The economics of ecosystems & biodiversity

IMPLEMENTATION GUIDE FOR
AICHI TARGET 11

A TEEB perspective

UNEP

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WHAT IS TARGET 11?

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

The 20 Aichi Biodiversity Targets for 2015 or 2020 are the key elements of the new **Strategic Plan for Biodiversity 2011-2020**, which the 10th Conference of the Parties to the CBD (COP 10) agreed on in October 2010 in Nagoya, Japan. As explained by the CBD on its website at www.cbd.int/sp/, this new plan will be the overarching framework on biodiversity, not only for the biodiversity-related conventions, but for the entire United Nations system.

The targets are organized under five strategic goals. Goals and targets comprise the aspirations for achievement at the global level, and a flexible framework for the establishment of national or regional targets. Parties are invited to set their own targets within this flexible framework, taking into account national needs and priorities, while also bearing in mind national contributions to the achievement of the global targets. Aichi Target 11 belongs to **Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity**.

How can the TEEB implementation guide help?

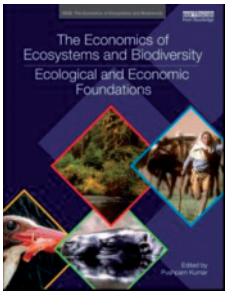
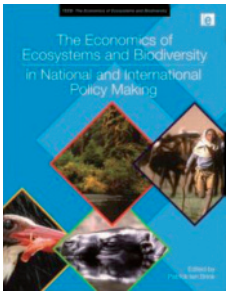
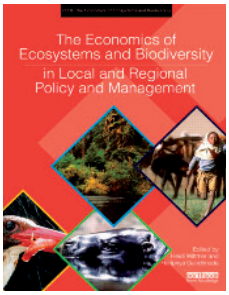
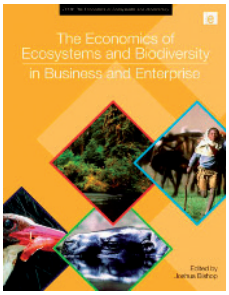
COP 10 agreed to translate this overarching international framework into **national biodiversity strategies and action plans (NBSAPs)** within two years. Additionally, in decision X/10, the meeting decided that the fifth national reports, due by 31 March 2014, should focus on the implementation of the 2011-2020 Strategic Plan and progress achieved towards the Aichi Biodiversity Targets. The TEEB implementation guide has been written to support CBD National Focal Points or others who are interested in translating the global targets into targets for the national context and in initiating their implementation.

> Given the particular national circumstances, national targets may be more specific and more precise than the global target. Targets should be ambitious but realistic.

In the next section, the guide will explain what the target means, relying to a large extent on the explanation provided in the Quick Guide to Target 11 of the Aichi Biodiversity Targets (CBD 2012). Subsequently, it explains how the target relates to TEEB, that is, why a "TEEB implementation guide" makes sense for this target.

In the section on "how to translate the target to the national level", the guide builds on the "guiding questions for setting national targets" of the CBD quick guide and presents selected guidance material, tools and case studies that should help answer the questions and thereby support national implementation efforts. This guidance will be complemented by a section on "actions and milestones", which provides a series of possible starting points and indicators, again taken mostly from the CBD quick guide. Last, the guide presents a list of other CBD COP 10 decisions. This list illustrates how the TEEB specific aspects of the target relate to different issues of biodiversity policy. Some of the decisions also contain useful information and recommendations for national implementation of the target.

