



AN ACTIVISTS' GUIDE TO THE CONVENTION ON BIOLOGICAL DIVERSITY

This guide is intended to provide a simple and accessible introduction to the Convention on Biological Diversity and current efforts to protect biodiversity. It aims to reflect a range of views held by members of the CBD Alliance, and includes summaries of CBD materials and other resources. It has been compiled by Ronnie Hall. Please send any further additional materials and updates to the CBD Alliance (coordinator@cbdalliance.org)

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I. INTRODUCTION

The world's biodiversity is in crisis.

Biodiversity — in terms of genes, species and ecosystems — continues to decline rapidly, as described in detail in [Global Biodiversity Outlook 3](#). Biodiversity is now considered by many to be one of the '[planetary boundaries](#)' — maybe even the most significant — that we are about to overstep in a relentless drive for economic growth.

A study from the University of California, Berkeley describes this as a potential sixth mass extinction. It warns that if we continue on our current path three quarters of the world's species could become extinct within the next 300 years. Analyzing the situation for mammals, reptiles, birds, plants, mollusks, and other forms of life, researchers found that 1% to 2% of species are already extinct today, and 20% to 50% are threatened — numbers that approach those of the great mass extinctions of the past.¹

Current threats to global biodiversity are multiple and complex, and this makes them extremely hard to understand, let alone reverse. Immediate causes include excessive habitat loss, the over-exploitation of wildlife, pollution, climate change, and invasion of ecosystems by alien species. But these immediate causes are themselves driven by underlying factors including inappropriate economic policies, overconsumption, and weak government and corruption.

There is also a widespread lack of understanding about how ecosystems work and how vital they are to humanity. For example, they are critical to the provision of healthy food and clean water, regulating local weather and our climate, and the decomposition of wastes.

To take just one example, honeybee populations in Europe and America are declining alarmingly because of a syndrome dubbed 'Colony Collapse Disorder.' Honey bees are vital to food production: as well as producing honey, they pollinate crops, and about a third of the food crops in these regions (especially commercially produced food crops) benefit directly or indirectly from honey bee pollination. The causes of Colony Collapse Disorder have not yet been identified, but governments are hurriedly ramping up their

¹ <http://news.sciencemag.org/2011/03/are-we-middle-sixth-mass-extinction>

² http://ec.europa.eu/food/animal/liveanimals/bees/bee_health_en.print.htm

efforts to protect honeybees² including by examining the impacts of pesticides.³

The need to protect the world's biodiversity was formally recognized in 1993, when the Convention on Biological Diversity (CBD) entered into force. Its three main objectives are: 1) the conservation of biological diversity, 2) the sustainable use of its components, and 3) the fair and equitable sharing of the benefits of the use of genetic resources (Article 1 of the Convention).

As with all intergovernmental negotiations, it was a compromise text, and focuses both on the conservation of biodiversity, and the fair and sustainable use of that biodiversity. However, the development of the CBD has also been notable for its relative openness to inputs from civil society, in particular Indigenous Peoples Organizations with a great interest in and knowledge about the world's biodiversity. Nevertheless, disagreements between the various 'providers' and 'users' of biodiversity persist.

The protection of biodiversity also formed part of the Millennium Development Goals adopted in 2000. However, the agreed target of significantly reducing biodiversity loss by 2010 has been well and truly missed. New targets can now be found in the CBD's [Aichi Biodiversity Targets](#), which focus on reducing the pressures on biodiversity.

In order to meet these new targets it is vital that the CBD focuses on leading a coordinated effort to resolve the biodiversity crisis by persuading governments to address the immediate and underlying causes of biodiversity loss effectively, in conjunction with Indigenous Peoples and local communities. The CBD and its member states also need to pay attention to implementing the CBD: are its provisions and recommendations actually being put into practice? And if not, why not?

To help drive this process forward, it is also vital that civil society plays an increasing role both in terms of knowledge and implementation, and with respect to holding governments to account for their actions. This guide is intended to be a useful tool to that end – it aims to explain the basic components of and dynamics at play within the CBD.

³ EFSA (2013). Pesticides and bees: EFSA finalises new guidance. 4 July. <http://www.efsa.europa.eu/en/press/news/130704.htm>

II. THE CONVENTION ON BIOLOGICAL DIVERSITY 2011-2020

In 1992 the CBD set a target of achieving a significant reduction in the rate of biodiversity loss by 2010 (a target which was also reiterated in the Millennium Development Goals). This target was not met. Biodiversity — in terms of genes, species and ecosystems — has continued to decline as described in detail in [Global Biodiversity Outlook 3](#).

It was therefore necessary for the CBD to update its strategic plan in 2010. The new 'Strategic Plan 2011-2020' sets out a range of specific targets to be achieved between 2015 and 2020. These are known as the Aichi Biodiversity Targets.

Click on the links below for more detail:

- [The CBD's Strategic Plan 2011-2020](#)
- [CBD Aichi Biodiversity Targets page](#)

Resources

- [CBD Strategic Plan](#)
- [The Aichi Biodiversity Targets](#)
- [Global Biodiversity Outlook 3](#)
- [Millennium Development Goals](#)

You can also find a comprehensive history of the CBD [here](#), at the International Institute for Sustainable Development's website.

1. THE CBD'S STRATEGIC PLAN 2011-2020

This new plan is intended to be the overarching framework for all [United Nations work on biodiversity](#), not just that undertaken by the biodiversity-related conventions.

For example, one of the main outcomes of the 2012 Rio+20 Conference was the agreement to launch a process to develop a set of Sustainable Development Goals (SDGs), which will build upon the Millennium Development Goals that expire in 2015, and converge with the post-2015 development agenda. This should include a focus on biodiversity. There are also other multilateral environmental agreements that address biodiversity issues, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The CBD's new strategic plan takes humanity's reliance on 'ecosystem services' as its starting point. Its overall vision is that,

"By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

It has five strategic goals, which are to:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.
- Reduce the direct pressures on biodiversity and promote sustainable use.
- Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.
- Enhance the benefits to all from biodiversity and ecosystem services.
- Enhance implementation through participatory planning, knowledge management and capacity building.

The [Aichi Biodiversity Targets](#) are commendable but the Strategic Plan's main — and potentially fatal — weakness is that it does not address implementation issues. There is no tool to enforce compliance or to avoid the blocking of CBD decisions by minorities.⁴ Whether any of these new targets can be met is therefore uncertain.

⁴ CBD Alliance. ECO 361, <http://www.cbdalliance.org/post-cop-10/>

Parties to the CBD agreed that they would integrate this overarching framework into their National Biodiversity Strategies and Actions Plans ([NBSAPs](#)) within two years.

They also agreed to make sure that the fifth version of their [national reports](#), which were due to be completed in 31 March 2014, would focus on the implementation of the Strategic Plan and progress towards the Aichi Biodiversity Targets.

Resources

- [CBD Strategic Plan](#)
- [CBD summary of key elements](#) of Strategic Plan page
- NBSAPs and National Reports for any country can be found easily, using the CBD's '[Search NBSAPs and National Reports](#)' database. Simply select the country, and choose 'order by: dates of receipt' to see the most recent versions.
- You can also find full [contact details](#) for National Focal Points for the CBD and its subsidiary bodies on the CBD website.

2. THE AICHI BIODIVERSITY TARGETS

This page outlines the [CBD's Aichi Targets](#). If you want to find out more about them please use the resources listed at the bottom of this page.

The Aichi Biodiversity Targets are headline targets grouped together under five strategic goals:

Strategic Goal A

Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target 1

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 3

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socioeconomic conditions.

Target 4

By 2020, at the latest, governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Strategic Goal B

Reduce the direct pressures on biodiversity and promote sustainable use

Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 7

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 8

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic Goal C

Improve the status of biodiversity by safeguarding ecosystems, species

and genetic diversity

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.

Target 12

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socioeconomically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity

Strategic Goal D

Enhance the benefits to all from biodiversity and ecosystem services

Target 14

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Target 15

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Target 16

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair

and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Strategic Goal E

Enhance implementation through participatory planning, knowledge management and capacity building

Target 17

By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Target 18

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

Target 19

By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Target 20

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

Resources

- [CBD Aichi Biodiversity Targets page](#)
- [Quick Guides](#) for the Aichi Biodiversity Targets

III. DEALING WITH DIVERSITY: HOW DOES THE CBD ADDRESS THE MANY DIFFERENT ASPECTS OF BIODIVERSITY?

The CBD deals with different aspects of biodiversity through different thematic programmes. Click on the links below to read about each of these programmes in more detail:

- [Agricultural biodiversity](#)
- [Dry and sub-humid land biodiversity](#)
- [Forest biodiversity](#)
- [Inland waters biodiversity](#)
- [Island biodiversity](#)
- [Marine and coastal biodiversity](#)
- [Mountain biodiversity](#)

1. AGRICULTURAL BIODIVERSITY

Our food and agricultural systems are completely dependent upon agricultural biodiversity, yet the expansion of modern industrial agriculture for food and biofuels is rapidly destroying that biodiversity, both through changing land use patterns and pollution.

In particular, the practice of producing food, biofuel and timber crops in vast, lifeless monoculture plantations is having a devastating impact on biodiversity, especially where forests are being destroyed to clear land for farming or tree plantations.

The rapid expansion of the agrofuel and bioenergy industry is aggravating the situation, leading to massive deforestation, depopulation and human rights abuses worldwide. Expansion of large-scale monocultures for 'energy crops' such as industrial monocultures of soybean, oil palm and eucalyptus, is impacting heavily on both forest ecosystems and Indigenous Peoples.

As demand for more arable land increases, entire ecosystems, such as the Brazilian Amazon, Cerrado, Pantanal, and Mata Atlantica, and the rainforests of Southeast Asia are seriously threatened. Throughout the global south, indigenous peoples and rural communities are being evicted from their land, often violently, to make way for large scale monocultures of agrofuel crops, undermining efforts to ensure land reform and food sovereignty.⁵

Industrial agriculture is also highly dependent on toxic agrochemicals and uses a narrow range of largely uniform plant varieties, animal breeds and fish species, including GMOs.

~~Yet yields are stagnating, declining pest-resistance is endemic, and the loss and contamination of water, soil and air is increasing.~~⁶

Further problems with industrial agriculture are that yields are stagnating, and pests are increasingly resistant to pesticides, meaning that ever more toxic levels and types of pesticides need to be applied. Loss and contamination of water, soil and air is increasing.

In complete contrast healthy, productive agroecosystems are very biodiverse. Rice paddy fields, for example, are major repositories of agricultural

⁵ CBDA (2010). Agricultural Biodiversity Feeds the World!, Briefing 8, <http://www.ukabc.org/agriculturalbiodiversity-briefing-cop10.pdf>

⁶ CBDA (2010). Agricultural Biodiversity Feeds the World!, Briefing 8, <http://www.ukabc.org/agriculturalbiodiversity-briefing-cop10.pdf>

biodiversity. A single Japanese rice ecosystem has been shown to contain 5,668 different species.⁷

Small farmers also provide food for more than 70% per cent of the world's peoples.⁸ Agricultural biodiversity provides us with food, clothing, medicines and fuels; and provides a lifeline for the estimated 2.5 billion people that are involved in full- or part-time smallholder agriculture.⁹

Agricultural biodiversity and associated ecosystems are the result of the resilient, biodiverse, ecological food production systems developed by knowledgeable women and men farmers. Over the centuries they have selected, developed and exchanged seeds, livestock and other terrestrial and aquatic food species. This has created biodiverse locally-adapted production systems that feed the world, improve human health and well-being, and sustain the environment. Yet much of this critical agricultural biodiversity is being lost, because of increasing standardization of agricultural processes.

Agricultural ecosystems are highly dependent upon a diverse range of species being present to ensure that nutrients are recycled, crops are pollinated, and pests, diseases and pollution are regulated. Diverse species are also involved in maintaining the water cycle, storing carbon and helping to regulate our climate. Agricultural biodiversity is vital to farmers seeking to adapt crops to climate change.

A rapid transition to sustainable farming that utilises organic 'agro-ecological' methods and farmers' traditional knowledge is urgently needed. Agro-ecology raises productivity on farms, helps to reduce rural poverty, and improves nutrition.¹⁰

Key to this are effective measures to promote a model of production and consumption that:

- Recognizes the importance of related ecosystem functions.
- Helps to sustain and develop agricultural biodiversity.

⁷ CBDA (2010). Agricultural Biodiversity Feeds the World!, Briefing 8, <http://www.ukabc.org/agriculturalbiodiversity-briefing-cop10.pdf>

⁸ CBDA (2012). Agricultural Biodiversity for Life: Providing food, improving health and well-being and regenerating the environment, CBD Alliance, <http://www.twinside.org.sg/title2/susagri/2012/susagri226/425887638506518c7c9a8a.pdf>

⁹ IFAD (2013). Smallholder farmers key to lifting over one billion people out of poverty, International Fund for Agricultural Development, <http://www.ifad.org/media/press/2013/27.htm>

¹⁰ UNHRC (2010). Report submitted by the Special Rapporteur on the rights to food, Olivier De Schutter, 17 December, A/HRC/16/49, <http://www2.ohchr.org/english/issues/food/docs/A-HRC-16-49.pdf>

- Prioritizes the provision of healthy, nutritionally-rich, local food.
- Defends small-scale food providers and food sovereignty, realizing Farmers Rights, and the rights of livestock keepers, forest dwellers, and artisanal fishers.
- Prevents corporate control, monopoly privileges, commodification and financialization with respect to agricultural biodiversity (such as the patenting of ‘climate ready’ genes).
- Prohibits or discourages the deployment of inappropriate and inherently dangerous technologies, such as planetary scale [geoengineering](#).

Agricultural biodiversity and the CBD

Agricultural biodiversity – its conservation, sustainable use and the equitable sharing of benefits from its use – has always been at the heart of the CBD’s work on these issues, usually in cooperation with other institutions, especially the Food and Agriculture Organization (FAO).

The CBD’s Programme of Work on Agricultural Biodiversity aims to:

- Assess what is happening to the world’s agricultural biodiversity and why.
- Identify and promote better practices and policies.
- Build capacity and increase awareness about this issue.
- Help to ensure that national efforts for the conservation and sustainable use of agriculture are mainstreamed.

There are three cross-cutting initiatives under this program:

- The International Initiative for the Conservation and Sustainable Use of Pollinators
- The International Initiative for the Conservation and Sustainable Use of Soil Biodiversity
- The International Initiative on Biodiversity for Food and Nutrition

In addition the CBD has a moratorium on sterile seed technology — also known as ‘Terminator Seed Technology’ — which effectively bans the production of plants that are genetically engineered to produce sterile seeds (which would protect biotechnology companies’ investments by preventing seed sharing).¹¹

¹¹ UN upholds moratorium on Terminator Seed Technology, 31 March 2006, ETC Group, <http://www.etcgroup.org/content/un-upholds-moratorium-terminator-seed-technology>

The [CBD's Cartagena Protocol](#) on the transboundary movement of living modified organisms also concerns food and agriculture directly.

The conservation of plant genetic resources is also the subject of an international treaty under the FAO, the [International Treaty on Plant Genetic Resources for Food and Agriculture](#). This treaty is [recognized by the CBD](#), but is highly controversial. Whilst it allows signatories access to all the genetic resources made available by other countries that have signed up to it, states' parallel commitment to respecting the rights of farmers is often ignored.¹²

Resources

- Agricultural Biodiversity for Life: Providing food, improving health and well-being and regenerating the environment ([CBD Alliance Briefing for COP 11](#)).
- [CBD's Programme of Work on Agricultural Biodiversity page](#).
- [CBD's page describing the three cross-cutting initiatives under this program](#).
- [FAO International Treaty on Plant Genetic Resources for Food and Agriculture page](#).
- The [Let's Liberate Diversity forum](#) is an annual gathering of farmers, seed-savers and groups from across Europe who are working on bringing agricultural biodiversity to life on farms and in gardens.

¹² GRAIN (2009). <http://www.grain.org/article/entries/786-itpgr-farmers-rights-or-a-fools-bargain>

2. DRY AND SUB-HUMID LANDS BIODIVERSITY

[‘Dry and semi-humid’ lands](#) (also known as ‘drylands’) are regions where rainfall is inconsistent and temperatures can be high. Ecosystems can be fragile and biodiversity particularly at risk.

They are also important because of the high number of endemic species living in them (these are species, often highly specialized, that are found nowhere else, which increases their vulnerability). The Mediterranean, for example, is home to more than 11,700 endemic species.¹³ In addition, these regions are the source of many of the world’s most important food crops, such as wheat, barley and olives.

Dry and semi-humid lands may be harsh environments to live in, but they cover some 47% of the world’s land and are home to around 2 billion people (around 35% of the world’s population).¹⁴ At least 90% of the people living in drylands are in developing countries, meaning that they are *more* dependent upon their immediate environment and its biodiversity but there is *less* capacity to protect and conserve it.

The [main pressures](#) on biodiversity in these regions include habitat conversion (for agriculture, infrastructure and tourism), grazing pressures, changes in water availability, and climate change.

The biodiversity in these regions is crucial for people’s livelihoods, and the way in which it is protected is also important from the perspective of sustainable development, poverty alleviation and food security.

Dry and Sub-humid Lands Biodiversity and the CBD

The CBD has a [Programme of Work on Dry and Sub-Humid Lands](#). This focuses on assessing the actual situation, identifying the benefits of biodiversity in these regions, and pinpointing best management practices, including the traditional knowledge and practices of indigenous peoples and local communities. It also prioritises ‘targeted actions’ such as [protected areas](#), the sustainable use and harvesting of wildlife, the sustainable use of water, and the management of invasive alien species.

The CBD also promotes collaboration with the [UN Convention to Combat Desertification \(UNCCD\)](#), including through the [Joint Liaison Group](#), which

¹³ <http://www.cbd.int/drylands/what.shtml>

¹⁴ <http://www.cbd.int/drylands/importance/default.shtml>

brings the CBD, the UNCCD and the UN Framework Convention on Climate Change (UNFCCC) together.

