

## GLOSSARY

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**Accountability mechanisms:** Means that incentivize organizations or individuals to take responsibility toward their constituents for their actions.

**Advanced market commitment:** A binding contract that provides a market once a product has been developed.

**Afrotropics:** The tropical belt in Africa, south of the Sahara Desert.

**Age- or aging-in-place:** Characterized by a focus on keeping individuals in their residence rather than moving them to specialized facilities for care.

**Agribusiness:** Agricultural activities conducted for commercial purposes and the companies involved in this industry.

**Agroecology:** The ecological study of agricultural landscapes.

**Agroforestry:** A method of farming that involves growing herbaceous and tree crops together to preserve or enhance the productivity of the land.

**Agrofuel:** Fuel that is produced from renewable resources, including plant biomass and vegetable oils, such as biogas or biodiesel. See also **biofuel**.

**Analogous:** Similar to; comparable to.

**Anthropogenic:** Resulting from humans or human activities.

**Ape management plan:** A document that outlines objectives for conserving a particular ape habitat and ways to achieve those objectives.

**Aquifer recharge:** The process by which surface water moves downward to groundwater.

**Autonomous region:** An administrative division of a country that has a degree of autonomy, meaning that it is free to make decisions on certain matters of public policy without approval from central authority.

**Bimaturism:** Development characterized by differing stages or timings within a species or within a sex; among orangutans, mature males are flanged or unflanged (see **flanged**).

**Biodiversity:** The variety of plant and animal life on Earth or in a particular habitat.

**Biodiversity offset:** Conservation activities that are designed to foster biodiversity in compensation for environmental damage caused by development projects.

**Biofuel:** Fuel produced from living organisms, most often plants or plant-derived materials; one example is bioethanol, an alcohol made by fermenting carbohydrates in crops such as corn or sugarcane. See also **agrofuels**.

**Biofuel feedstock:** Materials that are used to produce biofuel.

**Biomass:** The biological material of living (or recently living) organisms in a given area of an ecosystem at a given time; in the context of energy, a source of renewable energy derived from organisms, either alive or dead (see **biofuel**).

**Brachiation:** Arboreal locomotion that relies exclusively on the arms to propel the body forward.

**Brownfield site:** Land previously used for industrial or commercial purposes.

**Business-as-usual model:** A standard economic theory that discounts future earnings in favor of short-term profit-making.

**Cambium:** In woody plants, the layer that lies between the bark and wood of the stem.

**Carbon fixation:** The process by which inorganic carbon is converted into organic compounds, such as the conversion of carbon dioxide into glucose through photosynthesis.

**Carbon neutrality:** The state of net zero carbon emissions achieved by individuals or organizations that balance the amount of carbon they release with an equivalent amount sequestered, offset or bought in the form of carbon credits.

**Carbon sequestration:** The trapping of carbon by plants during the photosynthesis process.

**Carbon sink:** A natural or artificial store that absorbs more carbon than it releases, such as forests, soil and oceans.

**Carbon storage:** The process of capturing carbon dioxide from the atmosphere to mitigate global warming and other effects of high-carbon emission.