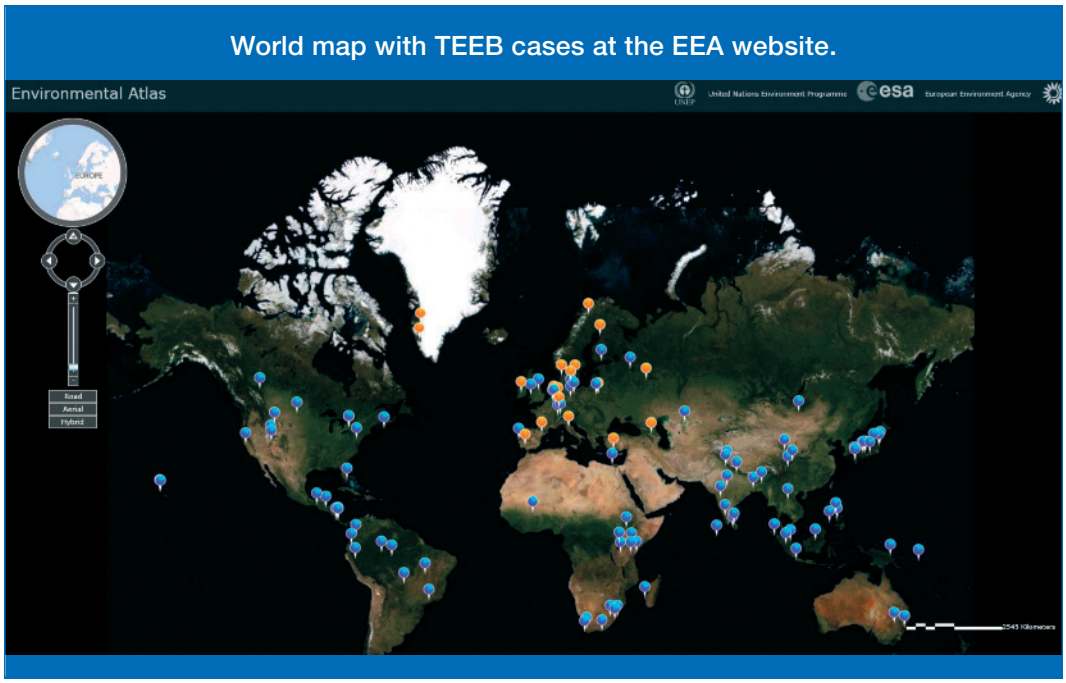
Most of the suggested guidance material is taken from the different **TEEB reports** (TEEB 2010, 2011, 2012a, 2012b – see box).[1]

TEEB 2010	TEEB 2011	TEEB 2012a	TEEB 2012b
			
FND	**POL**	**LCL**	**BIS**
Foundations	**International & national policy-makers**	**Regional and local policy-makers**	**Business**

Access the online versions of the TEEB reports at www.teebweb.org.

The **TEEB case data base** provides practical examples of occasions where ecosystem services have been assessed for better integration in decision-making and policy. The data base is hosted by the European Environment Agency (EEA)'s Environmental Atlas and can be found at http://discomap.eea.europa.eu/map/environmentalatlas/.

[1] Throughout the guide, the colors and the acronyms FND, POL, LCL, BIS are used to refer to the respective sections of the book versions of the TEEB reports. It will be indicated where the free online versions deviate from those.



World map with TEEB cases at the EEA website.

The information and tools from the TEEB reports and the TEEB case data base will be complemented with references to **additional useful sources, guidance material, and case studies**.

What does this target mean?

Well-governed and effectively managed protected areas are a proven method for safeguarding both habitats and populations of species and for delivering important ecosystem services. Particular emphasis is needed to protect critical ecosystems such as tropical coral reefs, sea-grass beds, deepwater cold coral reefs, seamounts, tropical forests, peat lands, fresh-water ecosystems and coastal wetlands. Additionally, there is a need for increased attention to the representativity, connectivity and management effectiveness of protected areas.

To comply with the Aichi target 11 several conditions need to be met: The area conserved should:

- **increase** – globally, this should reach at least 17% for terrestrial (including inland water) areas and 10% for marine areas. National targets may vary from this, as justified (see the guiding questions below).
- **include areas of particular importance for biodiversity and ecosystem services**, such as areas high in species richness or threatened species, threatened biomes and habitats, areas with particularly important habitats (key biodiversity areas, high conservation value areas, important plant areas, sensitive marine areas etc.) and areas which are important for the continued provision of ecosystem services (such as areas important for water supply, erosion control, sacred sites, etc.).