Resources

- [Desertification Primer - UNCCD](#)
- [The IUCN's Global Drylands Initiative](#)
- [International Center for Agriculture Research in the Dry Areas \(ICARDA\)](#)

3. FOREST BIODIVERSITY

The world's forests are home to the majority of its terrestrial biodiversity, including a huge array of species of plants, animals and microorganisms. Tropical rainforests, for example, have been estimated to contain 50-90% of all species.¹⁵

Forests are also important regulators of local and global weather systems, influencing temperature regulation and the water cycle. They are also critical because of their ability to store or 'sequester' carbon from the atmosphere. Indeed the world's largest forests, in the Amazon and the Congo Basin, are so vast that they help to regulate the planet's climate. However, forests are also impacted by climate change themselves, and their resilience is dependent upon their biodiversity, which enables them to adapt to a changing environment.

The diverse species present in forests are also vital to people. Forests provide food, fuel, construction materials and medicines, as well as shade, shelter and spiritual and cultural sustenance. Overall, nearly 1.6 billion people (some 25% of the world's population) are dependent upon forest resources in one way or another.¹⁶ Forests play particularly important social, economic and cultural roles in the lives of Indigenous Peoples across the world.

Yet some 45% of the planet's original forest cover has already been destroyed, mostly during the last century.¹⁷ Furthermore forests are still disappearing at an alarming rate, especially in Latin America and Africa, where around 3.6 million ha and 3.4 million ha were deforested respectively, between 2005 and 2010.¹⁸

[Forest peoples' rights, knowledge and habitats](#) are being destroyed in the process — even though research from CIFOR and the World Bank shows that community forests that are managed and controlled by indigenous peoples and forest-dependent communities within multiple use systems are

¹⁵ <http://www.scidev.net/global/biodiversity/feature/biodiversity-facts-and-figures-1.html>

¹⁶ <http://www.fao.org/forestry/livelihoods/en/>

¹⁷ <http://www.cbd.int/forest/problem.shtml>

¹⁸ UN (2013). Millennium Development Goals Report 2013, p42, <http://www.un.org/millenniumgoals/pdf/report-2013/mdg-report-2013-english.pdf>

significantly more effective in terms of conserving forest biodiversity than projects based on a strict conservation approach.¹⁹

The main drivers and underlying causes of deforestation include:

- Spiraling demand for land for plantations and other forms of agriculture.
- Persistently high demand for wood.
- Clearing forests for mining, urbanization and infrastructure.
- Poor central planning, lack of political will, corruption, and inadequate capacity.
- Economic poverty and a lack of livelihood options, which contributes to unsustainable forest management, overgrazing etc.
- Climate change.
- Economic policies that lock in unsustainable rates of consumption and poverty.²⁰

The CBD has an [Expanded Programme of Work on Forest Biological Diversity](#), which focuses on:

- The conservation and sustainable use of forests and benefit sharing, especially through the ecosystem approach and the protected areas system.
- Institutional and socio-economic aspects of forest biodiversity, such as improving forest law enforcement and governance, and clarifying land tenure rights.
- Improving knowledge about and the monitoring of forests.

The [protected areas approach](#) can be controversial however, if it leads to the exclusion of indigenous peoples and local communities from such areas. Many indigenous peoples and civil society organisations – such as the ICCA

¹⁹ FPP (2011). Peer-reviewed CIFOR and World Bank studies find that community-managed forests are better for conservation than strict protected areas. Forest Peoples Programme. <http://www.forestpeoples.org/topics/environmental-governance/news/2011/10/peer-reviewed-cifor-and-world-bank-studies-find-communi>

²⁰ GFC (2010). Getting to the Roots: Underlying Causes of Deforestation and Forest Degradation, and Drivers of Forest Restoration, Global Forest Coalition, December, <http://www.globalforestcoalition.org/wp-content/uploads/2010/11/Report-Getting-to-the-roots1.pdf>

Consortium,²¹ Forest Peoples Programme,²² Global Forest Coalition²³ and Tebtebba²⁴ — have focused their efforts on promoting the involvement of forest-dependent peoples in the management of territories that they have traditionally managed, including Indigenous and Community Conserved Areas and Territories (ICCAs).

Current activity also includes a focus on the implementation of REDD+ projects.²⁵ REDD+ stands for ‘Reducing Emissions from Deforestation and forest Degradation.’ This mechanism has been proposed through the UN Framework Convention on Climate Change (UNFCCC), and is intended to be a means of providing finance to those refraining from deforestation, although it is also [controversial, mainly because of the market-based orientation of most REDD projects](#). The issue of REDD+ has since come to dominate most global discussions relating to forests, and the CBD is considering what its implications might be for biodiversity and indigenous peoples and local communities.

External resources

- [Community rights and ‘buen vivir’ as an alternative to ‘green forest grabbing – a guide for communities, Global Forest Coalition](#) (May 2013).
- [Highlights on forests and indigenous peoples from the UNFCCC 19th Conference of the Parties, Warsaw, 11-22 November 2013, Forest Peoples’ Programme.](#)
- [Forests and the Biodiversity Convention: Independent Monitoring of the Implementation of the Expanded Programme of Work, Global Forest Coalition](#) (2008) (contains 22 country case studies).

²¹ <http://www.iccaconsortium.org/>

²² <http://www.forestpeoples.org/>

²³ <http://globalforestcoalition.org/>

²⁴ <http://www.tebtebba.org/>

²⁵ <http://www.cbd.int/forest/Current%20Activities.shtml>

4. INLAND WATERS BIODIVERSITY

Inland waters — inland seas, lakes, rivers, tidal zones and wetlands — are heavily used by people around the world, who depend upon them for a multitude of reasons including the provision of clean drinking water, crop production and irrigation, transport and energy from dams. They are essential to human well-being in terms of poverty reduction, food sovereignty, flood mitigation (by mangrove forests for example), nutrient recycling and waste treatment.

However, because of these multiple uses the pressure on inland waters biodiversity — from pollution, water withdrawal, habitat change, alien species invasion and climate change in particular — is especially intense. Inland waters may be small and/or isolated, with high levels of biodiversity and endemic species but they are amongst the most threatened of all ecosystems. Freshwater species are even more endangered than terrestrial species.

Overall a coordinated and integrated ecosystem approach that effectively addresses the multiple pressures threatening inland waterways across the world is absolutely essential. For example, dams proposed to be built at environmental hotspots should be stopped and the planet's most lethal dams should be decommissioned.²⁶

Indigenous peoples and local communities, especially women, have a particularly close holistic, cultural and spiritual relationship with essential elements of biodiversity associated with the water cycle, and can help to promote sustainable water management based on their traditional knowledge.

Inland waters biodiversity and the CBD

The CBD's tenth Conference of the Parties (COP 10) recognized water as the primary global natural resource challenge and the key link between biodiversity, climate change and desertification.

The CBD has a [Revised Programme of Work on Inland Water Biological Diversity](#). Water is also explicitly prioritized in the CBD [Strategic Plan \(2011-2020\)](#) and its [Aichi Biodiversity Targets](#).

Resources

²⁶ International Rivers. Rivers and Biodiversity page, <http://www.internationalrivers.org/rivers-and-biodiversity>

- [Statement On Agenda Item 13.3 Inland Waters Biodiversity from the International Indigenous Forum on Biodiversity](#)
- [The Ramsar Convention on Wetlands](#)
- [International Rivers, rivers and biodiversity webpage](#)
- [World Rivers Review: Focus on Biodiversity – December 2011](#)
- [Wetlands International](#)

5. ISLAND BIODIVERSITY

Island habitats, including some of the world's key biodiversity 'hotspots,' contain some 20% of the world's biodiversity.²⁷ Because of their isolation, islands also have extremely high levels of endemic species — species that are found nowhere else on earth. Yet they are uniquely vulnerable to the impacts of climate change, including sea level rise and extreme weather events, and island biodiversity is seriously threatened. Tourism, invasive alien species, habitat change, over-exploitation and pollution also impact on island biodiversity.

Islands are home to around 600 million people, 10% of the world's population. However, again because of the isolated nature of islands, people living on them are particularly dependent upon their local biodiversity and other natural heritage. Relatively weak economies can also mean that financial resources to protect biodiversity may be minimal.

In 2006 the CBD adopted its [Programme of Work on Island Biodiversity](#), which is focused on the uniqueness and fragility of island biodiversity.

The CBD also recognizes the [Global Island Partnership \(GLISPA\)](#), an informal network focused on advancing island conservation and sustainable livelihoods, as one of the mechanisms for implementing the Programme of Work on Island Biodiversity.

Resources

[Global Island Database](#)

[Small Island Developing States Network \(SIDSNet\)](#)

²⁷ Science Daily (2013). Island biodiversity in danger of total submersion with climate change, 13 November 2013, <http://www.sciencedaily.com/releases/2013/11/131113130029.htm>

6. MARINE AND COASTAL BIODIVERSITY

All life on Earth evolved from species living in the oceans, and the oceans' biodiversity is still vital, yet deeply threatened.

Life in the oceans provides about a third of the oxygen we breathe, and is also an important regulator of climate change.²⁸ Marine fish and invertebrates are also an important part of the protein intake of over 2.6 billion people.²⁹

The world's oceans cover 70% of the planet's surface and contain somewhere between 500,000 and 10 million species.³⁰ Yet marine species and habitats, especially beyond national jurisdictions, receive very low levels of conservation effort or effective protection compared with terrestrial habitats.

Life in the seas is threatened by many different factors, the most serious of which is overfishing.³¹ Nearly 70% of the world's fish stocks are now fully fished, overfished or depleted.³² Other destructive factors include climate change and acidification of the oceans, transportation, the effects of waste disposal, excess nutrients from agricultural run-off and the introduction of alien species.

Marine and coastal habitats include coral reefs, sea grass beds and hydrothermal vents, and coastal habitats such as estuaries and mangrove forests. Coral reefs are in a particularly vulnerable situation, with 20% of them already effectively destroyed and no recovery in sight.³³

Many of the world's most biodiverse sites fall within marine and coastal territories which are managed effectively using traditional and indigenous knowledge systems. Solutions must therefore be based on the knowledge of and developed with the full and effective participation of indigenous peoples and local communities.

Marine and coastal biodiversity and the CBD

²⁸ <http://www.cbd.int/marine/intro.shtml>

²⁹ <http://www.cbd.int/marine/important.shtml>

³⁰ <http://www.cbd.int/marine/important.shtml>

³¹ UN (2013). Millennium Development Goals Report 2013, p44, <http://www.un.org/millenniumgoals/pdf/report-2013/mdg-report-2013-english.pdf>

³² <http://www.cbd.int/marine/problem.shtml>

³³ <http://www.cbd.int/marine/problem.shtml>

The CBD has a [Programme of Work on Marine and Coastal Biodiversity](#) that incorporates efforts to integrate marine and coastal management.

Resources

- [Statement on Marine and Coastal Biodiversity, International Indigenous Forum on Biodiversity \(IIFB\)](#)
- [International Coral Reef Initiative](#)

7. MOUNTAIN BIODIVERSITY

Many mountain ecosystems contain higher levels of biodiversity and endemic species (that are found nowhere else in the world) than adjacent lowlands. Isolated mountain habitats can be especially rich in endemic species.

Cloud forests are particularly important for their spectacular levels of biodiversity. At lower altitudes biodiversity levels can also be exceptional due to the compression of a wide range of ecosystems into a relatively short distance.

Mountains can also provide refuge for species suffering the impacts of climate change. However, mountain species with a narrow tolerance for any variation in their habitat are particularly vulnerable to the impacts of climate change.³⁴

Mountains are vital to humanity. 22% of the world's people live in and depend upon the biodiversity of mountain regions. In addition, the CBD describes mountains as the water towers of the world, because they ensure freshwater supplies for more than half of the world's population.³⁵

The interaction between mountain ecosystems and farmers has also been significant, and many staple crops and domestic farm animal species originated in mountain areas.³⁶

But mountain biodiversity is threatened by a number of drivers, making mountain ecosystems some of the most endangered in the world. This includes the expansion of agriculture into new areas, over-grazing, abandonment and inappropriate land management. Also retreating glaciers have a significant impact. Changing land use in mountainous regions also leads to erosion, avalanches and flooding which have direct negative impacts on mountain biodiversity.

Dwindling resources also impact on the economies of mountain communities leading to increased resource conflict and migration to lowland urban centers.

Mountain forests on lower and medium slopes are also vital to the maintenance of mountain biodiversity, but are impacted by deforestation and the expansion of agriculture and tree plantations.

³⁴ <http://www.cbd.int/mountain/what.shtml>

³⁵ <http://www.cbd.int/mountain/importance.shtml>

³⁶ <http://www.cbd.int/mountain/sectors.shtml>

Other significant factors impacting on mountain biodiversity include the development of winter sports tourism infrastructure, dams, mining, air pollution and invasive alien species.

Mountain Biodiversity and the CBD

The CBD has a dedicated [Programme of Work on Mountain Biological Diversity](#).

In addition, 53 governments and others have also formed a UN voluntary alliance, the Mountain Partnership, which is dedicated to improving the lives of mountain people and protecting mountain environments around the world.

Resources

- Downloadable [Mountain Partnership](#) leaflet in [Arabic](#), [English](#), [French](#), [Russian](#), [Spanish](#) and [Turkish](#)
- [Mountain Biodiversity Portal](#)
- [Global Mountain Biodiversity Assessment](#)

IV. CBD PROTOCOLS

1. A BRIEF INTRODUCTION TO CBD PROTOCOLS

The [Biosafety Protocol](#) (formally known as the [Cartagena Protocol on Biosafety](#)) is a key element of the CBD. It is a legally binding agreement between governments about the safe handling, transport and use of 'living modified organisms' (that is, living organisms genetically modified using modern biotechnology techniques). It is specifically concerned with the movements of these organisms between countries, and regulates imports and exports.

There is also an additional [Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress](#), concerning the most contentious issue under the Biosafety Protocol — what should actually happen when biodiversity has been damaged as a result of 'Living Modified Organisms' (LMOs). LMOs is a term that the Cartagena Protocol uses to refer to any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology. It excludes non-living genetically modified components, e.g. in vaccines or processed foods³⁷. This protocol has been agreed but is not yet in force (which means that it has not yet been ratified by a sufficient number of countries).

The [Nagoya Protocol](#) (formally known as the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization) is supposed to address the vexed question of how to ensure the fair and equitable sharing of the benefits arising from the utilization of genetic resources. That is to say, it was hoped by many that it would prevent biopiracy — the use of biodiversity resources for commercial purposes without the consent of the peoples and countries that are the legitimate guardians of that biodiversity. The end result, however, is actually much weaker and vaguer, and clearly favors 'user' countries over 'provider' countries.³⁸ This protocol was adopted in 2010, and will come into force in October 2014.

³⁷ http://bch.cbd.int/protocol/cpb_faq.shtml#faq3

³⁸ Berne Declaration *et al* (2013). Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization: Background and Analysis, Berne Declaration, Bread for the World, Ecoropa, Tebtebba and Third World Network, <http://www.twinside.org.sg/title2/books/NagoyaProtocolonABS.htm>

2. TRADE IN LIVING MODIFIED ORGANISMS – THE CARTAGENA PROTOCOL

The CBD's [Cartagena Protocol on Biosafety](#) is intended to protect biodiversity and the sustainable use of that biodiversity from the potential risks associated with modern biotechnology and genetically modified organisms (GMOs).

The Biosafety Protocol governs the safe handling, transfer and use of what it refers to as 'Living Modified Organisms' (LMOs), taking into account risks for human health. It is specifically concerned with trade and transfers between countries, and it regulates imports and exports. The protocol is legally binding and came into force in 2003 — as of March 2013 it had been ratified or acceded to by 165 governments and the European Union. Current activity under the Biosafety Protocol is determined by the [Strategic Plan for the Cartagena Protocol on Biosafety for the period 2011-2020](#).

The environmental concerns it addresses include the risk of engineered genes escaping into the wild; the susceptibility of other species (ie. ones that are not targeted as pests); lost biodiversity; and a related increase in the use of chemicals in agriculture.³⁹

Importantly, the Protocol is based on the need to apply the [precautionary approach](#), to ensure that the risks associated with biotechnology are addressed *before* they create problems. It does this mainly by establishing rules for the safe use and transfer of LMOs. There are two sets of rules.

The first set of rules concerns the deliberate introduction of LMOs into the environment. The procedure that has to be followed is called 'Advance Informed Agreement.' Exporting countries are required to provide detailed information about shipments in advance; and importing countries are required to make decisions about whether or not to accept the proposed imports.

Critically, because of the inclusion of the precautionary approach in the CBD, these decisions are to be based on 'sound scientific risk assessments' when that information is available — but if it is *not* available, then governments can base their decision on the precautionary principle and/or [socio-economic considerations](#) (which might include concerns about food security, health or impacts on the sustainable use of biodiversity, for example).

³⁹ <http://www.who.int/foodsafety/publications/biotech/20questions/en/>

Box: The CBD and the precautionary ‘approach’

The precautionary principle states that if an action might cause harm to the public or to the environment, but there is a lack of scientific certainty, then the burden of proof — the responsibility for showing that it is actually safe — rests with those implementing the action. This principle has been the subject of intense debate and negotiations since the rather more ambivalent ‘precautionary approach’ was included in the 1992 Rio Declaration. Its inclusion in the CBD was similarly contested and controversial, but a group of African countries stood firm on this point, eventually securing the support of the EU. As a result the CBD is a good example of an intergovernmental agreement that is based on the precautionary approach (which is even located, quite unusually, in the [operational paragraphs of the Convention text](#)).

This means that there is also considerable potential for conflict with the rules of the World Trade Organization, primarily because of the different approaches that the two institutions take to the precautionary principle. The WTO’s trade-oriented approach is rather different to that of the Biosafety Protocol, with rules focused on the use of ‘scientific risk assessment’. If that is absent then there is minimal provision for alternative approaches — at best temporary bans are permitted whilst the necessary scientific evidence is acquired.⁴⁰

The second set of rules concerns agricultural commodities based on LMOs that are destined for use in ‘food, feed and processing’ (LMO-FFPs). These are subject to another similar procedure (the main difference being that whether or not an exporter has to provide information directly to the importing country depends upon the laws of that country).

