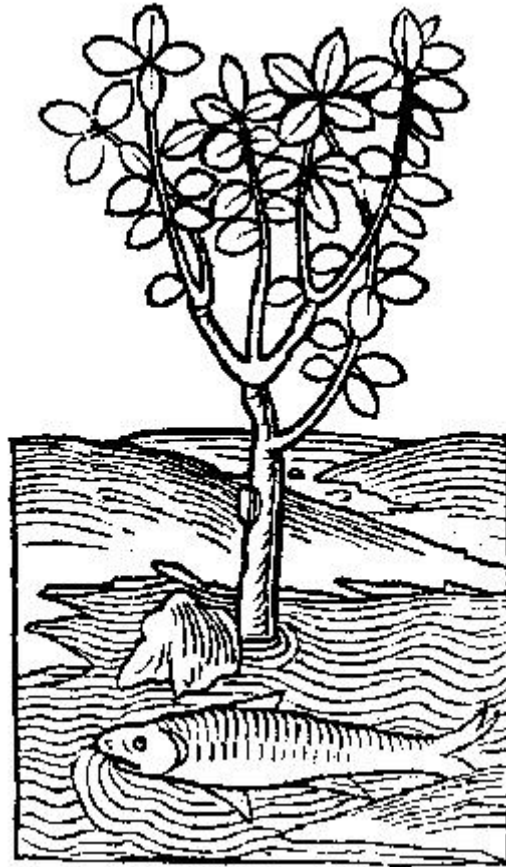


# BioGloss



**A glossary of terms relevant to  
the Convention on Biological Diversity**

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## **BioGloss: A glossary of terms relevant to the Convention on Biological Diversity**

**Abiotic resources:** Natural resources derived from the non-living world, e.g. land, water and air.

**Access and benefit sharing:** The provision of access to genetic resources within a country and the sharing of benefit derived from the use of genetic resources (see Article 15, CBD).

**Adaptive management:** Management practices, technologies and policies that promote the positive and mitigate the negative impacts on biodiversity.

**Alien species:** A species occurring in an area outside of its historically known natural range as a result of intentional or accidental dispersal by human activities (also known as an exotic or introduced species).

**Biodiversity:** Short for biological diversity - means the diversity of life in all its forms: the diversity of species, of genetic variations within one species, and of ecosystems.

**Biodiversity loss:** The loss of species and ecosystems.

**Biological Diversity:** The variability among living organisms from all sources, including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and ecosystem (from Article 2, CBD).

**Biological resources:** Includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value to humanity (from Article 2, CBD).

**Biome:** A major portion of the living environment of a particular region (such as a fir forest or grassland), characterised by its distinctive vegetation and maintained largely by local climatic conditions.

**Biopiracy:** The unauthorized use of genetic resources and the knowledge associated with these genetic resources held by the communities living in the locality by industrial enterprises, mainly pharmaceutical companies.

**Bioprospecting:** The search for plant and animal species from which medicinal drugs and other commercial compounds can be obtained.

**Biosafety:** The regulation, management or control of the risks associated with the use and release of living modified organisms resulting from biotechnology (see Article 8g, CBD).

**Biotechnology:** Any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use (from Article 2, CBD).

**Bio-toxin:** A poisonous substance made by a plant or animal.

**Bt Crops:** Bt stands for *Bacillus thuringiensis*, a bio-toxin derived from soil bacterium. The Bt-toxin gene can be 'engineered' into plants (such as Bt cotton) to kill specific insects.

**Buffer zone:** The region adjacent to the border of a protected area; a transition zone between areas managed for different objectives.

**Bush meat:** The meat from wild animals (see Decision VI/7).

**Carrying capacity:** The maximum number of people, or individuals of a particular species, that a given part of the environment can maintain indefinitely.

**Codex Alimentarius:** (Latin for "food code" or "food book.") A collection of internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety.

**Co-management:** The sharing of authority, responsibility and benefits between government and local communities in the management of natural resources.

**Contained use:** Any operation, undertaken within a facility, installation or other physical structure, which involves living modified organisms that are controlled by specific measures that effectively limit their contact with, and their impact on, the external environment (from Article 2, Cartagena Protocol).

**Conservation:** The management of human use of nature so that it may yield the greatest sustainable benefit to current generations while

maintaining its potential to meet the needs and aspirations of future generations.

**Conservation of biodiversity:** The management of human interactions with genes, species, and ecosystems so as to provide the maximum benefit to the present generation while maintaining their potential to meet the needs and aspirations of future generations; encompasses elements of saving, studying, and using biodiversity.

**Coral Bleaching:** The whitening of corals, due to stress-induced expulsion or death of algae-like protozoa (micro-organisms), or due to the loss of pigmentation within the protozoa.