- **be ecologically representative** – protected area systems should contain adequate samples of the full range of existing ecosystems and ecological processes, including at least 10% of each ecoregion within the country.
- **be effectively and equitably managed** – with planning measures in place to ensure ecological integrity and the protection of species, habitats and ecosystem processes, with the full participation of indigenous and local communities, and such that costs and benefits of the areas are fairly shared.
- **be well-connected** – to the wider landscape or seascape using corridors and ecological networks to allow connectivity, adaptation to climate change, and the application of the ecosystem approach.

The areas can include not only strict protected areas, but also areas that allow sustainable use if this use is consistent with the protection of species, habitats and ecosystem processes. In addition to state-run areas, indigenous and community conserved areas as well as private areas may be included in the total area, provided the conditions mentioned above are met. Other effective area-based conservation measures may also include restrictions on activities that impact on biodiversity, which would allow for the safeguarding of sites in areas beyond national jurisdiction.

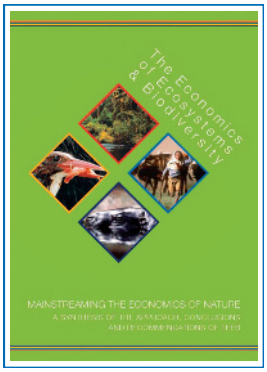
Implications for setting national targets:
On a global scale, some 13 % of terrestrial areas and 6% of coastal areas are currently protected, while very little of the open oceans are protected. Therefore reaching the proposed target implies a modest increase in terrestrial protected areas globally, with an increased focus on representativity, connectivity and management effectiveness, together with major efforts to expand marine protected areas. Some countries have already surpassed the global % value and therefore will be able to achieve targets higher than the global average. Indeed, this will be necessary to reach the global target. For most of these countries, however, the focus for terrestrial areas is likely to be on improvement of management effectiveness. Countries may wish to prioritize the protection of habitats of which relatively little remains and where continued damage would result in the total loss of the habitat type as well as the protection of habitats which are undergoing rapid rates of decline.

How does this target relate to TEEB?

In the TEEB-reports, the role of protected areas is covered in several chapters, illustrating that local protected areas are an important source for economic value and are usually beneficial for local populations rather than a burden.

One of the main **recommendations of the TEEB Synthesis report** (TEEB 2010, p. 27) relates directly to this aspect.

- PROTECTED AREAS OFFER VALUE FOR MONEY. The establishment of comprehensive, representative, effective and equitably managed systems of national and regional protected areas should be pursued (especially in the high-seas) in order to conserve biodiversity and maintain a wide range of ecosystem services. Ecosystem valuation can help to justify protected areas policy, identify funding and investment opportunities, and inform conservation priorities.



How to translate Target 11 to the national level?

1. How effective are existing protected areas? How can management effectiveness be improved?

The following chapters and specific aspects from the TEEB reports are important:

LCL Ch. 7 Ecosystem services and protected areas (p. 195, p. 125 in report)

POL Ch. 8 Recognizing the value of protected areas (p. 345)

- *To improve the management effectiveness of protected areas, the following topics from* LCL Ch. 7.3 are relevant:
  - Making informed planning and management decisions
  - Addressing conservation conflicts
  - Building alliances – create management partnership

  With an approach based on ecosystem services, conservation managers and local authorities may be able to address these topics more effectively.
- POL Ch. 8.3 provides arguments and examples on how economic valuation can help ensure management effectiveness in terms of advocacy, decision support and to address social impacts.
- The importance of multi-level policy support and effective institutional frameworks to successfully establish and effectively manage protected areas as well as the delivery of associated benefits is highlighted in POL Ch. 8.5.

The following tools and guidance from other sources seem useful:

- The LAB Guide Book by ICLEI, IUCN and CBD (2012) provides advice for planning and managing local biodiversity drawing on the experiences of 21 local authorities. It covers the topics biodiversity and climate change, mainstreaming and managing biodiversity, legislative frameworks and implementation mechanisms. The Guide Book is not created specifically for the management of protected areas; however, it can be helpful for their management. Using a methodology for planning for biodiversity with real-life examples from leading local governments, it shows how biodiversity planning can benefit from assessments to identify biodiversity targets and goals for a city or region.