Both processes require information to be submitted to the Protocol’s [Biosafety Clearing-House](#), which is intended to facilitate the exchange of relevant information. All LMO goods in transit also have to be accompanied by details and information concerning their safe handling, including contact details for further information.

The Biosafety Protocol also includes provisions that promote capacity building, and public awareness and participation, and establishes a financial mechanism and compliance procedures. It’s important to know that states are obliged to promote and facilitate relevant public awareness and education, including access to information. They must also consult the public in the decision-

⁴⁰ http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c8s1p1_e.htm

making process, as well as making final decisions public and informing the public about how to access the Biosafety Clearing-House.⁴¹

It's also important to note that the Biosafety Protocol could still be improved. It is not sufficiently demanding when it comes to essential biosafety measures, or the amount of information that needs to be provided about transboundary shipments.⁴² Furthermore, most countries have not fully implemented it, even after ten years, and it seems that the political priority being given to biosafety might be diminishing as the biotechnology industry expands.⁴³

Furthermore, there is now a totally new generation of LMOs being developed through [synthetic biology](#), which is the synthesis of entirely new biological parts and organisms. This issue is not regulated by the Cartagena Protocol and is still awaiting its approval as a '[new and emerging issue](#)' under the CBD.

There is also an additional [Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress](#), concerning the most contentious issue under the Biosafety Protocol — what should actually happen when biodiversity has been damaged as a result of GMOs. Negotiations on this topic have been difficult and heavily opposed by those with an interest in the production and export of GMOs.⁴⁴ In the end, the agreed text requires governments to take action (introduce laws) at the national level. However, even though the Nagoya-Kuala Lumpur law was finally agreed in 2010, it is still waiting for enough countries to ratify or accede to it, and it has not yet come in to force.⁴⁵

External resources

- The CBD provides a number of [downloadable briefings](#) on key issues relating to the Biosafety Protocol (on issues such as the Cartagena Protocol, the Biosafety Clearing House, Public Awareness and Participation, and Socio-Economic Considerations)
- [CBD: Frequently Asked Questions page](#)

⁴¹ UN (undated). Public Awareness and Participation, Factsheet, UN Decade on Biodiversity, http://bch.cbd.int/protocol/outreach/factsheets/factsheet_publicawareness_en.pdf?download

⁴² Greenpeace. Biosafety Protocol page. <http://www.greenpeace.org/international/en/campaigns/agriculture/solution-ecological-farming/biosafety-protocol/>

⁴³ <http://www.scidev.net/global/gm/feature/ten-years-in-taking-stock-of-the-biosafety-protocol.html>

⁴⁴ Third World Resurgence (2010). The rift at Nagoya on GMO safety and socioeconomic impacts, <http://www.twinside.org.sg/title2/resurgence/2010/242-243/cover06.htm>

⁴⁵ <https://bch.cbd.int/protocol/parties/#tab=1>

- [Biosafety Protocol News](#), which is published by the CBD Secretariat
- [20 questions on genetically modified foods](#), World Health Organization, which includes information about environment and biodiversity, and materials in English, French, Spanish, Russian, Chinese, Arabic and Estonian.
- [The Cartagena Protocol on Biosafety: an Analysis of Results, International Institute for Sustainable Development \(IISD\)](#)

3. THE NAGOYA PROTOCOL ON ACCESS TO GENETIC RESOURCES AND THE FAIR AND EQUITABLE SHARING OF BENEFITS ARISING FROM THEIR UTILIZATION

Access and Benefit Sharing (ABS) is one of the [three main objectives](#) of the CBD, and negotiations on this issue have been ongoing for many years. They have now culminated in the [Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization](#) (the Nagoya Protocol for short),⁴⁶ which was adopted in 2010, and will come into force in October 2014.

- **The Nagoya Protocol was intended to combat biopiracy by ensuring the implementation and enforcement of Access and Benefit Sharing measures**

The overall aim of the ABS negotiations and the Nagoya Protocol is to combat biopiracy (biopiracy is the appropriation of genetic resources and indigenous people's traditional knowledge (TK) about the use of those resources, both of which are supposed to be addressed by the Nagoya Protocol). Originally the intention was to strengthen CBD provisions on implementation by having an internationally recognized certificate confirming compliance with all necessary measures (such as Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT)), which would have to be filed with patent offices when submitting intellectual property applications.^{47,48}

The end result, however, is actually much weaker and vaguer, and clearly favors 'user' countries over 'provider' countries.⁴⁹

In fact ABS negotiations have been heated since they began. There have been wide-ranging debates about issues including state sovereignty over resources, economic development, the benefits due to indigenous and local communities, and the concerns of industries dependent on genetic resources

⁴⁶ <http://www.cbd.int/abs/about/default.shtml>

⁴⁷ Noting that countries can be both providers and users.

⁴⁸ Berne Declaration *et al* (2013). Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization: Background and Analysis, Berne Declaration, Bread for the World, Ecoropa, Tebtebba and Third World Network, <http://www.twinside.org.sg/title2/books/NagoyaProtocolonABS.htm>

⁴⁹ Berne Declaration *et al* (2013). Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization: Background and Analysis, Berne Declaration, Bread for the World, Ecoropa, Tebtebba and Third World Network, <http://www.twinside.org.sg/title2/books/NagoyaProtocolonABS.htm>

and traditional knowledge.⁵⁰ Disagreement concerned who should have access; how and amongst whom the benefits should be shared; and who should have access to the resulting commercial benefits and technologies.

Furthermore, the negotiations — which were initially marked by their openness and formally involved representatives of Indigenous peoples and local communities — finally concluded in exclusive closed-door negotiations, with EU officials over-riding many of the demands of other parties.⁵¹

- **Rather than creating a strong set of international rules the Nagoya Protocol promotes action at the national level**

Officially, this important protocol creates a framework for an international, legally binding framework that determines the effective implementation of ABS at the regional, national and local levels.⁵² There is another way of looking at this however: rather than creating a definitive set of international rules, the main thrust of the Nagoya Protocol is the promotion of action taken by national governments at the national level — actions which are to be determined by the individual governments themselves. This raises serious questions about its implementation in the future.

For example, one key concern is that although the Protocol acknowledges the need to take rights over resources and technologies into account, the issue of just who has legal rights to land and various natural resources is often hotly disputed at the national level, making this a particularly prickly issue.

On top of this, although the Protocol is explicit about the rights of indigenous peoples and local communities, it fails to provide compliance measures ensuring that these rights will be properly protected. The Nagoya Protocol contains no specific provisions requiring the rejection, sanctioning or penalizing of those engaging in biopiracy. There is also no requirement for governments to make relevant information public, which is critical when it comes to fighting biopiracy. In addition, some contentious issues have simply been left out of the Protocol. This includes the issue of intellectual property

⁵⁰ IUCN (2012). An Explanatory Guide to the Nagoya Protocol on Access and Benefit-Sharing, IUCN Environmental Policy and Law Paper No 83. <https://portals.iucn.org/library/efiles/documents/EPLP-083.pdf>

⁵¹ Berne Declaration *et al* (2013). Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization: Background and Analysis, Conclusions, Berne Declaration, Bread for the World, Ecoropa, Tebtebba and Third World Network, <http://www.twinside.org.sg/title2/books/NagoyaProtocolonABS.htm>

⁵² IUCN (2012). An Explanatory Guide to the Nagoya Protocol on Access and Benefit-Sharing, IUCN Environmental Policy and Law Paper No 83. <https://portals.iucn.org/library/efiles/documents/EPLP-083.pdf>

rights relating to genetic resources.⁵³ Currently, there is a heated debate about whether those intellectual property rights should be treated at the CBD or at the World Intellectual Property Organization (WIPO).

There is also the vexed question of how disputes between countries and/or companies located in other countries might be resolved.

- **The Nagoya Protocol recognizes the rights of ‘indigenous and local communities’ but creates a new requirement for developing countries to provide access to resources**

It might be fair to say that the real achievement of the Nagoya Protocol is that it puts the rights of indigenous and local communities to genetic resources firmly ‘on the map.’ However, it fails to ensure compliance with these rights. In addition, it creates increased obligations for ‘provider’ countries (often developing countries).

In general, the Nagoya Protocol requires ‘provider’ governments to:

- Start from a point of allowing ‘appropriate’ access to resources (a new obligation) although only if the terms of sharing are reasonable.
- Introduce or use existing national ABS laws to ensure that access to genetic resources really is clear, fair, and based on Free, Prior and Informed Consent (FPIC) and mutually agreed terms.
- Take into consideration the fact that genetic resources are important for food security.
- Keep in mind community laws and procedures, and customary use and exchange practices, and “endeavour to support” the development of community protocols by indigenous and local communities,⁵⁴ describing their practices and expectations.
- Ensure that there are legal mechanisms for resolving disputes.

What the Nagoya Protocol does *not* do is create a strong international compliance mechanism that would be of benefit to indigenous peoples and local communities. The latter are dependent upon national level legislation in terms of ensuring their rights.

⁵³ UNCTAD (2013). The Convention on Biological Diversity and the Nagoya Protocol: Why Intellectual Property Still Matters, Kiyoshi Adachi, http://www.ias.unu.edu/sub_page.aspx?catID=8&ddlID=2599

⁵⁴ ISE (2012). Using Biocultural Community Protocols to Implement MEAs and UNDRIP at the Local Level for Sustainable Development, Krystyna Swiderska, International Society of Ethnobiology Global Coalition for Biocultural Diversity, <http://pubs.iied.org/G03388.html>

In particular, certificates of compliance have inadequate requirements, and patent offices are not included as checkpoints. Furthermore, the Protocol has no explicit requirement for Parties to sanction or penalize biopirates;⁵⁵ and there is no requirement for information provided to be made public, meaning that companies can claim they need it to be kept confidential — this can make challenging biopiracy even harder.

Another problem is that all genetic resources that were accessed before the ratification of the Nagoya Protocol can still be used freely for commercial reasons. This seems to be a *de facto* legalisation of all previous biopiracy cases.

Finally, the Nagoya Protocol also addresses issues such as the establishment of ABS Focal Points and an ABS Clearing House; and the need for capacity building and awareness raising. These are important, because there has been a widespread lack of awareness about Access and Benefit Sharing.⁵⁶

Resources

- Video: [Chee Yoke Ling explains: What is access and benefit sharing?](#)
- [Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization: Background and Analysis, Berne Declaration](#), Bread for the World, Ecoropa, Tebtebba and Third World Network, 2013
- [CBD Factsheet on Access and Benefit Sharing](#) (available in Arabic, [English](#), Spanish, French, Russian and Chinese)
- [CBD Factsheet on the Nagoya Protocol](#) (available in Arabic, [English](#), Spanish, French, Russian and Chinese)

⁵⁵ Berne Declaration *et al* (2013). Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization: Background and Analysis, p131, Berne Declaration, Bread for the World, Ecoropa, Tebtebba and Third World Network, <http://www.twinside.org.sg/title2/books/NagoyaProtocolonABS.htm>

⁵⁶ IUCN on NP, <https://portals.iucn.org/library/efiles/documents/EPLP-083.pdf> intro

V. TAKING A BROADER VIEW: CROSS-CUTTING ISSUES

Besides specific types of biodiversity, the CBD also addresses many issues that are common to all the thematic areas, which are usually referred to as 'cross-cutting issues'. Click on the links below to read about each of them in more detail.

Cross-cutting issues

- [Biodiversity for Development](#)
- [Climate Change and Biodiversity](#)
- [Communication, Education and Public Awareness](#)
- [Economics, Trade and Incentive Measures](#)
- [Ecosystem Approach](#)
- [Gender and Biodiversity](#)
- [Global Strategy for Plant Conservation](#)
- [Global Taxonomy Initiative](#)
- [Health and Biodiversity](#)
- [Impact Assessment](#)
- [Identification, Monitoring, Indicators and Assessments](#)
- [Invasive Alien Species](#)
- [Liability and Redress – Article 14\(2\)](#)
- [Protected Areas](#)
- [Sustainable Use of Biodiversity](#)
- [Technology Transfer and Cooperation](#)
- [Tourism and Biodiversity](#)
- [Traditional Knowledge, Innovations and Practices – Article 8\(j\)](#)
- [New and emerging issues \(mainly dealing with synthetic biology\)](#)

1. BIODIVERSITY FOR DEVELOPMENT

The [CBD's Biodiversity for Development](#) strand of work focuses on the links between biodiversity, poverty reduction and development.

Biodiversity and associated ecosystems provide people with food, fuel, medicines, construction materials, clean air and water, and fertile soils, as well as cultural and spiritual sustenance. They also help to regulate weather and climate. Biodiversity is also critical for a range of different economic sectors including farming, fishing and tourism.

This is particularly so for those with the least financial resources, who depend on free access to biodiversity. It is also important for those earning meager livelihoods or living through tough economic times — biodiversity provides a 'safety net.' More than 1.3 billion people depend upon biodiversity and ecosystems for their livelihoods.⁵⁷

The CBD Secretariat's Biodiversity for Development Initiative is run in conjunction with the UN Development Programme.

There is also an Expert Group on Biodiversity for Poverty Eradication and Development, whose work is premised on the fact that biodiversity is crucial to the reduction of poverty, due to the basic goods and ecosystem services it provides.⁵⁸

External resources

[CBD Leaflet on Biodiversity for Development and Poverty Alleviation](#)

⁵⁷ CBD leaflet. Biodiversity for Development and Poverty Alleviation, <https://www.cbd.int/doc/publications/bd-brochure-en.pdf>

⁵⁸ <http://www.cbd.int/development/EGMBPED2/>

2. CLIMATE CHANGE AND BIODIVERSITY

There is a dynamic two-way relationship between [biodiversity and climate change](#). Because species (and the species that they depend upon) are adapted to live in specific environments, a rapidly changing environment presents a major hazard. On the other hand, biodiversity is also an integral part of the planetary systems that help to regulate our climate (and is also fundamental to our own ability to deal with and adapt to climate change).

According to the [Millennium Ecosystem Assessment](#)⁵⁹ climate change is likely to be one of the main drivers of biodiversity loss by the end of this century. There is already evidence of changes in species distribution, population sizes, the timing of reproduction and migration events, and an increase in the frequency of pest and disease outbreaks. Species most impacted are likely to be those already at risk due to factors such as low population numbers, restricted or fragmented habitats, and limited climatic ranges.⁶⁰ It is possible that entire ecosystems could be wiped out as well, and the species composition in others could change dramatically.⁶¹ The desertification of [dryland ecosystems](#) continues to be a major concern.⁶²

Dwindling biodiversity will trigger further climate change. Plants for example, especially forests, are important for their ability to store or 'sequester' carbon dioxide from the atmosphere (increasing levels of carbon dioxide and other 'greenhouse gases' are leading to climate change). Because of this the world's largest forests, in the Amazon and the Congo Basin, help to regulate the planet's climate as well as local weather patterns. Plants can benefit from increased concentrations of carbon dioxide to a certain extent — increased carbon intake can lead to increased growth — but this effect is thought to be limited and very much outweighed by the negative impacts of climate change.

⁵⁹ Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-Being: Biodiversity Synthesis, <http://www.unep.org/maweb/documents/document.354.aspx.pdf>

⁶⁰ Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-Being: Biodiversity Synthesis, <http://www.unep.org/maweb/documents/document.354.aspx.pdf>

⁶¹ Study on understanding the causes of biodiversity loss and the policy assessment framework, D-G Environment, European Commission, http://ec.europa.eu/environment/enveco/biodiversity/pdf/causes_biodiv_loss.pdf

⁶² <http://www.unccd.int/en/programmes/Thematic-Priorities/Biodiv/Pages/the-big-unknown.aspx>

In the longer term, the risk is that forests will die back because of rising temperatures and more frequent storms.⁶³

Similarly, marine and coastal biodiversity is likely to be impaired by warming seas, rising sea levels, ocean acidification (from increased CO₂ in seawater), and other forms of habitat/ecosystem change including coral bleaching and species invasion.

Critically, the more that biodiversity is destroyed, the more the climate is likely to change, creating a vicious circle or 'negative feedback loop.' This is another vitally important reason why biodiversity loss must be stopped.

The [CBD's approach](#) is to address biodiversity loss and climate change through 'ecosystem-based adaptation,' which seeks to integrate biodiversity and ecosystem issues into climate change adaptation strategies. Examples of this approach include the protection of coastal mangrove forests (which mitigate the impacts of coastal flooding and erosion); and the establishment of diverse agroforestry systems which are much more 'climate friendly.'⁶⁴

It is important to note that the CBD has stipulated that no climate-related [geo-engineering activities](#) that affect biodiversity may take place without science-based, global, transparent and effective control and regulatory mechanisms.⁶⁵ Initial experiments with [ocean fertilization](#) showed a dramatic impact on marine biodiversity.⁶⁶

Resources

[Natural Solutions: Protected areas helping people cope with climate change](#)

⁶³ FoEI (2008). Forests in a Changing Climate, <http://www.foei.org/en/resources/publications/forests-and-biodiversity/2008/04-foei-forest-climate-english/view>

⁶⁴ <http://www.cbd.int/climate/intro.shtml>

⁶⁵ CBD (2013). Follow-up to decisions X/33 and XI/20 in relation to climate-related geoengineering, Notification, November, <http://www.cbd.int/doc/notifications/2013/ntf-2013-102-geoeng-en.pdf>

⁶⁶ ETC Group (2012). <http://www.etcgroup.org/content/brief-primer-ocean-fertilization-cbd-and-london-convention-and-protocol>

3. COMMUNICATION, EDUCATION AND PUBLIC AWARENESS

Lack of public awareness about biodiversity and its environmental, social and economic importance is a major barrier to reversing the current situation. So too is knowledge about what can be done about it. This discourages action by individuals and results in a failure to prioritise biodiversity-related issues in political arenas.

A lack of awareness about biodiversity and the CBD has also been found to be a major issue amongst government officials as well,⁶⁷ even amongst officials who are responsible for forests in some cases.

The CBD has a Communication, Education and Public Awareness (CEPA) Programme, and [Aichi Biodiversity Target 1](#) is focused on ensuring that by 2020 people are aware of biodiversity and its importance.