- Catchment:** An area that collects rainwater.
- Civil society:** The total array of non-governmental organizations that undertake collective activities in the name of particular communities or to further specific interests.
- Class action:** A lawsuit filed or defended by an individual who represents a group.
- Climate change:** Change in the Earth's weather on a regional or global scale, including fluctuations in wind patterns and rainfall, and especially with reference to rising temperatures in the earth's atmosphere, as caused by an increased production of greenhouse gases since the mid-20th century. See also **greenhouse gas**.
- Cloud computing (or cloud technology):** The use of a network of remote servers hosted on the Internet to store, manage and process data.
- Cognitive bias:** A lack of objectivity in information processing or reasoning that affects decision-making or other behavior, typically used to describe negative biases or those that lead to error.
- Commodities:** Raw materials or primary agricultural products that can be traded commercially.
- Communal title to land:** Statutory recognition of a community's rights to access, use and control of an area of land.
- Compaction:** The process of densely packing together, typically used to describe the compression of soil; the reduction in habitat available to wildlife, see **compression effect (or crowding effect)**.
- Compliance mechanism:** An official procedure through which government institutions (such as a regional agency, ministry or international organization) can check whether its officials or external actors adhere to binding rules and regulations. These procedures are normally specified in the same document that sets out the relevant rules (such as codes, implementing regulations and founding treaties).
- Compression effect (or crowding effect):** The process by which habitat disturbance and loss leads to greater population density within a particular area and reduced possibilities for species dispersal. See also **refugee crowding**.
- Concession:** A relatively large area of land that is allocated to agricultural investors for the industrialized production of crops, generally by a government.
- Concessionaire:** A group or company to whom a land concession has been granted to operate a business.
- Conflict threshold:** The point at which challenging situations turn into conflict.
- Conservation corridor:** A strip of natural habitat that connects two or more larger blocks of natural habitat, and that is left in place (or created) to enable roaming and dispersal of wildlife species and thereby to enhance or maintain the viability of specific wildlife populations.
- Conspecific:** A member of the same species.
- Cover crop:** A low-growing plant crop that is cultivated for the protection and enrichment of the soil.
- Crop raiding:** The movement of wild animals from their natural habitat into agricultural landscapes for the purpose of feeding on cultivated produce.
- Crop residue:** Plant materials that are left behind after harvesting, including leaves, stalks and roots.
- Crude palm oil:** Pre-purified oil that is extracted from the kernel and still contains trace metals, kernel shell pieces and products of oxidation. The purification process removes these components and makes the palm oil edible and salable.
- Cultivar:** A plant variety produced by selective breeding.
- Customary occupancy:** Use of an area of land by a group of people based on long-established, traditional patterns or norms.
- Deciduous:** Pertaining to trees that lose their leaves for part of the year.
- Depauperate:** Lacking in numbers or variety of species.
- Developed countries:** Industrialized countries that rank high on the Human Development Index.
- Developing countries:** Non-industrialized countries.
- Dichromatic:** Exhibiting two color variations independent of sex and age.
- Dimorphic:** Having two distinct forms.
- Dipterocarp:** A tall hardwood tree of the family *Dipterocarpaceae* that primarily grows in Asian rainforests and that is the source of valuable timber, aromatic oils and resins.

**Diurnal:** Daily or active during the day.

**Downstream firm:** A business that purchases products made by other companies, rather than the natural resources directly from the source.

**Drone:** An unmanned aerial vehicle.

**Ecological gradient:** Gradual change in abiotic factors, such as altitude, temperature, depth, ocean proximity and soil humidity, through space or time.

**Ecological viability:** The ability of an ecosystem or specific functions of the ecosystem to sustain themselves.

**Endangered:** Threatened with extinction.

**Endemic:** Native to or only found in a certain place; indigenous.

**Energy balance:** The relationship between the amount of energy consumed in food and the amount of energy used by the body for daily energy requirements.

**Environmental impact assessment (EIA):** An analytical tool used to assess the potential environmental impact of a project, development or policy.

**Escarpment:** The edge of a mountain range or cliff along a fault line.

**Eutrophication:** A state that is caused by an increase in natural or artificial nutrients in a body of water and that results in the unhindered growth of plants and algae and, consequently, the depletion of oxygen, which may lead to the death of fish and aquatic animals and a reduction in biodiversity.

**Evergreen:** Of trees and other plants, having green leaves throughout the year, as leaves of the past season are not shed until after new foliage has grown.

**Executive:** The branch of government responsible for putting parliamentary decisions and laws into effect.

**Expropriation:** The taking of land owned or used by individuals or communities by a government, in most instances to be used for “public interest” purposes.

**Fallback foods:** Food items that are always available but that are not preferred.

**Fauna:** Animals (members of the Animal Kingdom).

**Faunal transect method:** A survey technique designed to establish the density and distribution of wildlife by counting animals and animal signs along line transects.

**Fission–fusion:** Pertaining to communities whose size and composition are dynamic due to the coming together (fusion) and moving away (fission) of individuals.

**Flagship species:** A species selected to raise the profile of a particular habitat, issue, campaign or environmental cause so as to leverage greater support for biodiversity conservation at large.

**Flanged:** Pertaining to one of two morphs of adult male orangutan; characterized by large cheek pads, greater size, a long coat of dark hair on the back and a throat sac used for “long calls,” as opposed to “unflanged.”

**Flood buffer:** An area or strip of land that is forested or planted with shrubs and grass, and that is located between cropland or pasture and surface water courses to protect water quality, reduce erosion and minimize flooding.

**Flora:** Plants (members of the Plant Kingdom).

**Folivore:** An animal that eats primarily leaves. Related terms: folivorous, folivory.

**Forest stand:** A large number of trees growing in a specific area and recognizably uniform in species composition, size, age, arrangement or condition so as to be distinguishable from the forest or other growth in adjoining areas.