2. What are the opportunities and constraints to expanding protected areas, generally and by eco-region?

How can these opportunities or constraints justify higher or lower figures for the national target than for the global target? What are the potential ecological, economical, and social costs and benefits of additional protected areas and how these could be shared?

The following chapters and specific aspects from the TEEB reports are important:

LCL Ch. 7 Ecosystem services and protected areas (p. 195, p. 125 in report)

POL Ch. 8 Recognizing the value of protected areas (p. 345)

- Chapter LCL Ch. 7.1 lists some examples on how costs and benefits of conservation can be shared.
- State of the art research to examine potential economical and social benefits and costs of protected areas is presented in POL Ch. 8.2. It particularly deals with the following questions:
  - Do benefits outweigh costs? If so, in which contexts and at what scales?
  - Who benefits and who bears the costs? Over what timeframe are benefits and costs experienced? For which benefits do markets exist and where could they be created?
- Some examples of possible benefits and costs on the global, national and local scale are listed below in Table 8.2, taken from POL Ch. 8.2 (p. 361, represented as Table 8.1 in report).

Table 8.1: Examples of protected area benefits and costs accruing at different scales

	Benefits	Costs
Global	- Dispersed ecosystem services (e.g. climate change mitigation/adaptation) - Nature-based tourism - Global cultural, existence and option values	- Protected area management* (global transfers to developing countries) - Alternative development programmes* (global transfers to developing countries)
National	- Dispersed ecosystem services (e.g., clean water for urban centres, agriculture or hydroelectric power) - Nature-based tourism - National cultural values	- Land purchase * - Protected area management (in national protected area systems) * - Compensation for foregone activities* - Opportunity costs of forgone tax revenue
Local	- Consumptive resource uses - Local ecosystem services (e.g. pollination, disease control, natural hazard mitigation) - Local cultural and spiritual values	- Restricted access to resources - Displacement - Protected area management (private land owners, municipal lands) - Opportunity costs of foregone economic activities - Human wildlife conflict

* These cost categories in effect transfer costs from the local to national level, or from the national or international level. Section 8.3 provides more information on these and related options.

- The following Table 7.1 illustrates for Namibia the costs and benefits of protected areas LCL Ch. 7.1 p. 202):

Table 7.1: Costs and benefits of PAs in Namibia at local, national and global levels

Currently PAs cover 17% of Namibia's national territory. Annually 540,000 visitors come to the country for their holidays. Namibia's 400 private hunting farms and conservancies on communal land cover 14% of the territory (2004). The national benefit from tourism (US$ 335.6 million) is far higher than the management costs (US$ 39.4 million). However, the number of local tourism-related jobs within or near a PA is low. This table shows costs and benefits at different policy levels and provides data where available:

	Costs	Benefits
Global	- approximately **US$ 8 million** International transfers for PA management **Costs carried by:** - International donors	- Option/→*existence value* of biodiversity - International tourism **Beneficiaries:** - Global community - Foreign tourists, tour operators, airlines, etc.
National	- US$ 18.6 million spent on management - US$ 20.8 million spent on operational costs of tourism facilities **Costs carried by:** - Ministry of Environment and Tourism - Directorate of Parks & Wildlife Management	- Habitat value & cultural value (not quantified) - Water provision (minimal) - Tourism-related jobs (about 20,000 people) - Over 2,200 tourism-related businesses **Beneficiaries:** - Households (rural 16%, urban 20%) - Private enterprises (39%) - Government (20% in taxes)
Local	- Foregone income from agriculture (low) - Crop damage, livestock losses and damage to infrastructure due to wild animals (figure not known) **Costs carried by:** - Local communities	- Employment in PAs (1,100 people) - Accommodation near PAs (US$ 51.4 million); tour operators/guides (US$ 13 million) - Revenue from tourism inside PAs (US$ 12.9 million – min. 4% of PA revenue for local communities) **Beneficiaries:** - PA management, government - Private business in rural areas - Local communities

Source: adapted from Turpie et al. 2009

The following tools and guidance from other sources seem useful:

- The Protected Area Benefit Assessment Tool published by the WWF (2008) is a tool to assess values and benefits provided by protected areas. The tool identifies a generic list of the range of possible benefits, both tangible and intangible, which can serve as a guide when considering the values provided by protected areas.
- Valuing Nature: Assessing Protected Area Benefits by Pabon et al. (2008) is a simple, practical quick guide to the assessment of potential economic benefits from protected areas with three country case studies.