**Country of origin of genetic resources:** The country which possesses those genetic resources in in-situ conditions (from Article 2, CBD).

**Country providing genetic resources:** The country supplying genetic resources collected from in-situ sources, including populations of both wild and domesticated species, or taken from ex-situ sources, which may or may not have originated in that country (from Article 2, CBD).

**Cultural diversity:** Variety of human social structures, belief systems and strategies for adapting to situations in different parts of the world. Language is a good indicator of cultural diversity, with over 6,000 languages currently being spoken.

**Depositary:** The authority who holds the instruments of ratification. In the case of the CBD, the Secretary-General of the United Nations.

**Domesticated or cultivated species:** Species in which the evolutionary process has been influenced by humans to meet their needs (from Article 2, CBD).

**Deoxyribonucleic Acid (DNA):** The storehouse of biological information in living things, and the carrier of hereditary information.

**Drivers of biodiversity loss:** The key causes of biodiversity loss, which include one or more of the following: human population growth; urban sprawl and intensive agriculture and forestry encroach on habitats; extension of road, rail and electricity networks; overexploitation of natural resources; pollution affecting the health of animals and plants; environmental disasters such as oil spills; climate change; and invasive alien species.

**Ecology:** A branch of science concerned with the interrelationship of organisms and their environment; the study of ecosystems.

**Ecosystem:** A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (from Article 2, CBD).

**Ecosystem approach:** A strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

**Ecosystem diversity:** The variety of ecosystems that occurs within a larger landscape, ranging from biome (the largest ecological unit) to microhabitat.

**Ecosystem services:** Processes by which the environment produces benefits useful to people, akin to economic services (e.g. provision of clean water and air).

**Eco-Tourism:** Travel undertaken to witness sites or regions of unique natural or ecologic quality, or the provision of services to facilitate such travel that has the least impact on biological diversity and the natural environment.

**Endangered species:** A technical definition used for classification referring to a species that is in danger of extinction throughout all or a significant portion of its range. IUCN The World Conservation Union defines species as endangered if the factors causing their vulnerability or decline continue to operate.

**Endemic species:** Species that are unique to a particular geographic location, such as a specific island, habitat, nation or other defined zone.

**Evolution:** Any gradual change. Organic evolution is any genetic change in organisms from generation to generation.

**Export:** The intentional transboundary movement (of a living modified organism) from one Party to another Party (from Article 2, Cartagena Protocol).

**Exporter:** Any legal or natural person, under the jurisdiction of the Party of export, who arranges for a living modified organism to be exported (from Article 2, Cartagena Protocol).

**Ex situ:** Off site; away from natural situation or location.

**Ex-situ conservation:** The conservation of components of biological diversity outside their natural habitats (from Article 2, CBD).

**Extinction:** The evolutionary termination of a species caused by the failure to reproduce and the death of all remaining members of the species; the natural failure to adapt to environmental change.

**Farmers rights:** Rights arising from the past, present and future contributions of farmers in conserving, improving and making available plant or animal genetic resources.

**Fauna:** All of the animals found in a given area.

**Flora:** All of the plants found in a given area.

**Gene:** The functional unit of heredity; the part of the DNA molecule that encodes a single enzyme or structural protein unit.

**Gene bank:** A facility established for the ex situ conservation of individuals (seeds), tissues, or reproductive cells of plants or animals.

**Genetically Modified Organism (GMO):** Any plant, animal, micro-organism or virus which has been genetically engineered or modified (see also Living modified organism).

**Genetic diversity:** The variety of genes within a particular population, species, variety, or breed.

**Genetic material:** Any material of plant, animal, microbial or other origin containing functional units of heredity (from Article 2, CBD).

**Genetic resources:** Genetic material of actual or potential value (from Article 2, CBD).

**Global Biodiversity Outlook 2:** A report produced in 2006 that assesses the status and trends of biodiversity and the key drivers of biodiversity loss.

**Global Taxonomy Initiative:** A programme of capacity building on taxonomy to remove or reduce the "taxonomic impediment" (see definition) to the sound management of biodiversity (see Decision VII/20).

**Grassroots (organizations or movements):** People or society at a local level, rather than at the centre of major political activity.

**Habitat:** A place or type of site where an organism or population naturally occurs (from Article 2, CBD).

**Habitat degradation:** The diminishment of habitat quality, which results in a reduced ability to support flora and fauna species.

**Habitat fragmentation:** Fragmentation of habitats occur when a single habitat has become divided into separate, often isolated small patches interspersed with other habitats. Small fragments of habitats can only support small populations of fauna and these are more vulnerable to extinction.

**Habitat loss:** The outcome of a process of change in which a "natural" habitat-type is removed and replaced by another habitat-type, such as converting natural areas to production sites. In such processes, flora and fauna species that previously used the site are displaced or destroyed.

