health-biodiversity linkages and related socioeconomic considerations, including, inter alia, on **linkages between migratory species and their corridors and human health**; (XIII/6, para. 6)
- Avoid, minimize and mitigate land-based and sea-based pollution, deoxygenation and introduction of invasive alien species through ballast water and biofouling to prevent adverse impacts on cold-water ecosystems and species, threats of invasive alien species to **migratory species**, and manage the impacts of fisheries on species and the wider ecosystem; (XII/23, annex, para. 8.1(d)-(e); XIII/11, annex II, para. 5.2; VI/23, para. 10(g); X/29, para. 13(g))
- Understand key species life histories with special emphasis on conservation biology tools and approaches to assist active recovery efforts, dynamics of key island populations and ecological communities and what constitutes an adequate area of key habitat to ensure viable populations, and delayed response processes of species responding to degradation, loss and **fragmentation** of insular habitats; (VIII/1, annex, priority action 2.1.1.10, 2.2.1.4, 2.2.1.7, 2.2.1.8)
- See all T4 guidance at <https://www.cbd.int/financial/t4.shtml>

TARGET 8 (CLIMATE CHANGE): *Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.*

Relevant guidance from the CoP for accessing GEF and GCF funding:

- Implement activities to increase the adaptive capacity of species and the resilience of ecosystems in the face of climate change, including reducing both non-climatic stresses and climaterelated stresses, **strengthening protected area networks including through the use of connectivity measures**, integrating biodiversity into wider seascape and landscape management, restoring degraded ecosystems and ecosystem functions; (X/33, para. 8(d))
- Cooperate regionally in activities aimed at enhancing **habitat connectivity** across ecological gradients, with the aim of enhancing ecosystem resilience and to facilitate the migration and dispersal of species with limited tolerance to altered climatic conditions, when undertaking the design, implementation and monitoring of ecosystem-based approaches to climate change adaptation and disaster risk reduction; (14/5, para. 3(d); VIII/30, para. 4)
- Take specific measures for species that are vulnerable to climate change, including **migratory species**, and to maintain genetic diversity in the face of climate change (X/33, para. 8(g))
- Recognize the role of indigenous and local community conserved areas in strengthening **ecosystem connectivity** and resilience across the sea and landscape thereby maintaining essential ecosystem services and supporting biodiversity-based livelihoods in the face of climate

change, and encourage activities at the local level led by indigenous peoples and local communities, including consideration and integration of indigenous and traditional knowledge, practices, plans and institutions; (14/5, para. 3(b); X/33, para. 8(i))

See all T8 guidance at <https://www.cbd.int/financial/t8.shtml>

TARGET 9 (PROVISIONING SERVICES): *Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.*

Relevant guidance from the CoP for accessing GEF funding:

- Support activities to reduce risk of the emergence of zoonotic diseases by addressing habitat fragmentation and destruction and risks from the direct use of migratory species; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021); Convention on Wetlands (CBD/SBI/3/6/Add.3, 16 February 2021))
- Promote and support further research on health-biodiversity linkages and related socioeconomic considerations: the relationships between biodiversity, ecosystem degradation and infectious disease emergence, including the effects of ecological community structure and composition, habitat disturbance and human-wildlife contact, and the implications for land use and ecosystem management; the interlinkages between dietary diversity, health and diversity of crops, livestock and other components of biodiversity in agricultural ecosystems, as well as marine and inland water ecosystems; the linkages between the composition and diversity of the human microbiome, and biodiversity in the environment, and implications for the planning, design, development and management of human settlements; the significance for health of marine biodiversity, including for food security, and the consequences of multiple stressors on marine ecosystems (including pathogens, chemicals, climate change and habitat degradation); the contribution of biodiversity and the natural environment, including protected areas, in promoting mental and physical health, particularly in urban areas; the significance of soil biodiversity for health; linkages between migratory species and their corridors and human health; and linkages between invasive alien species and human health; (XIII/6, para. 6, 8)
- Promote the formulation of policies, work plans and concrete actions among ministries, agencies and other bodies responsible for biodiversity and the sectors of energy and mining, infrastructure, manufacturing and processing, to facilitate the mainstreaming of biological diversity in these sectors, and include such policies, work plans and concrete actions in their national biodiversity strategies and action plans; utilize ecosystem-based approaches; (14/3, para. 13(r), 13(l); VIII/17, para. 10; XIII/3, para. 2, 14-15)
- Review and update legal frameworks, policies and practices to promote the mainstreaming of biological diversity in the energy and mining, infrastructure and manufacturing and processing sectors, including through safeguard, monitoring and oversight measures; (14/3, para. 13(e))
- Reduce the adverse impacts on wild migratory animals from energy installations and linear infrastructure, including roads, railways, fences, and pipelines, and integrate migratory wildlife

