

## Terms

### Biological Diversity

The variability among living organism from all sources including terrestrial, marine and aquatic ecosystems and ecological complexes of which they are part. This includes diversity within species, between species and ecosystems.

### BIOLOGICAL RESOURCE

Includes genetic resources, organism or parts thereof, population, or any other biotic component of ecosystem with actual or potential use or value humanity.

### CANOPY

A continuous cover of branches and foliage formed collectively by the crowns of adjacent trees consisting of one several layers.

### CARBON EMISSION

The release of carbon from a source such as but not limited to living organisms, fossils fuels, and volcanic emissions into the atmosphere over a specified area and period of time

### CARBON OFFSET

The result of any action of any action specifically undertaken to prevent the release of or to remove carbon dioxide from the atmosphere in order to balance emissions taking place elsewhere.

### CARBON RESERVOIR

A component of the climate system, other than the atmosphere which has the capacity to store, accumulate or release a substance of concern, e.g. carbon, a greenhouse gas or precursor. Oceans, soils, and forest are examples of reservoirs of carbon.

#### CARBON SOURCE

Any process or activity which releases greenhouse gas, aerosol or a precursor of a greenhouse gas into the atmosphere.

#### CLIMATE CHANGE

A condition attributed directly or indirect to human activity that alters the composition of global atmosphere and which is, in addition to natural climate variability, observed over comparable time periods.

#### CLIMATE SYSTEM

The totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions.

#### CLIMATE VARIABILITY

Variations in the mean state and other statistics (such as standard deviation, the occurrence of extremes, etc.) of the climate on all temporal and spatial scales beyond that of individual weather events. Variability may be due to natural internal process within the climate system (internal variability), or to variations in natural or anthropogenic external forces (external variability).

#### CONSERVATION

Protection of plant and animal habitat including the management of renewable natural resource with the objective of sustaining its productivity in perpetuity while providing for human use compatible with sustainability of the resources.

#### CRITICAL HABITAT

Area outside protected areas order RA 7586 than is known habitats of threatened species and designated as such based on scientific data taking into consideration species and endimicity and richness, presence of manmade pressures and threats.

#### CRITICAL WATERSHED

A drainage area of a river system supporting existing and proposed hydroelectric power, irrigation works or existing water facilities needing immediate protection and rehabilitation to minimize erosion and improve water yield.

#### CRITICALLY ENDANGERED SPECIES

Species or subspecies that is facing extremely high risk of extinction in the wild in the immediate future.

#### CULTIVATED LAND

Land not classified as forest or other wooded land used by man for agriculture or pastures.

#### DAMAGED TREE

Any tree injured beyond the tolerable limit.

#### DECAY

Deterioration caused by wood destroying fungi.

#### DEFECT

Any irregularity or imperfection in a tree, log piece, product, or lumber that reduces the volume of sound wood or lowers its durability, strength, or utility value.

#### DEFOLIATION

The loss, shredding or removal of leaves from a tree or other plant especially prematurely.

#### DEFORESTATION

The conversion of forest to another land use or the long-term reduction of the tree canopy cover below the minimum 10% threshold.

#### DEGRADATION

A decline in the productivity of an area of land or in its ability to support natural ecosystems or types of agriculture.

#### DOMINANT TREES

Trees with crowns extending above the general level of the crown cover and receiving full light from above and from the sides: larger than the average trees in the stand with crowns well-developed.

#### DRAINAGE AREA

The horizontal projection of area from which a lake or stream receives surface water originating as precipitation. Also called drainage basin, river, basin, watershed area, or watersheds.

#### ECOLOGICAL SUCCESSION

The gradual change on the species structure and composition of an ecological community over time.

#### ECOSYSTEM

A community of living organisms interacting with each other and with their physical environment.

#### ECOSYSTEM RESILIENCE

The capacity of natural system to recover from disturbance.

#### ECOSYSTEM STABILITY

The capacity of a natural system to apply self-regulating mechanisms so as to return steady state after an outside disturbance.

#### ECOSYSTEM STRUCTURE

The physical and temporal distribution of various living organisms in an ecosystem.

#### ECOSYSTEM SUSTAINABILITY

The capacity of an ecosystem to maintain its composition, function, and structure over time, thus maintaining the productivity of the land and diversity of plants and animals.

## ECOTONE

The transition zone between two adjoining communities.

## ECOTOURISM

Form of sustainable tourism within a natural and cultural heritage area where community participation, protection and management of natural resources, culture and indigenous knowledge and practices, environmental education and ethics as well as economics.

## ECOZONE OR SPECIAL ZONE

Selected area with highly developed, or which have the potential to be developed into, agroindustrial, tourist recreational, commercial, banking investment and financial centers whose meters and bounds are fixed or determined by Presidential proclamation.

## EMISSION

Any air contaminant pollutant, gas stream or unwanted sound from a known source that is passed into the atmosphere.

## ENDANGERED SPECIES

Species or subspecies that is not critically endangered but whose survival in the wild is unlikely if the casual factors continue operating. Species with small populations that could be threatened if the environment worsens.

## ENDEMIC SPECIES

Species or subspecies that are naturally occurring and found only within specific area in the country.

#### ENVIRONMENTALLY CRITICAL AREA

Area delineated as environmentally sensitive such that significant environmental impact are expected if certain type of proposed projects or programs are located, developed or implement in it.