**Frugivore:** An animal that eats primarily fruit. Related terms: frugivorous, frugivory.

**Functional connectivity:** The degree to which the land that divides and separates natural habitats facilitates or impedes the habitats’ ability to maintain ecological viability, allow movements of animals and perform ecosystem functions.

**Fungible:** Having multiple end uses, such as crops, which allows businesses to hedge against lower demand and prices in one sector by selling the same product to consumers in another sector.

**G20:** The Group of Twenty, an international forum for the governments and central bank governors of 20 major economies.

**Genetic drift:** Variation in the relative frequency of different genotypes (an individual’s collection of genes) in a small population, due to the disappearance or loss of specific genes.

**Genus (plural: genera):** A principal taxonomic category that ranks above species and below family and that groups together closely related species; the first word of a species' scientific name.

**Greenhouse gas (GHG):** A gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone.

**Gross concession area:** In agricultural terms, the entire area awarded to a company, as opposed to the actual area on which crops are grown.

**Gross domestic product (GDP):** The total monetary value of all final goods produced and services provided within a country annually.

**Habitat degradation:** A reduction in the quality of a habitat such that it can no longer optimally support its fauna and flora. Natural degradation is generally localized in time and space, such as damage due to earthquakes, floods or landslides; in contrast, human-caused degradation can be irreversible and widespread, as is predominantly the case with degradation caused by industrial expansion.

**Habitat fragmentation:** A reduction in the size and continuity of an organism's preferred or required environment, resulting in patches of habitat. Natural fragmentation is generally localized and may be caused by storms or fire; fragmentation due to human activities can be extensive.

**Habituation:** The process by which wildlife becomes accustomed to the presence of humans.

**Herbivore:** An animal that eats only plants. Related terms: herbivorous, herbivory.

**High carbon stock (HCS):** Pertaining to natural habitats that have at least 35 tons of above-ground biomass.

**High conservation value (HCV):** Pertaining to natural habitats that are of critical importance due to their high biological, socioeconomic or landscape value.

**Hybrid:** The offspring of two different species or varieties of plant or animal; something that is formed by combining different elements.

**Hydrological:** Related to water.

**Industrial agriculture (or industrial farming, intensive agriculture or farming, plantation agriculture, large-scale agriculture and commercial farming):** A method of intensive crop production that is characterized by large monoculture farms and plantations that rely heavily on chemicals, pesticides, herbicides, fertilizers, intensive water use, and large-scale transport, storage and distribution infrastructure.

**Infanticide:** The act of killing an infant.

**Infraction:** A violation or infringement of a law or regulation.

**Infrastructure:** The basic physical and organizational structures and facilities needed for the operation of a society or enterprise.

**Insolation:** The amount of sunlight and solar radiation.

**Intact forest landscape:** An unbroken area of natural forest ecosystems that shows no signs of significant human activity and that is large enough to maintain all native biodiversity.

**Interbirth interval:** The biologically determined period of time between subsequent births.

**Intergroup:** Between groups.

**Intraspecific:** Within one species or among members of the same species.

**Joint venture agreement:** A business arrangement by which two or more parties decide to pool their resources for the purpose of accomplishing a specific task while retaining their distinct identities. Parties exercise control over the enterprise and consequently share profits, losses and costs.

**Judicial proceeding:** Any action involving or carried out in a court of law in order to determine or enforce legal rights.

**Judicial review:** An official procedure that is set out by the law and that permits competent national courts to check the legality of decisions made by state institutions. A decision under review may be deemed illegal if it was made or carried out in contravention of required procedures, the state constitution and other primary legislation.

**Karst:** A landscape formed through the dissolution of soluble rocks, such as limestone, dolomite and gypsum, and characterized by underground drainage systems with sinkholes, dolines and caves.

**Keystone species:** A species that plays a crucial role in the way an ecosystem functions, and whose presence and role has a disproportionately large effect on other organisms within the ecosystem.

**Land acquisition:** The concession, lease or purchase of land from a government or government entity by a third party, either public or private, for commercial use.

**Land bank:** The entirety of awarded concession land that a company can potentially develop.

**Land tenure:** Rules defining how rights to land are to be allocated within a specific society; they define how access is granted to rights to use, control and transfer land, as well as associated responsibilities and restraints.