considerations into any spatial planning including in strategic and environmental impact assessments; (Convention on Migratory Species (CBD/SBI/3/6/Add.3, 16 February 2021))

- See all T9 guidance at <https://www.cbd.int/financial/t9.shtml>

TARGET 10 (PRODUCTION SERVICES): *Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.*

Relevant guidance from the CoP for accessing GEF funding:

- Develop, as appropriate, policy frameworks for land use that reflect the national biodiversity objectives, that inform -making at different scales and levels of governance to, inter alia, promote sustainable increases in the productivity and diversification of production of existing agricultural land and rangeland while enhancing ecosystem services and functions, including those services and functions that contribute to agricultural production (such as pollination, pest control, water provision and erosion control), while also protecting, restoring and sustainably using biodiversity and promoting **connectivity** in the landscape; (XIII/3, para. 28)
- Use an appropriate mix of regulatory and incentive measures aligned with national biodiversity objectives, including the elimination, phasing out and reform of incentives harmful to biodiversity in order, inter alia, to reduce habitat loss, degradation and **fragmentation** and to increase the efficiency of use of water, fertilizer and pesticides and to avoid their inappropriate use, and to encourage public and private sources of finance to be channeled into practices that improve the sustainability of production while reducing biodiversity loss, and to promote and support the restoration of ecosystems that provide essential services in a way that provides for the needs of indigenous peoples and local communities, does not cause harm to other ecosystems, and consistent with national legislation and international obligations; (XIII/3, para. 32)
- Prevent and mitigate losses due to **fragmentation** and conversion to other land uses, including agriculture, green areas in urban spaces, livestock and tourism; (XIII/7, para. 6; VI/22, annex, programme element 1, goal 2, objective 6)
- Promote, establish and maintain and/or develop adequate and effective **connected national or regional forest protected area networks**, giving priority to existing ones, and, where appropriate, apply spatial and land-use planning tools to identify areas of particular importance to the sustainable use and conservation and restoration of forest biodiversity, including in buffer zones; (XIII/3, para. 55; IX/5, para. 1(h); VI/22, annex, programme element 1, goal 3, objective 3; V/4, para. 10)
- Establish marine protected areas for conservation and management of biodiversity as the main objective and, when in accordance with the management objectives for protected areas, as fisheries management tools; (X/31B, para. 24)
- See all T10 guidance at <https://www.cbd.int/financial/t10.shtml>

TARGET 11 (REGULATING SERVICES): *Restore, maintain and enhance nature’s contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.*

Relevant guidance from the CoP for accessing GEF funding:

- Promote integrated watershed management practices at all levels for maintaining **ecosystem integrity**, soil stability on slopes, upstream-downstream **inter-connections** and protection against natural hazards (VII/27, annex, action 1.3.9)
- See all T11 guidance at <https://www.cbd.int/financial/t11.shtml>

TARGET 12 (URBAN AND DENSELY POPULATED AREAS): *Significantly increase the area and quality and **connectivity** of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological **connectivity** and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.*

Relevant guidance from the CoP for accessing GEF funding:

- Incorporate biodiversity considerations into urban, peri-urban, land-use and infrastructure planning, such as “green infrastructure”, and integrate biodiversity considerations into those projects that include **infrastructure** development for cities and local authorities; (XII/9, para. 3)
- Engage subnational governments and local authorities in the establishment and maintenance of systems of local protected areas, local conservation **corridors** and mosaics of land-use (such as biosphere reserves); (X/22, annex, D, para. (f))
- Support the development of landscape-level and ecosystem-based partnerships between subnational governments and local authorities on conservation **corridors** and sustainable land-use mosaics at national and transboundary levels; (X/22, annex, D, para. (i); XI/8A, para. 5)
- See all T12 guidance at <https://www.cbd.int/financial/t12.shtml>