Resources

The [Global Initiative on Biological Diversity Public Education and Awareness](#) focuses on integrating biodiversity into all forms of education. Its Teachers' Corner⁶⁸ includes resources for students from the UN and from a range of non-governmental organizations. Teaching resources for others are planned.

- [CEPA Users' Guide — Toolkit](#)

⁶⁷ GFC (2008). Independent Monitoring Reports (Summary and Case Studies), <http://globalforestcoalition.org/resources/independent-monitoring>

⁶⁸ <http://www.cbd.int/education/biodiv-edu/teachers-corner/>

4. ECONOMICS, TRADE AND INCENTIVE MEASURES

Even at the start, in 1992, the CBD was negotiated with a fairly utilitarian approach — the sustainable use of biodiversity and the sharing of benefits from that use are two of the [three main objectives](#) of the convention.

Since then, economic aspects have been given ever greater priority, in a desperate bid to halt biodiversity loss by engaging directly with commercial and economic interests and decision-makers around the world. The CBD has elaborated several sets of guidance emphasizing that such incentives are not just economic, but also cultural, social and spiritual, and observing that education, awareness raising, and respect for traditional value systems, can provide important incentives for biodiversity conservation. The CBD has also addressed the negative impact of subsidies and other financial incentives for activities and policies that destroy biodiversity, such as unsustainable agriculture and fisheries. It has recommended that these ‘perverse incentives’ be redirected.

However, despite the original broad-based approach there has been quite a strong focus on economic incentives for biodiversity conservation. This has entailed a degree of commercialization and the creation of biodiversity-related products, services and markets, which is highly controversial. The arguments for and against this approach are discussed in more detail [here](#).

The current [Aichi Biodiversity Targets](#) are also clearly focused on the economics of biodiversity loss. In particular Target 2 calls for governments to integrate biodiversity valuations into national accounting systems and other reporting systems; and Target 3 explicitly promotes the use of positive incentive systems and the removal of biodiversity damaging subsidies.

The recently agreed [Nagoya Protocol](#) on access and benefit sharing also reflects the commercial interests of ‘user’ countries and companies very strongly, creating a requirement for ‘provider’ countries to allow access to genetic resources (albeit on reasonable terms).

The CBD also has a [programme of work on incentive measures](#), and collaborates closely with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and other biodiversity-related conventions.⁶⁹

⁶⁹ <http://www.cbd.int/brc/>

The CBD's [Biotrade initiative](#) seeks to increase trade and investment in products and services resulting from the sustainable use of biodiversity, on the basis that traders would lose their income if the biodiversity they rely on is destroyed. These products and services include nuts, fruits, perfumes, natural dyes, oils, medicinal plants, biochemical compounds, eco-tourism, watershed protection and carbon adsorption.

It is important to notice that in general governments still prioritize short-term trade-related concerns over and above environmental threats. To this end they generally aim to ensure that [multilateral environmental agreements do not conflict with World Trade Organization](#) rules (officially termed 'mutual supportiveness').

For example, the CBD has officially recognized "the role of intellectual property in encouraging access to genetic resources and the sharing of benefits from the use of those resources" as well as in contributing to "the protection of traditional knowledge and folklore."⁷⁰ The issue of invasive alien species also relates to the WTO's Sanitary and Phytosanitary Agreement (this 'SPS Agreement' means that governments have to notify the WTO about measures to protect plant and animal health that they are implementing).

Potential areas of conflict include the [Cartagena Protocol on Biosafety](#), which is based on the precautionary principle, and deals with imports and exports of Living Modified Organisms (LMOs). The precautionary principle is not recognized in the same way in the WTO.⁷¹

The CBD Secretariat sits as an observer on the World Trade Organization's Committee on Trade and the Environment.

Resources

- [The WTO Agreements: An Introduction to the Obligations and Opportunities for Biosafety](#), Chee Yoke Ling and Lim Li Ching, Third World Network, 2013
- [Global Forest Coalition's 'Life as Commerce' resources](#)
- ['Civil Society Views on Scaling up Biodiversity Finance, Resource Mobilization and Innovative Financial Mechanisms'](#), compiled by Simone Lovera (Global Forest Coalition) and Rashed el Mahmud Titimur (Unnayan Onneshan) for the CBD Alliance.

⁷⁰ <https://www.cbd.int/incentives/coop-wto.shtml>

⁷¹ http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c8s2p1_e.htm

5. ECOSYSTEM APPROACH

The CBD's [Ecosystem Approach](#) is the main approach used to develop strategies to protect biodiversity under the Convention on Biodiversity.

This approach incorporates the fact that species do not live in isolation. They live in a specific habitat with many other species of plant, animal and microorganisms, and they interact with and are dependent upon each other in complex ways. The CBD thus aims to deal with entire ecosystems rather than individual species.

What this means in practice is that the CBD aims for strategies that support the integrated management of land, water and living resources, promoting conservation and sustainable use in an equitable way.

However, the ecosystem approach is often reduced to being about ecosystem *services*. This implies that rather than considering all possible interactions within ecosystems, the focus is mainly on those aspects that are considered to be the most useful — and economically valuable — for humans.

Resources

The CBD provides an [Ecosystem Approach Sourcebook](#), with different versions available for [Beginners](#) and [Advanced Users](#).

6. GENDER AND BIODIVERSITY

Gender refers to the social roles that men and women play and the power relations between them. These gender roles affect the economic, political, and social opportunities and constraints faced by both men and women, and this often has a profound effect on the use and management of natural resources.

Although men's and women's responsibilities differ from region to region, women are often responsible for husbanding land and natural resources, including through collecting firewood and clean water, gathering wild plants, managing seeds, and tending gardens, farms and forests, and managing seeds. On the other hand, women have few legal rights to land.

As a consequence, biodiversity loss is felt more sharply by women. In particular, dwindling resource availability can mean much more time has to be spent collecting those resources, and this can reduce the time available for education (a key factor in improving gender equality).

Exposing and understanding women's and men's different biodiversity practices and knowledge enhances biodiversity conservation. In particular, women's roles as primary managers of land and natural resources, and their deep technical and traditional knowledge relating to biodiversity, needs to be taken into account.

The CBD Secretariat established a [Gender Plan of Action](#) in 2008, which commits the Secretariat to stimulating and facilitating efforts on national, regional, and global levels to promote gender equality and mainstream a gender perspective. It has published a set of guidelines for mainstreaming gender into [National Biodiversity Strategies and Action Plans](#).

Resources

- [Gender and Biodiversity, Women's Environment and Development Organization \(WEDO\)](#)
- [IUCN Fact Sheet: Linking Gender and Biodiversity](#)

7. GLOBAL STRATEGY FOR PLANT CONSERVATION

The CBD has a detailed Global Strategy for Plant Conservation that runs from 2011-2020. Its overall purpose is to achieve the [three objectives of the Convention](#), particularly for plant diversity, taking into consideration [Article 8\(j\)](#) (on traditional knowledge, innovations and practices) and the [Cartagena Protocol on Biosafety](#).

The strategy has [16 specific targets](#).

Resources

The CBD has established a [specific website](#) dedicated to the Global Strategy for Plant Conservation.

This includes a [toolkit](#) to support national and regional implementation of the strategy.

8. GLOBAL TAXONOMY INITIATIVE

Through this initiative the CBD aims to improve information, infrastructure and expertise relating to taxonomy.

Taxonomy is the science of naming, describing and classifying organisms and includes all of the world's known species of plants, animals and microorganisms. It is a technical discipline that is essential to the management and implementation of the CBD. Without pinpointing, identifying and agreeing on the names of species it is difficult to discuss and develop strategies to conserve those species.

For example, certain insects must be present to pollinate certain plants, or the plant species will die out. Monitoring whether the right insect species are present in the right numbers can be critical for determining the stability of both the insect species and the plant species being pollinated.

Problematically, however, there is still a great deal that is not known about the world's biodiversity. In the past 250 years of research, taxonomists have named about 1.78 million species of animals, plants and micro-organisms, yet the total number of species is unknown and probably between 5 and 30 million.⁷² Furthermore, even what *is* known is not even gathered together in a single index.

The CBD's initiative is aimed at making countries aware of issues and possible solutions, helping them to share ideas and resources, and highlighting the need for funding for taxonomy.

Resources

Downloadable CBD leaflet, [The Global taxonomy Initiative: a Response to a Problem](#)

⁷² CBD leaflet. The Global taxonomy Initiative: a Response to a Problem, <http://www.cbd.int/doc/publications/gti-brochure-en.pdf>

9. HEALTH AND BIODIVERSITY

Biodiversity and ecosystems are essential to human health in many different ways. They provide us with clean air and water, fertile soil, and an abundance of foods and the many other materials we need for safe, productive and fulfilled lives. Biodiversity is the source of livelihoods for many, and the origin of many traditional and modern medicines. It also helps to regulate our climate and withstand extreme weather events such as flooding.

When biodiversity is destroyed it is impoverished and vulnerable people that suffer the immediate impacts, because they depend so directly on the world's natural wealth. The protection of biodiversity is thus critical to the prevention of poverty and hunger, both of which are the precursors of ill-health and disease.

Because of these multiple links between biodiversity and well-being there are also multiple strategies needed to ensure that those links are explicitly and effectively addressed. The CBD provides a summary of these [on its website](#). [Aichi Biodiversity Target 14](#) focuses on health, livelihoods and well-being.

Resources

[Downloadable 'quick guide' to Aichi Biodiversity Target 14.](#)

Downloadable and short COHAB (Co-operation on Health and Biodiversity) guides on:

- [The importance of biodiversity to human health](#)
- [Human health and global ecosystem change](#)
- [Health effects of climate change impacts on biodiversity](#)
- [Linking health and biodiversity in policy and practice](#)

10. IMPACT ASSESSMENT

Impact assessment is the process of identifying the future consequences of a current or proposed action. It is used to ensure that projects, programs and policies are economically viable, socially equitable and environmentally sustainable.

The Convention on Biological Diversity (CBD), the Ramsar Convention and the Convention on the Conservation of Migratory Species of Wild Animals (CMS) all recognize impact assessment as an important tool for helping ensure that development is planned and implemented with biodiversity in mind.

Resources

[The CBD agreed a set of voluntary guidelines on biodiversity-inclusive impact assessment](#)⁷³ in 2008.

The [International Association for Impact Assessment](#) also provides multiple resources, including '[Biodiversity in Impact Assessment](#)', a four-page downloadable leaflet.

⁷³ CBD (2006). Impact assessment: Voluntary guidelines on biodiversity-inclusive impact assessment COP 8, Decision VIII/28, <http://www.cbd.int/decision/cop/default.shtml?id=11042>

11. IDENTIFICATION, MONITORING, INDICATORS AND ASSESSMENTS

[Biodiversity indicators](#) are information tools used to indicate the overall status and trends of biodiversity. They can be used to gauge progress on [the CBD Strategy Plan 2011-2020](#) and the [Aichi Biodiversity Targets](#). Due to the complexity of biodiversity and other factors, monitoring typically relies on a small number of indicators for which data are available.

These indicators can be used to assess national performance and to signal key issues to be addressed through policy interventions and other actions. Examples of national biodiversity indicators⁷⁴ and global biodiversity indicators⁷⁵ can be found on the [CBD website](#).

New indicators need to be developed and others need to be refined. The Convention is developing guidance.

Resources

There is also a [Biodiversity Indicators Partnership](#), which aims to promote and coordinate development and delivery of biodiversity indicators.

⁷⁴ <http://www.cbd.int/indicators/nationalindicators.shtml>

⁷⁵ <http://www.cbd.int/2010-target/framework/indicators.shtml>

12. INVASIVE ALIEN SPECIES

Alien species are species that have been introduced to or found their way into a new ecosystem, having originated somewhere else. If they are 'invasive' it means that they survive and thrive in that new environment, typically outcompeting native species, and disturbing the delicate balance that previously existed within the ecosystem. The damage can be severe: invasive alien species are a key driver of biodiversity loss.

The introduction of invasive alien species is usually associated with human transportation and trade. In addition, and especially in [island ecosystems](#), it is often the case that the alien species' natural predators are absent, meaning that normal controls on population growth are absent. Ecosystems that have already been weakened by human interference are also much more susceptible to invasive alien species.

There are numerous intergovernmental agreements,⁷⁶ including the CBD, that are intended (wholly or in part) to stop the spread of invasive alien species and many governments have national action plans that focus on quarantine measures.⁷⁷ Eradicating such species after they have arrived is difficult (or impossible) and costly.

For example, in addition to strict quarantine measures at its borders, New Zealand's 'biosecurity' measures include a controversial program of aerial application of '1080' pesticide⁷⁸ (sodium fluoroacetate) to control introduced predators such as possums, rats and stoats, which prey on native ground-breeding bird and other insect and lizard species. The arguments for using the pesticide include the fact that it is an effective means of treating a large area, and that it is biodegradable.⁷⁹ The New Zealand government argues that it costs NZ\$17 per ha for aerial treatment as opposed to three times as much for ground control.⁸⁰ The arguments against the use of the pesticide (which is banned in most countries) focus primarily on animal welfare, because of the

⁷⁶ <http://www.cbd.int/invasive/done.shtml>

⁷⁷ CBD, Action on IAS, <http://www.cbd.int/invasive/legislation/default.shtml>

⁷⁸ <http://www.doc.govt.nz/conservation/threats-and-impacts/animal-pests/methods-of-control/1080-poison-for-pest-control/>

⁷⁹ <http://www.doc.govt.nz/conservation/threats-and-impacts/animal-pests/methods-of-control/1080-poison-for-pest-control/>

⁸⁰ <http://www.doc.govt.nz/conservation/threats-and-impacts/animal-pests/methods-of-control/1080-poison-for-pest-control/>

length of time it takes animals to succumb to what is clearly an agonizing death.⁸¹

The CBD has an [Invasive Alien Species Programme](#).

Resources

The CBD provides links to a wide range of [guidance and tools](#) related to alien invasive species.

⁸¹ http://www.wlpa.org/1080_poison.htm

13. LIABILITY AND REDRESS

The CBD provides for '[liability and redress](#)' in the event that one party damages the biodiversity of another. However, it does not specify what qualifies as damage to biodiversity, nor does it give any specifics about what should be done about it. The CBD is thus working to clarify this issue.

14. PROTECTED AREAS

One of the CBD's main streams of work is the creation of networks of protected areas on land and at sea. These areas are protected from development in order to maintain key habitats, protect ecosystems and the services they provide, and allow for species migration.

According to the CBD, well managed protected areas:

- can provide livelihoods and contribute to poverty reduction
- are a major factor in ensuring global food security
- are the primary source of drinking water for nearly 1.1 billion people

Protected areas are also considered to be critical to mitigating and adapting to climate change.⁸²

There are now about 130,000 protected areas, covering nearly 13% of the world's terrestrial surface, and over 6% of territorial marine areas.⁸³ Aichi target 11 aims at increasing this to 17% on land and 10% at sea by 2020.

Protected area networks need to fulfill a number of requirements. They must be:

- effectively and equitably managed
- ecologically representative
- connected to each other
- integrated into the wider landscape and seascape

All these criteria require due attention. Management is insufficient in many protected areas,⁸⁴ selection is not always based on the need to be ecologically representative, and it often ignores local peoples. In addition, protected areas are often isolated from one another, which increases pressure on species; and less than 1.5% of the total marine area (including the high seas) is protected.⁸⁵

⁸² <http://www.cbd.int/protected/overview/>

⁸³ <http://www.cbd.int/protected/overview/>

⁸⁴ <http://www.cbd.int/gbo3/>

⁸⁵ UNEP (2012). Global Environment Outlook 5, Summary for Policy Makers, p11, UN Environment Programme, http://www.unep.org/geo/pdfs/GE05_SPM_English.pdf

The CBD's work on expanding protected areas on land and at sea can also be [problematic for indigenous peoples](#) and local communities. An IUCN review of the Programme of Work on Protected Areas found that the upholding of indigenous peoples' and local communities' rights had been very variable in different countries and there were many examples of bad or inequitable practice.⁸⁶

This is clearly the case in Africa, for example, where an area of about one million square kilometers of forests, savannah, pasture and farmland has been redefined as protected — yet in most of these protected areas indigenous peoples' rights to own, control and manage them has been denied.⁸⁷

Resources

[E-learning curricula](#)

A series of concise learning modules published online by the CBD. These are like short courses, which take approximately an hour each to complete. They provide an overview of key terms, concepts, resources and approaches.

[CBD briefing](#)

National Action for Protected Areas: Key messages for achieving Aichi Biodiversity Target 11

⁸⁶ IUCN (2010). Next Steps: Convention on Biological Diversity Programme of Work on Protected Areas https://www.iucn.org/about/work/programmes/gpap_home/gpap_capacity2/gpap_pub/?5051/Next-Steps-Convention-on-Biological-Diversitys-Programme-of-Work-on-Protected-Areas

⁸⁷ FPP (2010). From principles to practice: indigenous peoples and protected areas in Africa, Forest Peoples Programme, <http://www.forestpeoples.org/sites/fpp/files/publication/2010/10/forewordandintroeng.pdf>

15. SUSTAINABLE USE OF BIODIVERSITY

The ‘sustainable use’ of the planet’s biodiversity — which humanity relies upon — is not just a ‘cross-cutting issue’ relevant to all biological and natural resources; it is one of the [three objectives of the CBD](#).

Sustainable use is the “*use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations*” (Article 2).

Nevertheless, it remains a contentious issue within the negotiations with respect [to just who is able to access and enjoy the benefits of that sustainable use](#). This was evident during the negotiations on the [Nagoya Protocol](#), which deals with access and benefit sharing, but is weak in terms of implementation and enforcement and favors access for bio-prospectors.

The [CBD’s sustainable use agenda](#) is set out in Article 10 of the Convention, which compels Parties to (among other things):

- integrate conservation and the sustainable use of biological resources into national decision-making
- protect and encourage the ‘customary use’ of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements, and
- encourage cooperation between governmental authorities and the private sector to develop methods for the sustainable use of biological resources.

Fourteen ‘practical principles’ for the sustainable use of biodiversity have been developed. These are known as the [Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity](#).