**Leaching:** The process whereby water-soluble plant nutrients are lost from the soil due to rain and irrigation. Leaching can result in the contamination of groundwater if chemicals, such as those in fertilizers and pesticides, are dissolved and carried into the underground water supply.

**Least developed country (LDC):** A United Nations classification for countries that exhibit the lowest indicators of socioeconomic development.

**Legal framework:** System of laws and rules that governs and regulates a specific policy area.

**Legal person:** An entity, such as a corporation, non-governmental organization or administrative agency, that has legal rights and is subject to obligations.

**Low bandwidth:** Bandwidth defines the amount of data that can be sent or received over an electronic channel during a specific period of time. Low bandwidth services, such as dial-up Internet, are typically slow and may require a dedicated phone line for connection. They typically do not allow for uninterrupted video or audio streaming and file downloads and uploads are slow.

**Low-carbon-density land:** An area that has little biomass, such as fields of low-growing agricultural crops, grasslands and degraded forests in which only small trees, scrub or grass remains, as opposed to primary rainforest, which is high-carbon-density land.

**Mantrap:** A type of snare that is large enough to catch a human, such as a poacher, but may also be used to hunt other animals. The most common type is a large foothold trap whose springs are armed with metal teeth that close on the victim's leg.

**Mast fruiting:** The simultaneous production of fruit by large numbers of trees every 2–10 years, without any seasonal change in temperature or rainfall.

**Medium spatial resolution:** Satellite image quality in which each pixel represents an area of 20–100 m<sup>2</sup>.

**Mega-farms:** Very large, highly mechanized industrial farms; in livestock farming, also known as “factory farms.”

**Metapopulation:** A group of spatially separated populations of the same species that interact at some level.

**Mitigation hierarchy:** A tool that guides users toward minimizing the negative impact of development projects on biodiversity; often used as a precursor to **biodiversity offsets**.

**Mobbing:** Animal group behavior that involves surrounding and attacking a predator or other threat, in order to chase it off.

**Monoculture:** The cultivation of a single crop in a given area.

**Monodominant:** Dominated by a single species.

**Monogamy:** The practice of having a single mate over a period of time.

**Monotonous forest:** Forest ecosystems of similar type that extend over large areas.

**Moratorium (plural: moratoria):** A temporary prohibition of an activity.

**Morph:** A distinct form of an organism or species.

**Mosaic landscape:** A geographic area that encompasses a variety of land use types, such as urban, natural, industrial and agricultural.

**Neopatrimonial:** Characterized by a system of social hierarchy in which powerful patrons or parties use or distribute state resources to secure the loyalty of clients in the general population.

**Neotropics:** The tropical belt in the Americas.

**Nest census:** A research method for counting individuals indirectly by recording the number of nests in a given area and estimating population numbers based on these nest counts.

**Normative arrangements:** Laws or regulations that tell relevant actors what to do, and how to behave in certain situations.

**Obligate crop feeder:** An individual who depends entirely on foraging on crops for survival; in contrast, a semi-obligate crop feeder depends on crops along with other natural food types for survival.

**Old-growth forest:** Unlogged primary forest.

**Ombrogenous, domed peat swamp:** Peat that forms above groundwater level, highly acidic and dependent on rain-water for mineral nutrients. In the tropics these bog forests can form extensive domes more than 10 km in diameter.

**Opportunity cost:** Loss of income or benefit based on forgoing alternative options.

**Outgrower scheme:** The contracting of small-scale farms to sell some portion of their harvest to a buyer, often a large estate. See also **smallholder farm**.

**Parasite:** An organism that lives off or in another organism, to the detriment of the host organism.

**Patrilineal:** Related to or inheriting from the paternal side.

**Pelage:** Fur; coat.

**Perforated forest:** Forest in which there are relatively small, usually man-made, clearings.

**Petiole:** The stalk that joins a leaf to a stem.

**Philopatric:** The tendency of an organism to stay in, or return to, its home area.

**Photosynthesis:** The process that plants and some other organisms use to convert sunlight into food or other forms of chemical energy.

**Physiochemical:** Relating to physiological chemistry, or biochemistry, the chemical processes that occur in living organisms.

**Pith:** The spongy tissue in the stems and branches of many plants.

**Pleistocene Era:** The time period starting about 1.8 million years ago and lasting until just under 12,000 years ago.

**Pleistocene refugium:** A favorable area in which species survived periods of glaciation during the Pleistocene Era.

**Poaching:** Illegal hunting.

**Polyandrous:** Pertaining to a mating system that involves one female and two or more males.

**Polygynandrous:** Pertaining to an exclusive mating system that involves two or more males and two or more females. The numbers of males and females may not be equal.