- For guidance towards exploring different values and socio-economic relevance of protected areas, see Assessing socio-economic benefits of Natura 2000 - A Toolkit for practitioners by Kettunen et al. (2009). This Toolkit is created for the management of Natura 2000 sites; however, it can also be used to assess the benefits of other protected areas.
- The output of the seminar on Communicating values and benefits of protected areas in Europe organised by BfN and EUROPARC provides a good overview on valuing benefits from protected areas from a European perspective. It´s include nine case studies from different European countries (Stolton 2009).

3. Who are the stakeholders, including indigenous and local communities, that may be affected?

How can they be involved and their needs addressed? What are the tradeoffs to consider?

The following chapters and specific aspects from the TEEB reports are important:

LCL Ch. 7 Ecosystem services and protected areas (p. 195, p. 125 in report)

POL Ch. 8 Recognizing the value of protected areas (p. 345)

- The following topics from LCL Ch. 7.2 can help involve stakeholders and address their needs:
  - Co-management with PA authorities
  - Municipal protected areas
  - Indigenous and community-based conservation

  These topics highlight the importance of local involvement for successful management of protected areas. Conservation needs local expertise and support in order to successfully conserve biodiversity without harming local livelihoods.
- Chapter POL Ch. 8.3.3 gives a short explanation on how valuing ecosystem services can help to make social impacts visible and address them.
- The illustration below (taken from LCL Ch. 7.1 p.198) shows how jointly thinking about ecosystem services can help to get a common understanding on management of protected areas and the surrounding land, and to agree on the importance of collaboration and co-management.

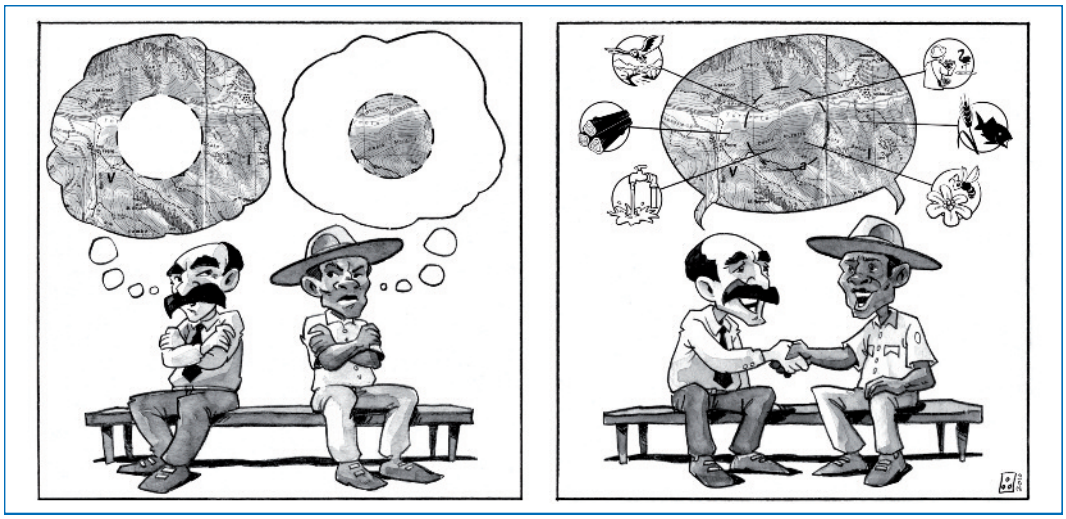


Illustration by Jan Sasse for TEEB

Looking at ecosystem services helps local authorities and conservation managers to see the interdependency between a protected area and surrounding land

4. What additional resources (financial, human and technical) will be required to reach the national target that is set?

How can additional funds be raised? What are possible funding sources?