This cross-cutting issue has also been implemented through a range of regional workshops on ‘ecosystem services’ assessment and the financial costs and benefits associated with the sustainable use of biological resources. Further work is envisioned on these issues and the sustainable use of resources.

Developing guidance on sustainable use and related measures for indigenous and local communities is also a new area of work in the [Working Group on Article 8\(j\)](#).

16. TECHNOLOGY TRANSFER AND COOPERATION

The related issues of access to technology and the transfer of technology between countries are considered to be essential to attaining the objectives of the CBD. Although there is reference to the transfer of technology from developed to developing countries,⁸⁸ the main focus is on the relationship between ‘provider’ and ‘user’ countries — the CBD seeks to ensure that countries providing genetic resources benefit from access to and transfer of technologies made with those resources (even if those technologies are protected by intellectual property rights)

The technologies in question are those that are *“relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment.”* (Article 16.1) However the CBD is also quite explicit that these technologies include biotechnologies (Article 16.1), so long as they are ‘environmentally sound.’

There is also an obligation to ‘cooperate’ with respect to the development and use of indigenous and traditional technologies (Article 18), which gives an impression of an obligation to share traditional knowledge. But this would conflict with the UN Declaration on Indigenous Peoples (UNDRIP), which states that, *“Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions.”* (Article 31)⁸⁹ In addition, the recent [Nagoya Protocol](#) on access and benefit sharing does require countries to ensure *“prior and informed consent or approval and involvement”* of indigenous and local communities (Article 7).⁹⁰

Governments are also supposed to ensure that the private sector facilitates access to and the transfer of technologies to government institutions and the private sector in developing countries. Joint and in-country research involving ‘provider’ countries is also prioritized.

The CBD has a [Programme of Work on Technology Transfer and Technological and Scientific Cooperation](#). The four elements within this program include technology assessments, information systems, creating enabling environments for technology transfer, and capacity building. Aspects

⁸⁸ <http://www.cbd.int/doc/publications/ttc-brochure-01-en.pdf>

⁸⁹ http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf

⁹⁰ <http://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>

of technology transfer and cooperation have also been integrated into other programs of work on relevant thematic and cross-cutting issues.

17. TOURISM AND BIODIVERSITY

The CBD aims to harness ‘sustainable tourism’ to promote conservation and thereby benefit biodiversity. It seeks to create a situation in which biodiversity benefits from people’s seemingly insatiable desire to see other parts of the planet — including the most beautiful and biodiverse rural, mountain, coastal and marine areas.

Yet some would argue that this is an unrealistic goal, given the harm that mass tourism can also cause to ecosystems and the planet’s climate through long-distance transportation, the accidental introduction of invasive alien species, and pressure on limited resources, such as water. It can also have devastating impacts on local cultures, especially if it is associated with particularly draconian measures to implement [protected areas](#) measures, which can lead to indigenous peoples and local communities being forcibly removed from their territories for the purposes of ecotourism.

Resources

To help mitigate some of the negative impacts of tourism, the CBD has developed a set of [Guidelines for Biodiversity and Tourism Development](#), which deals with tourism in vulnerable ecosystems and habitats of major importance for biodiversity.

There is also a [Biodiversity and Tourism Network](#) to foster dialogue between tourism practitioners.

[CBD’s User’s Manual on the Guidelines for Biodiversity and Tourism Development](#)

18. TRADITIONAL KNOWLEDGE, INNOVATIONS AND PRACTICES – ARTICLE 8(J) MOUNTAIN BIODIVERSITY

Since the CBD came into force in 1993, much has changed in terms of its interpretation thanks to tenacious efforts by indigenous peoples and local communities, especially with respect to the interpretation of their right to traditional knowledge under Article 8(j) and their right to the customary use of biological resources under Article 10(c).

Indigenous peoples and local communities have utilized growing evidence generated by the ‘commons’ movement, among others, to firmly establish that effective conservation and sustainable use of biological diversity requires at minimum a clear recognition of the access, use, and control rights that communities have in relation to their knowledge, lands and waters.

Negotiations of the Working Group on Article 8(j) — which have involved indigenous peoples, via the [International Indigenous Forum on Biodiversity](#) — have produced guidelines and resolutions relating to the obligations of states and private parties when dealing with the territories and cultures of communities. Examples of this include:

- The [Akwé:Kon Guidelines](#) on the conduct of social, cultural and environmental impact assessments on developments on the lands of indigenous and local communities, and
- [The Tkarihwaí:ri Code of Ethical Conduct](#) to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities Relevant to the Conservation and Sustainable Use of Biological Diversity.

The Working Group on Article 8(j) has a [Programme of Work on Article 8\(j\) and related provisions](#).

This program has been divided into phases and different elements within these phases include:

- participatory mechanisms for indigenous and local communities
- status and trends in relation to Article 8(j) and related provisions
- equitable sharing of benefits

- monitoring elements
- legal elements
- traditional cultural practices for conservation and sustainable use
- exchange and dissemination of information

It also includes a new 'task' focusing on Article 10(c), the customary use of biological resources.

Resources

[The CBD's Traditional Knowledge Information Portal](#) includes a range of information including news, community blogs and a community directory.

[Various related case studies are provided by the International Indigenous Forum on Biodiversity.](#)

19. NEW AND EMERGING ISSUES

This comes under the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), which is mandated to [identify new and emerging issues relating to the conservation and sustainable use of biodiversity](#).

Both countries and 'relevant organisations' can submit proposals on new and emerging areas, which may or may not be accepted for further consideration. This is a useful mechanism for drawing the attention of governments to critical new issues that may threaten (or provide opportunities) for biodiversity and ecosystems.

Synthetic biology

The main issue currently being considered is synthetic biology. Dubbed by some as 'genetic engineering on steroids,' the social, environmental and bio-weapons threats of synthetic biology surpass the possible dangers and abuses of biotechnology.

Synthetic biology brings together engineering and the life sciences in order to design and construct new biological parts, devices and systems that do not currently exist in the natural world or to tweak the designs of existing biological systems. Synthetic biologists, engaged in this extreme genetic engineering, hope to construct designer organisms that perform specific tasks such as producing biofuels or other high-value compounds.

Many governments are anxious to shift industrial production away from reliance on fossil fuels, and are promoting an alternative 'bioeconomy' approach instead. Synthetic biology is an integral part of this 'bioeconomy' and there is considerable support for it from both governments and industry.

However, in addition to the significant risks that such designer organisms pose to biodiversity and ecosystems, there are also implications for landlessness and hunger. Synthetic biology still requires large amount of biomass, which ramps up demand for land and the risk of landgrabbing.

Draft papers⁹¹ have been prepared for review within the CBD. There is disagreement about a range of issues including whether or not artificially-constructed organisms even count as biodiversity in the first place. Some

⁹¹ <http://www.cbd.int/emerging/>

governments, such as Brazil, are opposed to synthetic biology being formally taken up as a new and emerging issue.⁹²

Geoengineering

Geoengineering was also proposed as a new and emerging issue in advance of COP 11 in 2012.⁹³ This followed a notable consensus decision taken by governments at COP 10 to institute a moratorium on climate-related geoengineering pending a study into its impact on biodiversity.⁹⁴ However, a study of 'available scientific information' has since been circulated,⁹⁵ and a large ocean acidification project is underway off the coast of Canada's British Columbia.⁹⁶

Geoengineering is the intentional, large-scale technological manipulation of the Earth's systems, often discussed as a techno-fix for combating climate change. Climate geoengineering technologies can be divided into three broad areas: so-called solar radiation management (reflecting sunlight to space), greenhouse gas removal and sequestration, and weather modification.

Techniques proposed include blasting sulphate particles into the stratosphere or 'whitening' clouds to reflect the sun's rays; dumping iron particles in the oceans to nurture CO₂-absorbing plankton; firing silver iodide into clouds to produce rain; or genetically engineering crops so their foliage can better reflect sunlight.

Geoengineering technologies are risky and unpredictable. Critically, it is not possible to test their impacts. No experimental phase is possible — in order to have a noticeable impact on the climate, geoengineering must be deployed on a massive scale. For people and biodiversity, impacts could well be massive too, and possibly irreversible. The development and widespread use of geoengineering technologies would also strengthen the hand of those with the power and wealth to deploy them, potentially at the expense of others.⁹⁷

⁹² <http://www.cbd.int/emerging/> See list of proposals for new and emerging issues

⁹³ <http://www.cbd.int/emerging/>

⁹⁴ Conference agrees on geoengineering moratorium, Third World Network, <http://www.twinside.org.sg/title2/resurgence/2010/242-243/cover03.htm>

⁹⁵ <http://www.cbd.int/doc/meetings/sbstta/sbstta-16/information/sbstta-16-inf-28-en.pdf>

⁹⁶ <http://www.etcgroup.org/content/world's-largest-geoengineering-deployment-coast-canada's-british-columbia>

⁹⁷ Conference agrees on geoengineering moratorium, Third World Network, <http://www.twinside.org.sg/title2/resurgence/2010/242-243/cover03.htm>

Other new issues that have been raised for consideration as new and emerging issues at COP 12 include sand mining,⁹⁸ deep-sea fishing, biodiversity and ground-level ozone, and climate change in coastal and offshore zones.

Sand mining

Sand mining has significant adverse effects on natural and human welfare. It undermines water security, causes land erosion, and affects every form of biodiversity that requires sand, including mangroves, turtles and other marine and terrestrial life. It also affects livelihoods through the destruction of traditional fishing grounds. Sand is often seen as an inexhaustible resource for building, and the extraction of sand therefore has very little regulation. In reality sand is grossly undervalued. There are illegal sand mines in locations including India, Cambodia, USA, Caribbean, and the Maldives.

Resources

- [Extreme Genetic Engineering: an introduction to synthetic biology, ETC Group \(2007\)](#)
- [Synthetic Biology: the bioeconomy of landlessness and hunger, ETC Group \(2013\)](#)
- [Geopiracy: the Case Against Geoengineering, ETC Group \(2011\)](#)
- ['Sand Wars' video, directed by Denis Delestrac](#)

⁹⁸ Proposal from Awaaz Foundation and Bombay Natural History Society, <http://www.cbd.int/doc/emerging-issues/emergingissue-2013-10-Awaaz-Foundation-Bombay-NHS-en.docx>, also listed at <http://www.cbd.int/emerging/>

VI. UNDERSTANDING THE CBD'S STRUCTURE

The CBD's structure may seem confusing at first, especially because of the extensive use of a combination of very long and obscure names⁹⁹ and hard to understand but much needed acronyms. Here we briefly explain the key structures, and how the Convention bodies work together over time. It is important to note that besides the Secretariat and the Conference of the Parties, there are a number of 'inter-sessional bodies' (these are all the other structures described below). These are important places where civil society interventions can make a significant difference.

The Secretariat

[The Secretariat of the CBD](#), mainly functions to prepare for and service meetings of the 'Conference of the Parties' (known as the 'COP') and other subsidiary bodies of the CBD. It provides administrative support to these bodies, prepares background documentation for these meetings when requested, and coordinates with other relevant international bodies. It is located in Montreal, Canada, meaning that this is the location for the majority of the CBD's various meetings. The Secretariat also acts as an information clearinghouse.

The Conference of the Parties

The [Conference of the Parties](#) is the CBD's governing body, in which all member countries participate. Its primary function is to review the implementation of the CBD, to steer its development, and deal with budgets, national reports, the adoption of protocols or annexes, and the development of guidance concerning the CBD's financial mechanism. The COP meets every two years or as needed, and is open to all parties (governments) and observers from non-parties, intergovernmental organizations and NGOs.

SBSTTA

The [Subsidiary Body on Scientific, Technical and Technological Advice \(SBSTTA\)](#) is an intergovernmental body that exists to provide scientific, and technical advice to the COP. Its functions include:

- preparing scientific and technical assessments on the status of biodiversity

⁹⁹ For this reason we have left the terms 'open ended' and 'ad hoc' out of all CBD body names. They make for extremely difficult reading.

- preparing scientific and technical assessments on measures taken to implement the CBD
- identifying innovative, efficient and state of the art technologies and know-how and advising on how to promote their development
- providing advice on scientific programs and international cooperation in research and development, and
- generally responding to scientific, technical and technological and methodological questions asked by the COP

Working Group on Review of Implementation

Whether or not the CBD's policies are implemented effectively is obviously important to successfully addressing biodiversity loss. Tracking implementation and developing evaluation processes is the responsibility of the [Working Group on Review of Implementation](#) (WGRI). Importantly, this group's mandate includes looking at the implementation of country's [national strategies and action plans](#). It meets after each SBSTTA meeting and makes recommendations to the COP.

Working Group on Protected Areas

Although there are concerns about the impacts of the CBD's work on protected areas on indigenous peoples and local communities, the protected areas program is considered by others to be one of the most successful aspects of the CBD.

The [Working Group on Protected Areas](#) guides and monitors the implementation of the [Programme of Work for Protected Areas](#) (PoWPA). Its mandate is to:

- explore options for cooperating to establish marine protected areas beyond the limits of national jurisdiction
- contribute to the development of toolkits for identifying, monitoring and evaluating national and regional systems of protected areas
- consider reports on progress and make recommendations to the COP about how to improve the implementation of the Programme of Work on Protected Areas.

Protected areas are increasingly being considered in other Working Groups such as that on Article 8(j).

Working Group on Article 8(j)

The CBD recognizes the dependency of '[indigenous and local communities](#)' on biological diversity and their unique role in conserving life on Earth. This working group focuses on the protection of Traditional Knowledge, and as such is a key focus for Indigenous Peoples' Organizations (IPOs).

This working group has developed:

- [the Akwé:Kon Guidelines](#) (concerning the assessments of the impacts of developments on sacred sites and traditional territories)
- [the Tkarihwaí:ri code of ethical conduct](#) (which concerns the cultural and intellectual heritage of indigenous peoples and local communities), and
- [a plan of action on customary sustainable use of biodiversity](#) to provide ways to integrate customary practices that support sustainable natural resource management into biodiversity management strategies at all levels

It is also committed to developing:

- 'sui generis' (unique) systems for the protection of traditional knowledge, innovations and practices
- participatory mechanisms for 'indigenous and local communities' in the work of the Convention, and
- indicators relevant for traditional knowledge and customary sustainable use

Resources

- [Traditional Knowledge and Customary Sustainable Use of Biodiversity. E-learning series on international frameworks that support indigenous peoples, local communities, and their territories and areas](#), Natural Justice.¹⁰⁰

The CBD's two-year cycle

The diagram below¹⁰¹ illustrates how the Convention bodies above fit together in the two-year cycle leading up to each Conference of the Parties (COP).

¹⁰⁰ <http://naturaljustice.org/wp-content/uploads/pdf/TK-Customary-Sustainable-Use.pdf> This e-learning module is part of a toolkit for community facilitators on biocultural community protocols. The complete toolkit, including additional e-learning modules, is available at www.community-protocols.org

¹⁰¹ Source: Natural Justice (2012). Implementing the Convention on Biological Diversity: a rapid assessment for the CBD Alliance, July http://www.cbdalliance.org/en/images/publications/Implementing_the_CBD_A_Rapid_Assessment_for_the_CBD_Alliance_final_2012.pdf

The Cartagena and Nagoya Protocols

The Convention has a number of protocols that are binding on governments that have ratified them. These operate alongside but separately from the other Convention bodies and have their own institutional structures.

The first two protocols govern international movements of 'Living Modified Organisms' (LMOs) resulting from biotechnology. The principle one is the ['Cartagena Protocol on Biosafety.'](#) The second is the [Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress](#), which is intended to deal with what happens when biodiversity is damaged by LMOs. However, this supplementary protocol has not been ratified by enough governments yet and is not operational ('in force').

These protocols have their own separate meeting of governments, which also takes place every two years and is known as the 'COP-MOP.' (This stands for the 'Conference of the Parties serving as the meeting of the Parties to the Protocol' hence the acronym is *always* used.)

A third rather more controversial protocol, that was supposed to create a framework for Access and Benefit Sharing including for [Indigenous Peoples](#), has also been agreed on. This is the [Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation](#).

In July 2014, 51 Parties subscribed to this Protocol, meaning that it will enter into force on 12 December 2014, and that its first Meeting of the Parties will be held in parallel with COP 12, in Pyeongchang, October 2014.

The website

Once you are familiar with the CBD's various issues and structures you will also find that it provides a wealth of information via its website, including numerous tools, databases and downloadable publications and leaflets.

VII. MAKING IT ALL WORK: IMPLEMENTING THE CBD

Despite ambitions to conserve biodiversity — as expressed in Article 1¹⁰² of the Convention when it was established in 1992, and as part of the Millennium Development Goals¹⁰³ — it continues to [decline rapidly](#).