**Hotspot:** An area on earth with an unusual concentration of species, many of which are endemic to the area, and which is under serious threat by people.

**Human Genome Project:** An international project to identify the entire genetic material (every gene) of all human beings.

**Import:** The intentional transboundary movement (of a living modified organism) into one Party from another Party (from Article 2, Cartagena Protocol).

**Importer:** Any legal or natural person, under the jurisdiction of the Party of import, who arranges for a living modified organism to be imported (from Article 2, Cartagena Protocol).

**Indicator species:** A species whose status provides information on the overall condition of the ecosystem and of other species in that ecosystem.



**Indigenous and local communities:** A term found in Article 8j of the Convention, now generally considered to be superseded by the term Indigenous Peoples (see below).

**Indigenous people:** A term now superseded by the term Indigenous Peoples (see below)

**Indigenous Peoples:** A politically underprivileged group who share a similar ethnic identity different to the nation in power, and who have been an ethnic entity in the locality before the present ruling nation took over power. May also be used to denote particular peoples and groups around the world who, as well as being native to or associated with some given territory, meet certain other criteria (such as having maintained at least in part their distinct linguistic, cultural, and social/organizational characteristics, and/or who are self-identified as indigenous and/or those recognized as such by other groups).

***In situ:*** In the original position or place.

***In-situ conditions:*** Conditions where genetic resources exist within ecosystems and natural habitats, and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties (from Article 2, CBD).

***In-situ conservation:*** The conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties (from Article 2, CBD).

**Instruments to protect biodiversity:** The Convention on Biological Diversity (CBD) is generally considered to be the principal international instrument (international treaty) for the conservation and sustainable use of biodiversity. Other instruments include the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Convention on the Conservation of Migratory Species of Wild Animals (CMS); the Convention on Wetlands of International Importance, Especially as Waterfowl Habitats (RAMSAR) and the World Heritage Convention (WHC).

**Integrated marine and coastal area management (IMCAM):** A participatory process for decision making to prevent, control, or mitigate adverse impacts from human activities in the marine and coastal

environment, and to contribute to the restoration of degraded coastal areas (see Decision VI/3).

**Intellectual property rights:** Rights enabling an inventor to prevent imitators from copying the invented product for a certain period of time.

**Invasive species:** Those that are introduced – intentionally or unintentionally – to an ecosystem in which they do not naturally appear and which threaten habitats, ecosystems, or native species. These species become invasive due to their high reproduction rates and/or by competing with and displacing native species that naturally appear in that ecosystem.

**Inventory:** On-site collection of data on natural resources and their properties.

**Landrace:** A crop cultivar or animal breed that evolved with and has been genetically improved by traditional agriculturalists, but has not been influenced by modern breeding practices.

**Land use:** Refers to how a specific piece of land is allocated, its purpose, need or use.

**Liability (and redress):** The obligation under the applicable law to provide for compensation for damage resulting from an action for which that person is deemed to be responsible. Liability and redress in the context of the Cartagena Protocol concerns the question of what would happen if the transboundary movement of living modified organisms has caused damage (see Article 14(2), CBD and Decision VI/11).

**Living modified organism (LMO):** Any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology (see Article 8g, CBD) (see also Genetically modified organism).

**Living organism:** Any biological entity capable of transferring or replicating genetic material, including sterile organisms, viruses and viroids (from Article 2, Cartagena Protocol).

**Major threats** to biodiversity: see drivers of biodiversity loss.

**Marine protected area:** An area of sea (or coast) especially dedicated to the protection and maintenance of biological diversity, and of natural and

associated cultural resources, and managed through legal or other effective means.

**Microorganism:** A microscopic organism, e.g. a bacterium, virus or fungus.

**Migratory species:** Species that migrate from one location to another.

**Millennium Ecosystem Assessment (MA):** A scientific appraisal of the condition and trends in the world's ecosystems and the services they provide, as well as the scientific basis for action to conserve and use them sustainably.

**Mitigating measures:** Measures that allow an activity with a negative impact on biodiversity, but reduce the impact on site by considering changes to the scale, design, location, process, sequencing, management and/or monitoring of the proposed activity.

**Modern biotechnology:** The application of:

- a. *In vitro* nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles; or
- b. Fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection (from Article 2, Cartagena Protocol).

**National Biodiversity Strategy and Action Plan:** A plan developed by each Party to the Convention on Biological Diversity (under Article 6a) for the conservation and sustainable use of biological diversity within their territorial responsibility.

**Native species:** Flora and fauna species that occur naturally in a given area or region; also referred to as indigenous species.

**Natural environment:** The natural environment comprises all living and non-living things that occur naturally on Earth. In its purest sense, it is thus an environment that is not the result of human activity or intervention.