The following chapters and specific aspects from the TEEB reports are important:

LCL Ch. 7 Ecosystem services and protected areas (p. 195, p. 125 in report)

POL Ch. 8 Recognizing the value of protected areas (p. 345)

- In Chapter LCL Ch. 7.3, the following possibilities for funding are explained and illustrated with practical examples:
  - Attracting donor funding
  - Payment for ecosystem services
  - Bioprospecting
  - Carbon sales
  - Wildlife viewing and wilderness experience sales

  A comprehensive assessments of the ecosystems and the services they provide is a helpful basis for raising additional funds for conservation.
- For details on how to raise funds and possible funding sources, see POL Ch. 8.4.2. A general extensive overview of main existing funding mechanisms for protected areas, both traditional and innovative including their advantages and disadvantages is given in Table 8.3. in POL Ch. 8.4.2 (pp. 377 – 380).

The following tools and guidance from other sources seem useful:

- ECO-BEST (2012) in Thailand is an ongoing project with the overall objective to reduce land biodiversity loss in South-East Asian countries for the benefit of local communities. One main goal is to strengthen on-the-ground conservation efforts in pilot sites through the use of economic and financial tools. Associated with this project, a guideline for an integrated assessment to identify and plan appropriate economic tools is currently being developed.
- For assessing the viability of ecosystem service valuation, see the Framework for Assessing the Viability of an Ecosystem Service Approach to Conservation provided by The Nature Conservancy (2008).

The following case studies are relevant here:

- A TEEB case from Brazil illustrates how in more than half of Brazilian States an ecological fiscal transfer has been established. This instrument can act as a financial incentive to municipalities for biodiversity conservation and the provision of ecosystem services (Cassola 2010; Ring 2008).
- Practical experience on financing protected areas is illustrated POL Ch. 8.4.3 Box 8.10 (p. 382) (represented as Box 8.8 in report) – see below.

Box 8.8: Options for financing a new network of protected areas in Sierra Leone

The Sierra Leone Government applied for GEF funding to create a national network of protected areas. The issue of sustainable financing sources for this network is of paramount importance. A study prepared by RSPB, the National Commission for the Environment of Sierra Leone and the Conservation Society of Sierra Leona demonstrated that although there are several potential mechanisms to generate income for the protected areas (debt swaps, a hypothecated airport departure tax, sale of carbon credits, donations from the mining industry, GEF, support from NGOs), the creation of a trust fund would be the optimum solution for establishing sustainable financial security. This trust fund would help to bring together various possible income streams to ensure they are sufficiently co-ordinated. The reason behind this proposal was the serious constraints on generating dependable on-going revenue in Sierra Leone and the vulnerability associated with dependence on a series of one-off injections of funds.

Source: RSPB et al. 2006

- A TEEB case from northern Peru serves to show how the city Moyobamba depends on three micro-watersheds for its water supply. These areas are especially rich in biodiversity, however, affected by land use change. Conversion of tropical rain forest to agricultural lands reduced the quality and quantity of drinking water available. Municipal water users agree to pay an additional charge on their water bill for financing upstream watershed protection which secures water quality and quantity (Renner 2010).

Actions and milestones

Actions taken to achieve this target should be guided by the Convention's Programme of Work on protected areas. Additional guidance is provided in decisions XI/18 and X/31 which suggest the following steps:

(1) Institutionalize management effectiveness assessment towards assessing 60% of the total areas by 2015 and ensure that the results of the assessments are implemented.
(2) Completion of ecological gap analysis for identifying "ecologically representative areas" (including unprotected important bird areas, key biodiversity areas, etc.) and implement the result.
(3) Integration of protected areas into wider land and seascapes to show case mainstreaming of biodiversity with other sectors and ecosystem based approaches to climate change adaptation and leading to mitigation through carbon sequestration.
(4) Recognition of indigenous and community conserved areas including through acknowledgement in national legislation or other effective means formal inclusion in the national systems and practicing of various governance types.
(5) Development and implementation of sustainable finance plans for protected area systems.