[The CBD Alliance's implementation assessment](#)¹⁰⁴ shows that inconsistent implementation of what has already been agreed is a key factor in this failure to halt biodiversity loss. Similarly, in an interview with the CBD Alliance, the Executive Secretary of the CBD, Braulio Ferreira de Souza Dias, said that his three immediate and overriding priorities are “*implementation, implementation, and implementation.*”¹⁰⁵

The CBD has a number of existing mechanisms already in place that are intended to promote implementation. Click on the relevant links for more detail about each:

[CBD Financial Resources and Mechanism](#)

- [CBD Clearing-House Mechanism](#)
- [CBD National Implementing Mechanism](#)
- [CBD Good Practice Guidelines](#)

There have also been a number of reviews of implementation undertaken:

- [Official reviews of implementation](#)
- [CBD and IUCN reviews of protected areas implementation](#)
- [UNU review of national implementation](#)
- [GFC review of implementation of work on forest biological diversity](#)
- [CBDA review of implementation](#)

¹⁰² <http://www.cbd.int/convention/articles/default.shtml?a=cbd-01>

¹⁰³ <http://www.un.org/millenniumgoals/environ.shtml>

¹⁰⁴ Source: Natural Justice (2012). Implementing the Convention on Biological Diversity: a rapid assessment for the CBD Alliance, July http://www.cbdalliance.org/en/images/publications/Implementing_the_CBD_A_Rapid_Assessment_for_the_CBD_Alliance_final_2012.pdf

¹⁰⁵ Interview with Braulio de Souza Dias, “Fewer decisions, more implementation,” [square brackets], issue 6, May 2012. <http://www.cbd.int/ngo/square-brackets/square-brackets-2012-05-en.pdf>

1. CBD FINANCIAL RESOURCES AND MECHANISM

Clearly mobilizing sufficient resources to implement plans and policies agreed under the CBD is critical, especially for under-resourced countries. To a large extent this relates to commitments made by developed countries with respect to financial resources and the transfer of technology (see Article 20(4)). Strategies to improve international and domestic 'resource mobilization' in response to identified funding needs are regularly considered at COPs.¹⁰⁶

However, these strategies have now been developed to include '[innovative financial mechanisms](#)' which are rather controversial. Within UN bodies such as the CBD and the UN Environment Programme, the conservation of biodiversity and associated 'ecosystem services' is typically discussed from an economic perspective now, using the language of economics.¹⁰⁷ This approach may come as something of a surprise to anyone new to the CBD, but it has been developed by conservationists desperate to get the rest of the world to finally pay attention to the ongoing biodiversity crisis.¹⁰⁸ Others in civil society, however, view it as an unacceptable and risky 'commodification' of the natural world.¹⁰⁹

In general, finance for biodiversity does seem to be gradually increasing. The Global Monitoring Report 2012 indicated that EU institutions and the 23 countries of the Development Assistance Committee have set aside US\$6.57 billion for biodiversity assistance in 2010, three times the amount allocated in 2002.¹¹⁰ The [Global Environment Facility](#), housed in the World Bank, operates the CBD's financial mechanism.

¹⁰⁶ Natural Justice (2012). Implementing the Convention on Biological Diversity: a rapid assessment for the CBD Alliance, July http://www.cbdalliance.org/en/images/publications/Implementing_the_CBD_A_Rapid_Assessment_for_the_CBD_Alliance_final_2012.pdf

¹⁰⁷ <http://www.monbiot.com/2012/08/06/the-great-impostors/>

¹⁰⁸ <http://www.theguardian.com/environment/2012/aug/10/nature-economic-value-campaign?INTCMP=SRCH>

¹⁰⁹ GFC (2008). Life as Commerce: the impact of market-based conservation on Indigenous Peoples, local communities and women, <http://www.globalforestcoalition.org/wp-content/uploads/2010/11/LIFE-AS-COMMERCE2008.pdf>

¹¹⁰ CBD (2012). Global Monitoring Report 2012: State of financing for biodiversity, <http://www.cbd.int/doc/meetings/cop/cop-11/information/cop-11-inf-16-en.pdf>

2. CBD CLEARING-HOUSE MECHANISM

The CBD recognizes that the provision and sharing of information about biodiversity is critical to preventing biodiversity loss. To that end it has a Clearing-House Mechanism (CHM), which promotes scientific and technical cooperation. It does this by providing extensive information on its website; and through a network of [national information clearinghouse mechanisms](#).

National contact people are listed on the CBD's website, together with their email addresses, for many countries. The CBD also collaborates with various partner institutions.

There is also a separate [Biosafety Clearing-house](#) to support the [Cartagena Protocol on Biosafety](#).

3. CBD GOOD PRACTICE GUIDELINES

Over the years the CBD has developed a number of Good Practice Guidelines which can all be found [here](#). These include:

- The Tkarihwaí:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities
- Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species
- Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities
- The Ecosystem Approach
- Guidelines on Biodiversity and Tourism Development
- Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity
- Bonn Guidelines on Access to Genetic Resources and Fair and Equitable sharing of the Benefits Arising out of Their Utilization
- Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment
- Proposals for the Design and Implementation of Incentive Measures
- Proposals for the Application of Ways and Means to Remove or Mitigate Perverse Incentives

However, the existence of these mechanisms is not enough to ensure consistent implementation, as ongoing reviews of the CBD process show.

4. OFFICIAL REVIEWS OF IMPLEMENTATION

The official review process is organized by the CBD's Working Group on the Review of Implementation. Detailed results of the [WGRI meetings](#) can be found at the CBD website (you need to select the 'documents' tab in the menu on the left and then find the final report of the meeting you are interested in). These reports tend to be in the form of recommendations to the COP rather than detailed reviews.

However, the CBD's flagship publication Global Biodiversity Outlook provides a more immediately accessible account of the implementation of the CBD. The last edition of this was [Global Biodiversity Outlook 3](#) (GBO-3) published in 2010.

The online pages related to this publication include a variety of information including regional summaries, a case study database, and a comprehensive list of the CBD's [Good Practice Guidelines](#). The Executive Summary begins with the following message from then Executive Secretary Ahmed Djoghlaif:

*“The news is not good. We continue to lose biodiversity at a rate never before seen in history — extinction rates may be up to 1,000 times higher than the historical background rate. The assessment of the state of the world's biodiversity in 2010...should serve as a wake up call for humanity...Business as usual is no longer an option if we are to avoid irreversible damage to the life-support systems of our planet. The Convention's new Strategic Plan...must tackle the underlying causes of biodiversity loss.”*¹¹¹

GBO-3 finds that there have been positive developments with respect to:

- More land and sea areas being protected
- More countries fighting the threat of invasive alien species
- More money being set aside for the implementation of the CBD

However, it also finds that these efforts are too often undermined by conflicting policies; and that there is an overriding need to give higher priority to tackling the root causes of biodiversity loss in all areas of decision-making and in all economic sectors.

¹¹¹ <http://www.cbd.int/gbo/gbo3/doc/GB03-Summary-final-en.pdf>

5. CBD AND IUCN REVIEWS OF PROTECTED AREAS IMPLEMENTATION

Specifically with respect to the CBD's work on protected areas, a 2010 [SBSTTA review](#)¹¹² found that the promotion of equity and benefit sharing and enhancing the [involvement of 'Indigenous and local communities' was limited and behind target.](#)

[An IUCN review of work on protected areas](#) found similar shortcomings, observing that *"upholding the rights of indigenous peoples and local communities has been variable within Parties and there were many examples of bad or inequitable practice."* The IUCN report calls for (among other things) the incorporation of [areas conserved by indigenous peoples and local communities](#) instead of emphasizing state-run protected areas.

UNU review of national implementation

[A review of the National Biodiversity Strategy and Action Plans](#) (based on the fourth set of national reports) shows that at the national level there has been progress on communication, education and public awareness; protected areas; and legislation. But there have been shortcomings with respect to the preparation, ownership and coordination of NBSAPs; coverage of the CBD's objectives; mainstreaming across sectors; developing targets, indicators and monitoring mechanisms; and funding. Other obstacles to implementation identified include:

- limited capacity due to lack of financial resources and technical expertise
- limited project funding in cases of project-based action plans
- weak administrative and institutional structure
- lack of political will and interest
- poor enforcement of legislation
- limited mainstreaming and cross-sectoral integration
- lost awareness of NBSAPs

GFC review of implementation of work on forest biological diversity

¹¹² SBSTTA (2010). In Depth Review of the Implementation of the Programme of Work on Protected Areas, SBSTTA 14, <http://www.cbd.int/recommendations/sbstta/?m=sbstta-14>

A 2008 Global Forest Coalition review of the implementation of the Programme of Work on Forest Biodiversity, which focused on implementation at the national level, found that (among other things):

- Levels of implementation were very variable (but all countries could do better) and levels of knowledge about the program were remarkably low in many countries.
- There are clear success stories of forest biodiversity conservation, especially on indigenous lands, but indigenous peoples and local communities were hardly involved in policy-making.
- Some countries are heavily reliant on protected areas as the main tool for meeting their CBD commitments (as opposed to halting forest conversion). In many countries, environmentally and socially harmful monoculture tree plantations are still being promoted within the framework of forest and climate change mitigation policies.
- Weak institutional capacity, ambiguous regulatory frameworks, lack of information and expertise, and low levels of law enforcement and corruption are key impediments in many countries.
- Conflict with other economic objectives remains an entrenched problem, with logging, oil concessions, agriculture and agrofuels offering significant economic incentives not to implement commitments under the CBD.

CBDA review of implementation

The CBD Alliance hired a consultant to make an implementation analysis, studying the 12 CBD Operational articles from the convention, with 53 indicators to follow up their implementation, for a total of sixteen countries from different regions of the world (OECD and megadiverse countries)¹¹³.

The study is available [here](#).

A second study undertaken by the CBD Alliance is looking at the degree to which a number of different countries have succeeded in implementing their CBD commitments, and the various obstacles that they face. Brief case studies consider the state of play in Brazil, Kenya, Canada, New

¹¹³ The basis of the information were 4th Parties National Reports, as the fifth ones had not yet been submitted. As a result the Strategic Plan for Biodiversity 2011-2014 and the Aichi targets were not yet in effect.

Zealand, Ecuador, DR Congo, Germany and the results will be available soon.

VIII. THE CBD AND INTERNATIONAL LAW

There is considerable uncertainty about the legal status of various different aspects of the CBD. It is important that civil society organizations are aware of this uncertainty, as it is the subject of ongoing debate, and the results of that debate are likely to have a considerable impact on what governments are required to do by the CBD.

In addition, there are other multilateral environmental agreements that address biodiversity, meaning that the international approach is rather fragmented and there is a need for a more coordinated approach.

Finally, there are concerns about conflicts with other intergovernmental agreements and rules concerning international trade and economics, which may conflict with the CBD's objectives.

To find out more about each of these click on the following links:

- [The legal status of the CBD](#)
- [CBD Moratoria](#)
- [The CBD and other multilateral environmental agreements](#)
- [The CBD, international trade and the World Trade Organization](#)

1. THE LEGAL STATUS OF THE CBD

There is considerable uncertainty about the legal status of various different aspects of the CBD. It is important that civil society organizations are aware of this uncertainty, as it is the subject of ongoing debate, and the results of that debate are likely to have a considerable impact on what governments are required to do by the CBD. The fact that there is this legal uncertainty also means that there is a considerable degree of confusion about states' current legal obligations.

Traditionally, binding international law (including international environmental law) is created pursuant to the Vienna Convention on the Law of Treaties (Vienna Convention). Under the Vienna Convention, parties consent to be bound by a treaty at an international conference and the treaty enters into force once it has been ratified by a minimum number of parties. This allows states to exercise their sovereign right to withhold their consent to be bound, and enables them to demand reciprocal concessions from their bargaining partners.

This is the method under which conventions such as the CBD and the United Nations Framework Convention on Climate Change (UNFCCC) entered into force, making them binding upon the 'Parties' (states) that formally ratify the final agreement.

The CBD is a critical multilateral environmental agreement (MEA) that has been hailed as the epitome of a new generation of MEAs. At least initially, it was seen as balancing the needs and concerns of developing countries against the goals of industrialized countries. However, the CBD has still been criticized for its vague and heavily qualified text, which contains many loopholes.

In addition, the actions of the CBD's main decision-making body, the Conference of the Parties (COP) inhabit an ambiguous area in the binding/non-binding dichotomy of traditional international law. While some actions such as amending the governing instrument take place in a manner akin to formal treaty-making, other actions such as reaching agreement on 'decisions' made by the COP occur under less formal circumstances. It is the status of this latter category of actions that is particularly unclear. Applying formal treaty law, such actions appear to be more akin to 'soft law' (meaning that the rules in question are significant but don't have quite the same legal status as 'hard law').

Legal scholarship concerning the actions of the COP is still in its nascent stage, and with respect to the CBD in particular, is essentially nonexistent. However, as more actions are taken by COPs in the future, new approaches to analyzing the legal status of these actions may gain wider use. These approaches may help to clarify the legal status of COP actions. For the time being, however, there are no definitive answers regarding the binding nature of COP actions.

It is also important to note that while the traditional treaty making process protects states' sovereign rights to withhold or grant consent to be bound by a treaty, it has been criticized in the context of MEAs as being inadequate to respond to the realities of environmental degradation and loss of biodiversity in a timely and effective manner. This has prompted calls for new approaches to international environmental law-making.

For a more detailed legal analysis read: [Implementing the Convention on Biological Diversity: a rapid assessment for the CBD Alliance](#), by Natural Justice.

2. **CBD MORATORIA**

Although the legal status of elements of the CBD's work may be unclear, this does not mean that its outcomes have no significance in the real world.

In particular, the CBD has the ability to establish — and has indeed already established — certain temporary moratoria, which are not legally binding but still have an important impact in practice, so long as governments continue to abide by and enforce them.

These currently include moratoria on climate-related [geo-engineering](#), and ['terminator seed technology'](#).

3. THE CBD AND OTHER MULTILATERAL ENVIRONMENTAL AGREEMENTS

Biodiversity is also impacted by the activities of a number of other intergovernmental agreements and there is debate about how to coordinate what is happening in the CBD and these other fora.

Given the biodiversity crisis, questions have been raised as to the effectiveness and efficiency of MEAs, particularly with respect to their implementation, with countries reporting on weakened implementation of MEAs due to overloaded meeting agendas, duplication of tasks, failed national coordination and arduous reporting procedures.

Six multilateral environmental agreements (MEAs) are relevant in terms of biodiversity. In addition to the CBD they are:

- the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- the Convention on Migratory Species (CMS)
- the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
- the Ramsar Convention on Wetlands
- the World Heritage Convention (WHC)

Enhanced cooperation and synergies among MEAs has been highlighted as a tool to enhance MEA effectiveness and has been the subject of considerable intergovernmental discussion; a range of approaches to creating more synergy has been proposed.¹¹⁴ These vary from simply improving coordination amongst MEA Secretariats through to the reorganization of MEAs under a proposed World/UN Environment Organization. This matter is still under discussion.

In addition, in April 2012 the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)¹¹⁵ was established to provide scientifically credible and independent information that takes into account the complex relationships between biodiversity, ecosystem services and people. IPBES is

¹¹⁴ UNEP-WCMC (2012). Promoting synergies with the cluster of biodiversity-related multilateral environmental agreements, http://www.unep-wcmc.org/medialibrary/2012/04/27/8b832e8c/Final_MEA_synergies_27April2012_cover.pdf

¹¹⁵ <http://www.ipbes.net/>

an independent intergovernmental body open to all member countries of the United Nations.

4. THE CBD, INTERNATIONAL TRADE AND THE WORLD TRADE ORGANIZATION

There are also questions about potential conflicts between the World Trade Organization (WTO) and the CBD.

Clearly there are general concerns about the impact of growing global trade in commodities and merchandise in terms of the changing use of land (especially for use for intensive agriculture), excessive consumption of natural resources, and the environmental impacts of increased international air, road and maritime transport. One recent research project found that (excluding invasive species) 30% of global species threats are due to international trade, especially imported coffee, tea, sugar, textiles, fish and other manufactured items. The USA, the EU and Japan are the main final destinations of 'biodiversity-implicated commodities.'¹¹⁶

Some of the risks posed to biodiversity by international trade in 'living modified organisms' are already acknowledged and being addressed through the CBD's [Cartagena Protocol on Biosafety](#). Similarly, international trade in wildlife is controlled through another MEA, the [Convention on International Trade in Endangered Species \(CITES\)](#).

However, there are further questions concerning potential inconsistencies between international trade rules (in the WTO and regional and bilateral free trade agreements) and the CBD's objectives and rules. Any such conflict could be significant, since trade fora have powerful enforcement measures, meaning that in the case of any specific dispute trade interests could prevail.

Rules on intellectual property rights are a key concern, but trade rules and negotiations on other issues, such as agriculture, are also important.

Intellectual property rights are dealt with in the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). Essentially, the TRIPs Agreement focuses on protecting intellectual property rights, which conflicts with the CBD's focus on access to and sharing the benefits of the sustainable use of biodiversity. Exploring the relationship between TRIPs, the CBD and traditional knowledge and folklore has been on the WTO's agenda since 2001.

¹¹⁶ Nature (2012). International trade drives biodiversity threats in developing nations, Lenzen M *et al*, 6 June, http://www.nature.com/nature/journal/v486/n7401/full/nature11145.html?WTec_id=NATURE-20120607 and <http://www.stapgef.org/stap/wp-content/uploads/2013/10/International-Trade-and-Biodiversity-Threats.pdf>

In 2011, following the conclusion of the Nagoya Protocol, a large group of developing countries — Brazil, China, Colombia, Ecuador, India, Indonesia, Peru, Thailand, the African Caribbean and Pacific (ACP) Group, and the African Group — submitted a proposal¹¹⁷ to the TRIPs Council that aimed to make it compulsory for governments, when granting patents, to demand the disclosure of information about the specific source of resources or traditional knowledge being utilized, in order to promote prior, informed consent and benefit sharing.

However, this proposal was not accepted and the debate has not moved forward since then.¹¹⁸ Supporters of the proposal argue that it would ensure that the TRIPS Agreement matches the CBD. Others argue that there is no need to amend the TRIPS Agreement because countries can apply both the WTO and the CBD agreements without any conflict between them, and that disclosing the source of material and knowledge may not be the best way to prevent misappropriation or inappropriate patenting.

The CBD sits in as an observer on regular meetings of the WTO's Committee on Trade and Environment. However, requests to be granted observer status for Special Sessions of the Committee on Trade and Environment, the WTO's TRIPs Council, its Committee on Agriculture, and other WTO Committees are all pending¹¹⁹ and have been so for many years. This means that the CBD Secretariat cannot intervene in and contribute to these debates, even where there is a potential impact on biodiversity.

¹¹⁷ WTO (2011). TN/C/W/59, 19 April, <http://docsonline.wto.org/imrd/directdoc.asp?DDFDocuments/t/t/c/W59.doc>

¹¹⁸ WTO (2013). Intellectual property meeting mulls Irish tobacco plan, drug tariffs, sport, non-violation, 10 and 11 October, http://www.wto.org/english/news_e/news13_e/trip_10oct13_e.htm#biodiversity

¹¹⁹ CBD's Cooperation with WTO page, <http://www.cbd.int/incentives/coop-wto.shtml>

IX. THE CBD: CRITICAL CONCERNS

This section explains three key areas of concern, explaining why they are important, and how they are linked to the CBD negotiations. These are:

- [The CBD and Indigenous Peoples](#)
- [The CBD and underlying drivers of biodiversity loss](#)
- [The CBD and ‘innovative financial mechanisms’](#)

1. THE CBD AND INDIGENOUS PEOPLES

Areas located within the territories of indigenous peoples typically have very high levels of biodiversity; and indigenous peoples have a wealth of knowledge about the successful management and use of that biodiversity. They are also highly dependent on continued access to their traditional resources and territories. For all these reasons it is critical that indigenous peoples’ views and involvement are at the heart of all that the CBD does.