**Natural resources:** Natural resources are often classified into renewable and non-renewable resources. Renewable resources are generally living resources (fish, coffee and forests for example), which can restock (renew) themselves if they are not overharvested.

**Non-Governmental Organization (NGO):** A non-profit group or association organised outside of institutionalised political structures to realise particular social objectives (such as environmental protection).

**Novel Organism** (or food): A term used to describe an organism or food that has been genetically engineered or modified.

**Organism:** An individual animal, plant, or single-celled life form.

**Overexploitation:** Overexploitation occurs when harvesting of specimens of flora and fauna species from the wild is out of balance with reproduction patterns and, as a consequence, species may become extinct.

**Participatory rural appraisal (PRA):** An approach for conducting action-oriented research in developing countries; used to help involve villagers and local officials and leaders in all stages of development work, from the identification of needs and the decision making to the assessment of completed projects.

**Patent:** A government grant of temporary monopoly rights on innovative processes or products.

**Population viability analysis (PVA):** Estimation of the likelihood of a population's extinction and indication of the urgency of recovery efforts, and identification of key life stages or processes that should be the focus of recovery efforts.

**Precautionary Principle:** A principle whereby if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is *not* harmful falls on those who advocate taking the action. The principle implies that there is a social responsibility to protect the public from exposure to harm when scientific investigation has found a plausible risk; these protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result.

**Prior Informed Consent:** Consent that is required for accessing genetic resources or the associated knowledge held by communities living in the locality; requires communities to be informed of all consequences of granting such permission.

**Protected area:** A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives.

**Public Domain:** Refers to the knowledge that is freely available, commonly shared throughout the world without any access restrictions. In the context of Intellectual Property, this term refers to knowledge that is beyond the realm of protection of intellectual property rights.

**Recombinant DNA Technology:** Technology that has allowed the transfer of already existing genes from one organism to another with special carriers or vectors, such as bacteria and viruses.

**Red List:** The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on taxa that have been globally evaluated using the IUCN Red List Categories and Criteria.

**Regional economic integration organization:** An organization constituted by sovereign States of a given region, to which its member States have transferred competence in respect of matters governed by the Convention on Biological Diversity and which has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to it (from Article 2, CBD).

**Rehabilitation:** The recovery of specific ecosystem services in a degraded ecosystem or habitat.

**Restoration:** The return of an ecosystem or habitat to its original community structure, natural complement of species, and natural functions.

**Risk Assessment:** An approach taken by scientists, governments and companies to consider the safety of a new technology.

**Seedbank:** A facility designed for the ex-situ conservation of individual plant varieties through seed preservation and storage.

***Sine qua non*:** An indispensable and essential action, condition, or ingredient (see SBSTTA recommendation II/2).

**Species:** A group of organisms capable of interbreeding freely with each other but not with members of other species.

**Species diversity:** The number and variety of species found in a given area in a region.

**Succession:** The more or less predictable changes in the composition of communities following a natural or human disturbance.

***Sui generis* systems:** One that is of its own kind. In this case it refers to the creation of a new national law or the establishment of international norms that would afford protection to intellectual property dealing with genetic resources -or biodiversity - and the biotechnology that might result.

**Sustainable development:** Development that meets the needs and aspirations of the current generation without compromising the ability to meet those of future generations.

**Sustainable use:** 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 (from Article 2, CBD).

**Taxon (pl. taxa):** Any group or rank in a biological classification into which related organisms are classified; a taxonomic unit in the biological system of classification of organisms, for example: a phylum, order, family, genus or species.

**Taxonomic impediment:** The shortage of taxonomists available to inventory and characterize the world's biodiversity.

**Taxonomy:** The classification of animals and plants based upon natural relationships.

**Technology:** Includes biotechnology (from Article 2, CBD).

**Terminator Gene:** A patented gene technology that modifies plants so that they become sterile, such that the seed produced by the parent crop does not grow.

**Threatened species:** A technical classification referring to a species that is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range.

**Traditional cultural practices:** Refers to the manifestation of a culture or sub-culture especially in regard to the traditional and customary practices of a particular ethnic or other cultural group (see Art 10c, CBD).

**Traditional knowledge:** Knowledge gained through tradition or anecdote (see Decision VI/10). In the context of the CBD, a “term used to describe a body of knowledge built by a group of people through generations living in close contact with nature.” The term has been widely elaborated by the World Intellectual Property Organization.

**Transboundary movement:** The movement of a living modified organism from one Party to another Party, save that for the purposes of Articles 17 and 24 transboundary movement extends to movement between Parties and non-Parties (from Article 2, Cartagena Protocol).

**Viable populations:** (See Article 8d, CBD).

**Wild species:** Organisms captive or living in the wild that have not been subject to breeding to alter them from their native state.

**Wildlife:** Living, non-domesticated animals. Some experts consider plants also as part of wildlife.