Possible indicators:

- Trends in extent of marine protected areas, coverage of key biodiversity areas and management effectiveness.
- Trends in protected area condition and/or management effectiveness including more equitable management.
- Trends in representative coverage of protected areas and other area based approaches, including sites of particular importance for biodiversity, and of terrestrial, marine and inland water systems.
- Trends in the connectivity of protected and other area based approaches integrated into land and seascapes.
- Trends in the delivery of ecosystem services and equitable benefits from protected areas.

Which CBD COP 10 decisions refer to the TEEB-relevant aspects of Aichi Target 11?

The following COP 10 decisions provide useful additional information and recommendations for implementation of Aichi Target 11.

Subsection	Relevant text of COP decision
	Decision X/24 – Review of guidance to the financial mechanism
4.4.e.	The Global Environment Facility should provide financial resources to developing country Parties, taking into account the special needs of the least developed countries and the small island States, as well as Parties with economies in transition, for country-driven activities and programmes, consistent with national priorities and objectives and in accordance with the following programme priorities […] (e) Further development of the portfolio on protected areas towards comprehensive, representative and effectively managed protected area systems addressing system wide needs.
4.18.a.	The Global Environment Facility should provide financial resources to developing country Parties, taking into account the special needs of the least developed countries and the small island developing States, as well as Parties with economies in transition, for country-driven activities and programmes, consistent with national priorities and objectives and in accordance with the following programme priorities […] (a) Projects which help Parties to develop and implement national, sectoral and crosssectoral plans for the conservation and sustainable use of biological diversity of inland water ecosystems, including comprehensive assessments of the biological diversity of inland waters, and capacity-building programmes for monitoring the implementation of the programme of work and the trends in inland water biological diversity and for information gathering and dissemination among riparian communities.
	Decision X/25 – Additional guidance to the financial mechanism
19.	The COP invites the Global Environment Facility and other donors and funding agencies as appropriate to extend support for capacity-building to eligible countries, in order to identify ecologically or biologically significant and/or vulnerable marine areas in need of protection […]

	Decision X/28 – Inland water supply
1.	The COP notes with concern that the rapidly increasing pressures from the drivers of change in inland water ecosystems, the overall continuing and accelerating rate of loss of the biodiversity of these ecosystems and of associated critical ecosystem services are already resulting in significant economic, social and environmental costs, which are projected to rapidly escalate. These services include water supply and the mitigation of hydrological extremes.
10.c.	The COP urges Parties, other Governments and relevant organizations to reinforce their efforts for the implementation of the programme of work on the biological diversity of inland water ecosystems […] and encourages Parties, other Governments and relevant organizations to reinforce capacity for the implementation of the programme of work […] by, inter alia […] reinforcing their conservation efforts including, inter alia, expanding protected areas and ecological networks for inland water biodiversity and through designating coherent and comprehensive networks of wetland areas within river basins for the Ramsar List of Wetlands of International Importance and through international cooperation in the management of inland water resources.
10.d.	The COP […] encourages Parties, other Governments and relevant organizations to reinforce capacity for the implementation of the programme of work […] by, inter alia […] strengthening their ability to report on protected areas coverage of freshwater ecosystems, including in areas designated to protect terrestrial biodiversity.
10.k.	The COP […] encourages Parties, other Governments and relevant organizations to reinforce capacity for the implementation of the programme of work […] by, inter alia […] exploring opportunities to strengthen resource allocation for capacity-building for implementation, as might be justified by the economic benefits of improved inland water ecosystem management.
34.	The COP welcomes with appreciation the development and expanded use of tools to assist implementation of the programme of work by Parties, other Governments, international and non governmental organizations and other partners, and encourages their further development and wider application, and recognizes the need for strengthened capacity-building efforts for their use, while noting that priority needs lie in the social, economic, institutional and policy arenas in order to better coordinate the management of the multiple drivers of change to inland water ecosystems so as to achieve balanced, fair, equitable and sustained delivery of their multiple services as a contribution to sustainable development.
	Decision X/29 – Marine and coastal biodiversity
13.i.	The COP encourages Parties to [value] marine and coastal biodiversity and ecosystem services and its integration into national accounting systems in order to increase sectoral integration.
15.	The COP urges Parties and other Governments to achieve long-term conservation, management and sustainable use of marine resources and coastal habitats, and to effectively manage marine protected areas, in accordance with international law, including the [UNCLOS], in order to safeguard marine and coastal biodiversity and marine ecosystem services, and sustainable livelihoods, and to adapt to climate change, through appropriate application of the precautionary approach and ecosystem approaches, including the use of available tools such as integrated river basin and integrated coastal zone management, marine spatial planning, and impact assessments.
71.	The COP requests Parties, other Governments, and other relevant organizations to take into account the special characteristics of enclosed and semi-enclosed seas, which are affected by multiple direct and indirect anthropogenic influences originating from the watershed area, and where the biodiversity issues require an integrated holistic approach aiming to improve the water quality and restore the health and functioning of marine and coastal ecosystems to ensure the provision of ecosystem services that are provided by these ecosystems.