**Polygynous:** Pertaining to a mating system that involves one male and two or more females.

**Preputial:** Relating to the foreskin or clitoral hood.

**Primary forest:** A natural forest of native tree species that lacks evidence of human activities and whose natural ecological processes are not significantly disturbed.

**Public interest litigation:** Legal action taken to advance the cause of a specific community or group, or issues of broad public concern.

**Raindrop energy:** The (kinetic) energy of falling raindrops.

**Ramsar wetlands:** Wetlands designated under the Convention on Wetlands, known as the Ramsar Convention, an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

**Ratify:** To sign or give formal consent to an agreement such as a treaty or contract, thereby formalizing its validity.

**REDD+:** Reducing Emissions from Deforestation and Forest Degradation (REDD) plus, a United Nations initiative that goes beyond reducing emissions and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

**Redress:** Remedy or compensation for a wrong suffered.

**Refugee crowding:** The in-migration of individuals from areas of destroyed habitat or significant disturbance, resulting in crowded conditions in the remaining suitable habitat. See also **compression effect**.

**Regeneration:** The restoration or new growth of a forest or other vegetation that had been degraded or destroyed.

**Regulatory framework:** System of regulations that govern a specific policy area.

**Rent-seeking behaviour:** A company or organization's use of local resources to obtain an economic gain without reciprocating any benefits back to the community.

**Riparian forest:** A forest that grows along riverbanks.

**Risk-mitigation tools:** Actions and procedures designed to reduce exposure to the adverse effects of any given investment project.

**Roundtable on Sustainable Palm Oil (RSPO):** An association that brings together different market players to develop and implement global standards for sustainable palm oil.

**Sanction:** A penalty for violating a law or a rule.

**Secondary forest:** A forest that regenerates on the remains of native forests that have been cleared due to natural causes or human activity, such as agriculture.

**Sedimentation:** The process by which particles found in fluid settle and come to rest against a barrier.

**Semi-deciduous:** Relating to plants that lose their leaves for a very short period, when old leaves fall off and new growth is starting.

**Sequester:** To capture and store.

**Silvicultural treatment:** The practice of controlling the establishment, growth, composition, health and quality of forests to meet diverse needs and values (including practices such as enrichment planting, weeding, vine cutting, thinning and pruning).

**Slash-and-burn agriculture:** A farming technique that involves cutting and burning an area of forest or vegetation before planting. This technique is often associated with poor soil that is only cultivated for a few seasons before a new area of forest or vegetation is cut and burned to create new plots.

**Smallholder farm:** A small-scale plot, often less than 1 ha but sometimes up to 10 ha, cultivated both for subsistence purposes and to grow a limited number of cash crops.

**Solitary apes:** Apes who live alone or in isolation from other members of their species.

**Spatial factor:** A factor that relates to geography, topography or location.

**Split-listing:** A legal or regulatory status that recognizes some members of a species or population in a particular category, but not others, such as threatened versus endangered species with regard to extinction risk.

**Stochastic:** Occurring in a random pattern.

**Sympatric:** Pertaining to species or populations that occupy the same geographic ranges.

**Taxon (plural: taxa):** Any unit used in the science of biological classification or taxonomy.

**Temporal factor:** A factor that relates to time or season.

**Topogenous peat swamps:** Peat that forms in valley bottoms or other depressions as a result of poor drainage; they are usually slightly alkaline or neutral and receive mineral nutrients from runoff and seasonal flooding as well as rainwater.

**Translocation:** The human act of moving a living organism from one area to another.

**Understory:** Vegetation growing beneath the canopy of a forest.

**Upstream production:** Industrial growing of primary commodities, which are then processed by other firms.

**Virology:** The study of viruses.

**Water table:** The highest underground level below which the ground is completely saturated with water.

**Wean:** To accustom a young animal to nourishment other than the mother's milk.

**Wildlife corridors:** A strip of natural habitat that can be used by wildlife to move from one larger area of habitat to another.

**Yield intensification:** The process of increasing and intensifying the production of natural, agricultural or industrial products, particularly through improved practices that result in increased growth or production within an existing area, rather than through the expansion of cultivated land.

**Zoonosis or zoonotic disease:** An infectious disease that can be transmitted from non-human animals to humans.