In general the CBD is unique in that it recognizes these factors. Nevertheless Parties have been — and continue to be — reluctant to fully implement this approach.

For example, a key part of the original convention that is important from an indigenous perspective is [Article 8\(j\)](#). This directs parties to “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.” Unfortunately, other parts of the article contain ambivalent language meaning that it is not binding, and that is “subject to national legislation.”

This brings us to a key dilemma within the CBD. The Convention as a whole is generally predisposed to considering the role and rights that indigenous peoples have with respect to both genetic resources and traditional knowledge. However, there are Parties that will not recognise ‘indigenous peoples’ as being separate from local communities.

So, for example, the Working Group on Article 8(j) does not use the term ‘indigenous peoples’ but invites the “full and effective participation of

indigenous and local communities”¹²⁰ in its meetings, which are currently focused on constructing a Global Plan of Action on Customary Sustainable Use of Biological Diversity.

These linguistic nuances are highly significant. They are the result of deep and enduring tensions between indigenous peoples and state authorities in many countries, tensions which generally concern ownership of land and genetic resources that are in ‘customary use’, and whether or not indigenous peoples are involved in related decision-making processes.

Another prominent dynamic within the Convention is the engagement of and support for businesses that consider themselves to be dependent upon bioprospecting — access to genetic resources.

These two dynamics combine to create a constant push-pull dynamic within the negotiations, with some parties and business trying to (1) avoid ceding full control of resources to indigenous peoples and local communities; and (2) prevent the effective implementation and enforcement of the Convention’s provisions as they apply to users.

This is clearly evident in the recently negotiated [Nagoya Protocol on access and benefit sharing](#), which favors the rights of biodiversity ‘users’ over those of biodiversity ‘providers.’

For example, the Protocol effectively mandates countries that are providers to cede access to resources. Although this is supposed to happen only if there is a mutually agreed contract with the users, which is based on the prior, informed consent of the resource holders, the Protocol does little to ensure that these conditions will actually be enforced. Furthermore, the [Nagoya Protocol](#) contains no specific provisions requiring the rejection, sanctioning or penalizing of those engaging in biopiracy. Indigenous peoples and local communities are dependent upon national level legislation — to be introduced or implemented by the very state authorities that may dispute their right to those resources anyway — in terms of ensuring their rights.

The CBD’s reliance on expanding ‘[protected areas](#)’ on land and at sea can also be problematic for indigenous peoples and local communities. The CBD has missed its original related 2008 target for ensuring the “full and effective participation of indigenous and local communities.” There has been inadequate involvement of indigenous peoples and local communities in protected area planning and management, and local community resistance to

¹²⁰ <http://www.cbd.int/traditional/general.shtml>

protected areas.¹²¹ A new deadline of 2020 has been set, in Aichi Biodiversity Target 18:

“By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.”

An IUCN review of the Programme of Work on Protected Areas also found that the upholding of indigenous peoples and local communities had been very variable between parties and there were many examples of bad or inequitable practice.¹²² IUCN also observed that protected areas are sometimes used as a pawn in broader dialogues about land claims and restitution.¹²³

The use of ‘[innovative financial mechanisms](#)’ to finance biodiversity conservation and protect ‘ecosystem services’ can also create problems. Developed with the twin goals of finally engaging governments more concerned with economic development, and attracting private capital, these new mechanisms tend to involve and promote the commodification and privatization of biodiversity and ecosystems.

But this approach has significant winners and losers. It rewards those that have or can acquire formal ownership of land and resources, but it deprives money-poor peoples and communities of resources that were previously freely available to them. The risk of land grabbing and violence also increases as the financial value of resources goes up. These all impact on indigenous peoples who are highly dependent upon genetic resources for their survival and quality of life.

¹²¹ Next Steps: Convention on Biological Diversity Programme of Work on Protected Areas, https://www.iucn.org/about/work/programmes/gpap_home/gpap_capacity2/gpap_pub/?5051/Next-Steps-Convention-on-Biological-Diversitys-Programme-of-Work-on-Protected-Areas

¹²² Next Steps: Convention on Biological Diversity Programme of Work on Protected Areas https://www.iucn.org/about/work/programmes/gpap_home/gpap_capacity2/gpap_pub/?5051/Next-Steps-Convention-on-Biological-Diversitys-Programme-of-Work-on-Protected-Areas

¹²³ Next Steps: Convention on Biological Diversity Programme of Work on Protected Areas, https://www.iucn.org/about/work/programmes/gpap_home/gpap_capacity2/gpap_pub/?5051/Next-Steps-Convention-on-Biological-Diversitys-Programme-of-Work-on-Protected-Areas

In addition, although participation in such schemes by indigenous groups and local communities may be encouraged, they can be complex mechanisms that are difficult to negotiate and risky, and known to attract fraudsters.

Within the CBD's [SBSTTA](#) the difficulty of reconciling different systems of knowledge is also being considered.¹²⁴

However, the CBD could rapidly improve the protection of biodiversity by promoting the maintenance or creation of [Indigenous and Community Conserved territories and Areas](#) (also known as ICCAs), over and above the use of protected areas that exclude people from their traditional territories and resources. Forest-dependent communities have the know-how and desire to conserve their forests, without additional finance being provided by outsiders.

ICCAs have been shown to contribute to cultural integrity and survival, the 'Buen Vivir' approach, and social well-being. They also lead to effective and fair forest conservation and restoration efforts. Research from CIFOR and the World Bank shows that community forests that are managed and controlled by indigenous peoples and forest-dependent communities within multiple use systems are significantly more effective than projects based on a strict conservation approach.¹²⁵

To support the implementation of ICCAs it is also critical to secure land tenure and recognize the value of traditional systems of knowledge.

Resources

CBD involvement – financial and logistical support

The CBD provides financial support to enable indigenous peoples and local communities to attend meetings. They can also participate in both formal and informal groups (such as contact groups and Friends of the Chair groups). There is also an [Advisory Group/Steering Committee](#) in which indigenous peoples and local communities are represented. Inputs regarding the CBD's work can also be sent directly to the Secretariat.

International Indigenous Forum on Biodiversity (IIFB)

The IIFB is a collection of representatives from indigenous governments, indigenous non-governmental organizations and indigenous scholars and

¹²⁴ <http://iifb.indigenousportal.com/2013/10/16/iifb-statement-on-strategic-goal-a-at-sbstta-17/>

¹²⁵ FPP (2011). Peer-reviewed CIFOR and World Bank studies find that community-managed forests are better for conservation than strict protected areas. Forest Peoples Programme. <http://www.forestpeoples.org/topics/environmental-governance/news/2011/10/peer-reviewed-cifor-and-world-bank-studies-find-communi>

activists that organize around the Convention on Biological Diversity (CBD) and other important international environmental meetings. IIFB helps to coordinate indigenous strategies at these meetings, provide advice to the government parties, and influence the interpretations of government obligations to recognize and respect indigenous rights to traditional knowledge and resources.

www.iifb.indigenousportal.com

E-learning Series on International Frameworks that Support Indigenous peoples, Local Communities and Their Territories and Areas

<http://naturaljustice.org/wp-content/uploads/pdf/TK-Customary-Sustainable-Use.pdf>

ICCA Consortium

The ICCA Consortium is an international association dedicated to promoting the appropriate recognition of and support to ICCAs (Indigenous and Community Conserved Areas and Territories)

www.iccaconsortium.org

2. CBD AND UNDERLYING DRIVERS OF BIODIVERSITY LOSS

The destruction of biodiversity is the result of many different factors, which can be difficult to disentangle and address. This issue is complicated further by the fact that some of these factors are more immediate and therefore obvious; but others are indirect and can be harder to pinpoint and prevent.

Major direct causes of biodiversity loss include:

- land use change and the conversion of habitat to other land uses
- the over-exploitation of wildlife
- pollution
- climate change
- invasion by alien species¹²⁶

Underlying causes include factors such as:

- Inappropriate economic policies that take little or no account of environmental factors such as biodiversity loss and climate change, and drive overconsumption
- Poor governance, weak institutions and corruption, which mean that even appropriate policies may not be implemented or enforced properly, and
- A widespread lack of understanding about how ecosystems work and how they benefit humanity.¹²⁷

For example, the immediate drivers of deforestation include the conversion of forest to farmland or monoculture and plantations, and clearing forest for development and to build roads and other infrastructure. Forest ecosystems have also been degraded by nitrogen and phosphorous pollution. But the underlying causes driving biodiversity loss in forests are:

- Growing global consumption of meat, with consequences for the amount of land needed to grow crops for animal feed
- The increasing trend of burning wood on an industrial scale in place of fossil fuels

¹²⁶ EC (2009). Study in understanding the causes of biodiversity loss and the policy assessment framework. Slingenberg *et al.* http://ec.europa.eu/environment/enveco/biodiversity/pdf/causes_biodiv_loss.pdf

¹²⁷ EC (2009). Study in understanding the causes of biodiversity loss and the policy assessment framework. Slingenberg *et al.* http://ec.europa.eu/environment/enveco/biodiversity/pdf/causes_biodiv_loss.pdf

- Persistently high demand for timber and charcoal, including from nearby urban centers
- Growing cities, caused by rural people who have been displaced by industrial farms and tree plantations migrating to cities in search of work, and
- The impacts of climate change on forests.¹²⁸

Similarly, loss of biodiversity in [inland wetlands](#) is driven by habitat change, pollution and invasive species, but it is continued urbanization, industrialization and climate change that are the main underlying causes.

[Coastal ecosystems](#) suffer the added underlying causes of high and rapidly growing populations, and the impacts of transport, economic growth and international trade.

In [marine ecosystems](#) the main immediate drivers of biodiversity loss are over-exploitation, followed by habitat change. A key underlying cause here is lack of adequate governance structures, particularly since no governments have national jurisdiction beyond their 200 mile Exclusive Economic Zones (EEZ). Marine ecosystems are also particularly susceptible to the negative impacts of economic growth.¹²⁹

[Climate change](#) is also a growing threat to biodiversity. According to the [Millennium Ecosystem Assessment](#) climate change is likely to be one of the main drivers of biodiversity loss by the end of this century. There is already evidence of changes in species distribution, population sizes, the timing of reproduction and migration events, and an increase in the frequency of pest and disease outbreaks.

Reliance on new and untested technologies that have the potential to disrupt and damage biodiversity at the genetic level — such as genetically engineered trees¹³⁰ and [synthetic biology](#) — also threatens to be a new

¹²⁸ GFC (2010). Getting to the Roots: Underlying Causes of Deforestation and Forest Degradation, and Drivers of Forest Restoration, Global Forest Coalition, December, <http://www.globalforestcoalition.org/wp-content/uploads/2010/11/Report-Getting-to-the-roots1.pdf>

¹²⁹ E C (2009). Study in understanding the causes of biodiversity loss and the policy assessment framework. Slingenberg *et al.* http://ec.europa.eu/environment/enveco/biodiversity/pdf/causes_biodiv_loss.pdf

¹³⁰ <http://globaljusticeecology.org/stopgettrees.php?tabs=0>

underlying cause of significant proportions. [Geo-engineering projects](#)¹³¹ that interfere with the workings of ecosystems — such as ocean fertilization — could also do untold damage to biodiversity at the species and ecosystem levels.

Stopping the destruction of biodiversity *must* address these various underlying causes. Dealing with the immediate causes of biodiversity loss in isolation tends to push the problem to another area or country where the laws and regulations may be weaker.

The CBD recognizes that there are underlying drivers but that these are difficult to address. In GBO3,¹³² the CBD Secretariat states that “there has been insufficient integration of biodiversity issues into broader policies, strategies and programmes, and the underlying drivers of biodiversity loss have not been addressed significantly” adding that governments’ “actions to address the underlying drivers of biodiversity loss, including demographic, economic, technological, socio-political and cultural pressures, in meaningful ways, have also been limited.”

In practice addressing the drivers of biodiversity loss is proving extremely difficult and a slow process, especially given humanity’s ever increasing demand for resources, the lack of political will displayed by numerous governments, and the dominance of an economic system that prioritizes financial well-being over other social goods. These factors all need to be addressed, if biodiversity loss is really to be stopped in its tracks. In the meantime the CBD looks to its [Protected Areas](#) initiative as a relatively successful ‘rapid response mechanism.’ Focusing on key species and the implementation of protected areas has at least succeeded, for example, in reversing the decline in some key species, such as the Iberian lynx.¹³³

¹³² Global Biodiversity Outlook 3, <https://www.cbd.int/gbo3/?pub=6667§ion=6673>

¹³³ http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.createPage&s_ref=LIFE06%20NAT/E/000209

3. THE CBD AND ‘INNOVATIVE FINANCIAL MECHANISMS’¹³⁴

Within UN bodies such as the CBD and the UN Environment Programme, the conservation of biodiversity and associated ‘ecosystem services’ is increasingly discussed from an economic perspective, using the language of economics.¹³⁵ This approach has been developed by conservationists desperate to get the rest of the world to finally pay attention to the ongoing biodiversity crisis, and create the necessary money to finance positive action for biodiversity.¹³⁶ Nevertheless this approach is controversial, at least within civil society, with many viewing it as an unacceptable and risky ‘commodification’ of the natural world that may also impact negatively on forest-dependent communities and peoples.¹³⁷

Box: what are ecosystem services?

A great deal of emphasis is currently placed on the ‘services’ that ecosystems provide to humanity, and calculating an equivalent financial value. These services include functions such as flood control, water filtration, and the removal of carbon from the atmosphere, which helps to regulate our climate. For a more detailed explanation see [here](#).

A key argument that has been put forward by supporters of the ecosystem services approach is that freely available natural resources are inevitably squandered because there is no financial incentive for businesses or individuals to use them sparingly.

On the basis of this argument, efforts are ongoing to assign values to the various components of nature, so that direct comparisons can be made with the financial costs of inaction. For example, wetlands play a key function in

¹³⁴ For a more detailed discussion of this issue read: Civil Society View on Scaling up Biodiversity Finance, Resources Mobilization and Innovative Financial Mechanisms, compiled by Simone Lovera (Global Forest Coalition) and Rashed Al Mahmud Titimur (Unnayan Onneshan) for the CBD Alliance, March 2012, http://www.cbdalliance.org/en/images/Briefing_notes/CBD_Alliance_Civil_society_views_on_Scaling_Up_Biodiversity_Finance.pdf

¹³⁵ <http://www.monbiot.com/2012/08/06/the-great-impostors/>

¹³⁶ Guardian (2012). We must put a price on nature if we are going to save it, Juniper T, The Guardian, 10 August, <http://www.theguardian.com/environment/2012/aug/10/nature-economic-value-campaign?INTCMP=SRCH>

¹³⁷ GFC (2008). Life as Commerce: the impact of market-based conservation on Indigenous Peoples, local communities and women, <http://www.globalforestcoalition.org/wp-content/uploads/2010/11/LIFE-AS-COMMERCE2008.pdf>

water and chemical cycles. They are also rich in biodiversity, making them an important source of food for people. In addition, they are involved in watershed protection and climate regulation. A global economic assessment of 63 million ha of wetlands has estimated their value at US\$3.4 billion per year.¹³⁸

In addition to valuing ecosystem services, governments are now engaged in setting up 'positive incentive' systems aimed at rewarding the providers of those ecosystem services (this might be landowners, for example, or farmers). This can also include the creation of markets where those services can be traded.

The CBD has elaborated several sets of guidance emphasizing that positive incentives are not just economic, but also cultural, social and spiritual, and observing that education, awareness raising, and respect for traditional value systems, can provide important incentives for biodiversity conservation.

Examples of positive incentives include:

- **Expanding or creating markets for biodiversity-based products and services**

For example, the CBD collaborates closely with the UN Conference on Trade and Development's Biotrade initiative¹³⁹ which seeks to increase trade and investment in products and services resulting from the sustainable use of biodiversity, on the basis that traders will protect the biodiversity their income relies upon. These products and services include nuts, fruits, perfumes, natural dyes, oils, medicinal plants, biochemical compounds, eco-tourism, watershed protection and carbon adsorption.

This can also involve the creation of new markets for entirely new products, such as 'individual transferable fishing quotas.'

- **Payments for Environmental Services**

Payments for Environmental Services (PES)¹⁴⁰ are payments made to the providers of environmental services. They can include payments for organic farming or for managing grasslands in a biodiversity-friendly way, for example, or payments for 'conservation easements' (payments for

¹³⁸ <http://www.teebweb.org/wp-content/uploads/2013/01/The-economic-value-of-the-worlds-wetlands.pdf>

¹³⁹ <https://www.cbd.int/cepa/projects.shtml?s=biotrade>

¹⁴⁰ <https://www.cbd.int/cepa/projects.shtml?s=biotrade>

setting land aside for conservation purposes). For example Costa Rica's FONAFIFO scheme pays farmers to protect biodiverse forests. Its scheme is funded from a variety of sources including taxes on timber and fuel.¹⁴¹

'Biodiversity offsets' are a relatively recent and highly controversial innovative financial mechanism. The idea is that developers involved in projects that have unavoidable residual environmental impacts are legally obliged to fund conservation activities elsewhere as a form of compensation. This is often an obligation that is included at the end of a 'mitigation hierarchy' where the developer is required to demonstrate that they have done everything they can to avoid negative impacts.

This approach has proved relatively popular with governments. This is undoubtedly because it provides and protects profit-making opportunities for business. Thus a large and influential constituency is in favor rather than opposition. In addition, it brings private finance into the equation (meaning, in theory, less cost to the public purse).