	Decision X/31 – Protected areas
A.1.g	The COP […] invites Parties to […] carry out communication plans to promote information sharing on, and the understanding of, the importance of protected areas so as to increase support for them among decision makers and stakeholders of key sectors at all levels of government, community and non-governmental organizations on the benefits of protected areas to national and subnational economies, securing ecosystem services, public health, maintenance of cultural values, sustainable development and climate change adaptation and mitigation.
A.3.7.b.	The COP […] requests the Executive Secretary to […] provide additional technical support through the development of toolkits, best practices, and guidelines on themes of the programme of work on protected areas in collaboration with Parties partners and international organizations, in particular techniques and instruments to assess and communicate values of ecosystem services and cost benefits, planning and institutional strengthening of protected area systems, improving protected area coverage of under-represented ecoregions, biomes, and ecosystems, and implementing element 2 of the programme of work on protected areas.
B.1.10.a	The COP […] invites Parties […] to develop and implement sustainable finance plans in accordance with national legislation and systems, for protected area systems by 2012 and support individual protected areas, based on realistic needs assessments and a diversified portfolio of traditional and innovative financial mechanisms, such as, inter alia, payments for ecosystem services, as appropriate.
B.1.10.c.	The COP […] invites Parties to […] develop and implement additional means and methods of generating and allocating finance, inter alia, on the basis of a stronger valuation of ecosystem services, taking into account the findings of The Economics of Ecosystems and Biodiversity study, as appropriate.
B.2.14.c.	The COP […] invites Parties to […] evaluate, recognize and communicate the value and the benefits of comprehensive, effectively managed and ecologically representative protected area systems in climate-change adaptation and mitigation.
B.8.27.	The COP […] requests the Executive Secretary in collaboration with the IUCN World Commission on Protected Areas and other partners, including indigenous and local communities, in supporting the programme of work to explore and evaluate existing methodologies and guidelines for measuring the values, costs and benefits of protected areas, bearing in mind the characteristics of the different biomes and ecosystems, building on existing work, including on the findings of [TEEB] study, and disseminate the results of the evaluation for Parties to apply if need be.
B.8.28.	The COP […] further requests the Executive Secretary […] to develop guidelines and indicators to determine the costs and benefits of protected areas.
B.8.29.a.	The COP […] invites Parties to increase understanding of and communicate the role, importance and costs and benefits of protected areas in sustaining local livelihoods, providing ecosystems services, reducing risks from natural disasters, adapting to and mitigating climate change, health, water and other sectors, at all levels.
B.8.29.b.	The COP […] invites Parties to advance innovative measures to instil in park visitors and the general public a deeper understanding of the values of biodiversity, and to inspire their support and commitment for its protection.

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