However, there is also a plethora of compelling moral and practical reasons why the 'ecosystem services' approach and associated innovative financial mechanisms such as Payments for Environmental Services schemes, REDD, and biodiversity offsets, are considered false solutions by many NGOs and others.^{142,143} In particular, using these 'innovative financial mechanisms may':

- **Fail to address the underlying causes of biodiversity loss**

For example, one of the main drivers of biodiversity loss is the expansion of industrial-scale agriculture and fishing. Yet excessive demand for food — and related issues such as land-intensive livestock production, obesity and food waste¹⁴⁴ — are not addressed by this approach. Schemes that do not address the underlying causes of biodiversity loss may result in the problems they are designed to address simply moving elsewhere (a phenomenon called 'leakage').

¹⁴¹ http://www.unep.org/forests/Portals/142/docs/our_vision/PES_Schemes.pdf

¹⁴² For a more detailed discussion of this issue read: Civil Society View on Scaling up Biodiversity Finance, Resources Mobilization and Innovative Financial Mechanisms, compiled by Simone Lovera (Global Forest Coalition) and Rashed Al Mahmud Titimur (Unnayan Onneshan) for the CBD Alliance, March 2012, http://www.cbdalliance.org/en/images/Briefing_notes/CBD_Alliance_Civil_society_views_on_Scaling_Up_Biodiversity_Finance.pdf

¹⁴³ http://e360.yale.edu/feature/ecosystem_services_whats_wrong_with_putting_a_price_on_nature/2583/

¹⁴⁴ FAO (2013). Food Wastage Footprint: Impacts on Natural Resources, available at <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=2726&ArticleID=9611&l=en>

- **Involve and promote the commodification and privatization of biodiversity and ecosystems**

In general, the current economic dynamic based on excessive consumption of the world's resources goes unchallenged. Instead, nature is converted into yet more products that can be bought and sold. This is a form of privatization that has significant winners and losers, and it has been characterized as a new form of enclosure of the commons.¹⁴⁵

- **Reward those that have or can acquire formal ownership of land and resources**

Since PES schemes tend to be based on land and resource ownership they are highly likely to favor those with secure, legally recognized tenure. But land ownership is already an extremely contentious issue in many countries, especially with respect to the recognition of Indigenous Peoples' rights. A study examining the long-standing Costa Rican PES scheme found that payments tend to go to relatively large farms and private companies.¹⁴⁶

- **Deprive money-poor peoples and communities of resources that were previously freely available to them**

At the other end of the spectrum those with insecure land and resource tenure, the majority of whom will be money-poor, will find it difficult to participate in and benefit from PES schemes.¹⁴⁷ Rather, they may find themselves even more disadvantaged if the natural resources that were previously available to them for free now have a value and are assigned to others. The risk of land grabbing and violence may well increase.

- **Favor those with the capacity to engage in complex financial mechanisms, and encourage fraud**

Some schemes may be technically and/or financially complex, and may not work in countries where governance is poor and/or corruption rife. This is the case with REDD+,¹⁴⁸ for example, which requires the measurement and monitoring of carbon stored in an area of forest, as well as the

¹⁴⁵ http://e360.yale.edu/feature/ecosystem_services_whats_wrong_with_putting_a_price_on_nature/2583/

¹⁴⁶ <http://www.iied.org/markets-payments-for-environmental-services>

¹⁴⁷ <http://www.iied.org/markets-payments-for-environmental-services>

¹⁴⁸ REDD stands for Reducing Emissions from Deforestation and forest Degradation. For more information see <http://globalforestcoalition.org/wp-content/uploads/2013/06/LANDGRABBING-MANUAL-FINAL-2-EN.pdf>

negotiation of complex legal contracts. REDD+ is notable for the fact that it is already attracting fraudsters — including ‘carbon cowboys’ persuading communities in Colombia to sign over the management of their territories — and an Interpol environment crime specialist has observed that, “The potential for criminality is vast and has not been taken into account by the people who set it up.”¹⁴⁹

- **Fail to deliver conservation objectives**

On top of all these problems there are concerns that schemes may simply fail to deliver on their objectives. For example, they may be too complex, or too expensive to administer.¹⁵⁰ In particular, the success of positive incentive schemes depends on their ability to provide income on a par with the profits that can be derived from biodiversity-damaging activities. A further concern is the fact that biodiversity offsets may even be used to sanction environmentally damaging development projects that would not otherwise have been permitted.¹⁵¹

On a more positive note, the CBD has addressed the negative impact of subsidies and other financial incentives for activities and policies that destroy biodiversity, such as unsustainable agriculture and fisheries. It has recommended that these ‘perverse incentives’ be redirected. But a critical analysis shows that ‘innovative financial mechanisms’ themselves can lead to ‘perverse incentives.’ For example, biodiversity offsets can be used to sanction environmentally damaging development that would not otherwise have been permitted.

However, innovative financial mechanisms may also create perverse incentives. It is also important to note that the rapid production of biomass for fuel, including from plantations of alien tree species is currently subsidized in some countries¹⁵², and subsidies will potentially be made available for fast-growing genetically-engineered trees.¹⁵³ This trend is encouraged by the inclusion of tree-based biomass projects in the UN’s

¹⁴⁹ Guardian (2009). UN’s forest protection scheme at risk from organized crime, experts warn, 5 October 2009, <http://www.theguardian.com/environment/2009/oct/05/un-forest-protection>

¹⁵⁰ <http://www.iied.org/markets-payments-for-environmental-services>

¹⁵¹ Campaigners attack proposals to allow destruction of ancient woodlands, 4 January 2014, The Guardian, <http://www.theguardian.com/environment/2014/jan/04/ancient-woodland-cut-down-biodiversity-offsetting>

¹⁵² Biomass production is currently subsidized in the UK for example: Biomass fuel subsidies to be capped says energy secretary, 16 July 2013, BBC News, <http://www.bbc.co.uk/news/business-23334466>

¹⁵³ http://www.biosafety-info.net/file_dir/11739570714f82b110c9e60.pdf

Clean Development Mechanism (CDM).¹⁵⁴ (The CDM allows industrialized countries to purchase carbon credits from projects in developing countries, which can then be offset against those industrialized countries' greenhouse gas emissions.¹⁵⁵)

Resources

For a more detailed discussion of this issue read: [Civil Society View on Scaling up Biodiversity Finance, Resources Mobilization and Innovative Financial Mechanisms](#), compiled by Simone Lovera (Global Forest Coalition) and Rashed Al Mahmud Titimur (Unnayan Onneshan) for the CBD Alliance, March 2012

¹⁵⁴ Forestry/land-use projects in the CDM, Carbon Trade Watch website 2014, <http://carbonmarketwatch.org/category/sustainable-development/forestry-land-use-projects/>

¹⁵⁵ Find out more by reading What is Clean Development Mechanism: Global Alliance for Incinerator Alternatives, http://no-burn.org/downloads/GAIA_CDMFactsheet.pdf

X. GETTING INVOLVED, NATIONALLY AND INTERNATIONALLY

1. HOW THE CBD APPLIES TO NATION STATES

Although there is some question about the extent to which different aspects of the CBD are [binding on national governments](#), much of what the CBD does happens at the national level, and depends on effective implementation of domestic policies and regulations by governments.

In particular, each country has to draft a National Biodiversity Strategy and Action Plan (NBSAP), which should be mainstreamed into the planning and activities of all sectors that might impact on biodiversity. National reports are also required at periodic intervals.

Needless to say, national level implementation is very variable, depending on political will, resources, and successful engagement with Indigenous Peoples and local communities. The CBD Alliance's current assessments of implementation include numerous case studies.

National level participation

If you are hoping to influence governments' approach to biodiversity loss you can achieve a great deal at the national level, even if you do not have access to sufficient resources to attend CBD meetings.

Your government's position on CBD negotiations is of course critical, and you may know of many other organizations in your country that you can collaborate with in order to influence that position.

The CBD has issued numerous helpful decisions but [implementation](#) of most of these at the national level has been very weak so far. It is critical that civil society organizations are tracking the issue and ensuring that their governments are held to account at home. It has been found that even though the CBD has issued some 400 decisions, the CBD is hardly known about amongst decision-makers in some countries.¹⁵⁶

On the other hand, campaigns around specific issues like [geo-engineering](#) and the [Aichi targets](#) have demonstrated that CBD decisions can be very useful — if there is a strong national implementation campaign.

Participating in the CBD Alliance

¹⁵⁶ <http://www.globalforestcoalition.org/wp-content/uploads/2010/08/Summary-Forest-and-the-Biodiversity-Convention.pdf>

In order to stay informed you can contact the [CBD Alliance](#), which brings together all those civil society organizations around the world that are focusing on the CBD. This can be an excellent way of enhancing the effectiveness of your group's participation in the CBD process with minimal resources.

If you have access to a computer you should join the CBD Alliance listserve, which enables groups to follow the process in detail and debate it with each other. Other activities, like the production of the Alliance's ECO newsletter and joint position papers, also allow groups to provide inputs into the process, even when they do not have resources to attend CBD meetings. It is mainly a matter of reading and responding to the list, and making the effort to volunteer for writing ECO articles or contributing to joint position papers.

In general, decision-making within the CBD Alliance tends to be more or less by consensus, in that position papers are usually published if no significant objections are made. Officially they are published on behalf of the authors only, but it is understood by all that they have been through a fairly elaborate consultation process with interested participants in the Alliance.

The day-to-day affairs of the CBD Alliance are managed by a [Coordinator](#), who is responsible to the [Board](#).

Participating in CBD negotiations at the international level

If you are able to find the time and resources to participate in international CBD negotiations, you will find that it is a useful and instructive activity. Whilst following the minutiae of negotiations can sometimes be tedious, it does allow you to see and better understand the global context and the positions of other countries.

In particular, participation in the CBD's intergovernmental meetings — which can be facilitated by engaging with the CBD Alliance and/or the International Indigenous Forum on Biodiversity — allows you to:

- Influence the formal decision-making process (especially through meetings of the [inter-sessional bodies](#))
- Reach out to some 1,000 national decision-makers from around the world (especially during Conference of the Parties (COP) meetings, and through CBDA materials)
- Liaise with other civil society members
- Learn from the experiences of people in other countries

Making contact with the CBD Secretariat

It is very useful to liaise with Secretariat staff during meetings about specific text proposals, opportunities for interventions, logistical issues, etc.

Staff from the Secretariat of the CBD are quite approachable. There has also been collaboration on different activities, including the publication of '[Square Brackets].' However, participants from smaller and less well-resourced groups may find it harder to attract the attention of Secretariat staff, unless it is through meetings between the Secretariat and the CBD Alliance. Such a meeting is held at least once every session.

The ICCA Consortium (www.iccaconsortium.org) also has a good relationship with the Secretariat, and regularly co-publishes reports with them.

The International Indigenous Forum on Biodiversity (IIFB)

The [IIFB](#) is a collection of representatives from indigenous governments, indigenous non-governmental organizations, and indigenous scholars and activists that organize around the Convention on Biological Diversity (CBD) and other important international environmental meetings, to help coordinate indigenous strategies at these meetings, provide advice to government parties, and influence the interpretations of government obligations to recognize and respect indigenous rights to traditional knowledge and resources.

Accreditation and financial resources

The CBD's approach to participation is quite relaxed — participation is very open (to those who have the resources to come), and accreditation is never a problem. There have been some difficulties around visas in the past, but both the CBD Alliance and the Secretariat have tried to help in these cases as well.

For Indigenous Peoples there is a voluntary fund that finances up to 20 or even 30 representatives to meetings, although there is stiff competition for these places, and decisions are generally made by the responsible Secretariat staff person, often on the basis of who they already know. For NGOs there are no funding sources.

Other resources

NBSAPs and National Reports for any country can be found easily, using the CBD's '[Search NBSAPs and National Reports](#)' database. Simply select the country, and choose 'order by: dates of receipt' to see the most recent versions.

You can also find full [contact details](#) for National Focal Points for the CBD and its subsidiary bodies on the CBD website.

XI. CREATING EFFECTIVE SOLUTIONS: ICCAS AND COMMUNITY PROTOCOLS

1. INDIGENOUS AND COMMUNITY CONSERVED TERRITORIES AND AREAS (ICCAs)

Even though indigenous peoples already know how to manage the world's ecosystems sustainably, their knowledge is often overlooked by governments seeking ways of conserving biodiversity or dealing with climate change.

Fortunately, the role that indigenous peoples and local communities have played, are playing and should continue to play is increasingly being recognized through the concept of Indigenous and Community Conserved territories and Areas (ICCAs).

An ICCA is an area of forest or another natural area that is being conserved or restored through an initiative that is driven by an indigenous people or local community. There are thousands of ICCAs across the world, and some have been in existence for much longer than government conservation initiatives. In addition, new ICCAs are also being created, in response to new situations (such as climate change).

Formally, an ICCA has three defining characteristics:

- It concerns a people or community that is closely connected to a well-defined territory, area or species
- The community is the major player with respect to making decisions about and managing that territory, area or species, and
- The community management decisions and efforts lead to the conservation of the territory, area or species and associated cultural values.

Most importantly, ICCAs are designed by local people for local people, which means they work really well in terms of their impacts on human rights and social welfare, as well as biodiversity and climate change.

Indeed, ICCAs are more equitable and workable than ['innovative financial mechanisms'](#) proposed by governments, such as biodiversity offsets. There is significant evidence that ICCAs are at least as effective as conventional protected areas in terms of their contribution to the conservation of

biodiversity.¹⁵⁷ Because each ICCA has been or is developed in response to a specific ecosystem and its needs, and addresses the practical, cultural and spiritual needs of the local Indigenous Peoples and communities, they can be extraordinarily effective and long-lasting solutions.

Resources

- [ICCA Consortium website and case studies](#)
- [Community Rights and 'Buen Vivir' as an Alternative to 'Green' Forest Grabbing: a Guide for Communities](#), 2013

¹⁵⁷ Porter-Bolland, L *et al* (2011). Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics. *Forest Ecol. Manage.* (2011), doi:10.1016/j.foreco.2011.05.034. http://www.cifor.org/publications/pdf_files/articles/AGuariguata1101.pdf

2. USING COMMUNITY PROTOCOLS

In all cases where biodiversity conservation projects are being proposed — whatever the nature of the project and whoever is running it — affected indigenous peoples and local communities should be consulted, in accordance with their right to Free, Prior and Informed Consent, as enshrined in the UN Declaration on Indigenous Peoples (UNDRIPs).

Indigenous People have the right to say ‘no’ to a conservation project that impacts their territories and livelihoods. However, to reach the point where they can make a decision about this, communities need to receive full information and have their views heard and addressed.

‘Community Protocols’ offer a way of communicating the full depth and breadth of an indigenous people’s cosmovision, customary laws and territories, and the specific concerns of local communities, especially with respect to their natural resources and traditional knowledge.

These protocols help communities to assert their rights and explain what they are looking for from any proposed projects. They strengthen communities’ negotiating positions. They can also help to guide the design of appropriate conservation projects. These protocols can be written but they could also be in a non-written form (such as on a video).

Community Protocols are already recognized under the CBD. Communities have used them to demand things such as respect for farmers’ and livestock keepers’ rights; the conservation of traditional knowledge about medicinal plants, seeds, and breeds; and the protection of Indigenous territories.

For example:¹⁵⁸

- In South Africa traditional healers are engaging protected areas agencies and biotechnology companies to protect medicinal plants and their associated knowledge.
- In Malaysia indigenous communities are calling on government agencies to respect their rights to land and natural resources.
- In Colombia artisanal gold miners are using a community protocol to guard against unsustainable mining practices.

¹⁵⁸ These examples are provided by Natural Justice.

- In India a range of livestock keepers are using community protocols to protect their migration routes, grazing areas and associated ethno-veterinary knowledge.

Resources

- More information about [Community Protocols and a toolkit](#) can be found at the [Natural Justice website](#).
- [You can also read: Biocultural Community Protocols: Articulating stewardship, Asserting Rights, Affirming Responsibilities](#), also by Natural Justice.
- [Community Rights and 'Buen Vivir' as an Alternative to 'Green' Forest Grabbing: a Guide for Communities](#), 2013.

GLOSSARY

ABS	Access and Benefit Sharing
ACP	African Caribbean and Pacific (ACP) Group
CBD	Convention on Biological Diversity
CBDA	Convention on Biological Diversity Alliance
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO ₂	Carbon dioxide
CMS	Conservation of Migratory Species of Wild Animals
COHAB	Co-operation on Health and Biodiversity guides
COP	Conference of the Parties
COP-MOP	'Conference of the Parties serving as the meeting of the Parties,' that is the COP for the Cartagena Protocol on Biosafety
EEZ	Exclusive Economic Zones
FAO	Food and Agriculture Organization
FPIC	Free, Prior and Informed Consent
GBO	Global Biodiversity Outlook (GBO-3)
GEF	Global Environment Facility
GLISPA	Global Island Partnership
GMO	Genetically Modified Organism
ICARDA	International Center for Agriculture Research in the Dry Areas
ICNP	Intergovernmental Committee for the Nagoya Protocol
IIFB	The International Indigenous Forum on Biodiversity
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
ICCAs	Indigenous Peoples' and Local Community Conserved Areas and Territories
IUCN	International Union for the Conservation of Nature
LMO	Living modified organisms
LMO-FFP	Living modified organisms intended for direct use as food or feed, or for processing
MAT	Mutually Agreed Terms
MEA	Multilateral Environmental Agreement
MDGs	Millennium Development Goals
NBSAP	National Biodiversity Strategy and Action Plan

PES	Payments for Environmental Services
PoWPA	Programme of Work for Protected Areas
REDD+	Reducing Emissions from Deforestation and forest Degradation
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SIDSNet	Small Island Developing States Network
TK	Traditional Knowledge
TRIPS	Trade-Related Aspects of Intellectual Property Rights
SPS	WTO's Sanitary and Phytosanitary Agreement
UNCTAD	UN Conference on Trade and Development
UNCCD	UN Convention to Combat Desertification
UNDRIPs	UN Declaration on Indigenous Peoples
UNEP	UN Environment Programme
UNFCCC	UN Framework Convention on Climate Change
WHC	World Heritage Convention
WGRI	Working Group on Review of Implementation
WTO	World Trade Organization