#### EVENAGED FOREST

Stand of trees in which there are only small differences in age among individual trees.

#### EXCLUSIVE ECONOMIC ZONE

The area beyond and adjacent to the territorial sea which shall not exceed beyond 200 nautical miles from the baseline as defined under existing laws.

#### EXPERIMENTAL FOREST

Forest land set aside by the DENR Secretary exclusively for scientific, educational and research purposes.

#### EX-SITU CONSERVATION

The conservation of components of biological diversity outside their natural habitats.

#### FAST GROWING SPECIES

A tree species that grows relatively faster than common forest trees and whose rotation age is 4 to 20 years with a mean annual

increment of at 10 cubic meter per hectare under favorable site conditions.

## FOREST

Land with an area of more than 0.5 hectare and tree crown cover (or equivalent stocking level) of more than 10%. The trees should be able to reach a minimum height of 5 meters at maturity in situ. It consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open formations with a continuous vegetation cover in which tree crown cover exceeds 10%. Young natural stands and all plantations established for forestry purposes, which have yet to reach a crown density of more than 10% or tree height of 5 meters are included under forest.

## FOREST BIOME

Reflects the ecological and physiognomic characteristics of the vegetation and broadly corresponds to climatic regions of the earth. In this document, it is used in reference to boreal, temperature and tropical forest biomes.

## FOREST BIOLOGICAL DIVERSITY

The variability among forest living organisms and the ecological processes of which they are part. It includes diversity in forest within species, and ecosystems and landscapes.

## FOREST COVER

Natural and man-made forests, including forests within wetlands and built-up areas.

## FOREST DEGRADATION

Changes within the forest whether natural or human-induced which negatively affect the structure of function of the stand or



site, and thereby lower the capacity to supply products and/or services resulting to a degraded forest.

#### FOREST DISTURBANCE

Any relatively discrete event in time that disrupts ecosystem, community or population structure and changes resources, substrate availability, of the physical environment.

#### FOREST ECOSYSTEM

A dynamic complex of plant, animal and microorganism communities and their abiotic environment interacting as a functional unit, where trees are a key component of the system. Humans, with their cultural, economic and environmental needs are integrated.

#### FOREST FRAGMENTATION

(1) Break up of a forest landscape by various forest and non-forest uses. (2) Any process that results in the conversion of formerly continuous forest into patches of forest separated by non-forest lands.

#### FOREST IMPROVEMENT

Changes within the forest, which positively affect the structure or function of the stand or site, and thereby increase the capacity to supply products and services.

#### FOREST INFLUENCES

All the modifying effects of forest cover on the environment, particularly on water supplies, soil, and microclimate.

#### FOREST LAND

Includes public forest, permanent forest or forest reserves, and forest reservations.

#### FOREST MANAGEMENT

The process of planning and implementing practices for stewardship and use of forest land aimed at fulfilling relevant ecological, economic, and social function of the forest in a sustainable manner.

#### FOREST RESERVATION

Forest land which has been reserved by the President of the Philippines for any specific purpose or purposes.

#### FOREST RESOURCES

Includes soil and all elements found on it, above and below the ground in an area classified as forest land.

#### FOREST RESTORATION

A management strategy applied in degraded primary forest to enhance and accelerate natural processes of forest regeneration in order to regain the elastic capacity of the forest ecosystem.

#### GREENHOUSE EFFECT

The effect produced as greenhouse gases allow incoming solar radiation to pass through the earth's atmosphere, but prevent part of the outgoing infrared radiation from the earth's surface and lower atmosphere from escaping into outer space. This process occurs naturally and has kept the earth's temperature about 59 degrees Fahrenheit (15 degrees Celsius) warmer than it would otherwise be. Current life on earth could not be sustained without the

natural greenhouse effect. Synonymous to GLOBAL WARMING.

#### GREENHOUSE GASES

Those gaseous constituents of the atmosphere both natural and anthropogenic, that absorb and re-emit infrared radiation. The major GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). Less prevalent greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).

#### HABITAT

A place or environment where a species or subspecies naturally established its population.

#### HABITAT LOSS

The permanent conversion of the habitat to an area where the original species can no longer exist.

#### INDIGENOUS SPECIES

Species or genotypes that have evolved in the same area, region or biotope and are adapted to the specific predominant ecological conditions at the time of establishment.

#### INFILTRATION

The movement of water through the soil surface into the ground.

#### IN-SITU CONSERVATION

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.

#### INTERMEDIATE TREE

A tree whose crown cover extends into the lower portion of the main canopy of even-aged stands or, in uneven-aged stands into the lower portion of the canopy formed by the tree's immediate neighbors but shorter in height than the co-dominant and receiving little direct light from above and no direct light from the side.

#### INVASIVE SPECIES

Species of flora and fauna which may be accidentally or deliberately introduced to an area that may cause or likely to cause economic, environmental damage, and harm to human health.

#### IRRIGATION WATER

Portion of a runoff that is being used in irrigation. The intentional application of water to the soil usually for the purpose of crop production.

#### LAND

Resources both man-made and natural, found on the surface, below, and above the ground including inland waters and the air therein.

#### LAND CLASSIFICATION

A system for determining land of the public domain into forest land, mineral land, national parks, and agricultural land based on the 1987 Constitution. In current practice, land of the public domain are classified into either forest land and alienable & disposable land.

## LAND COVER

The observed physical and biological cover of the earth's land, as vegetation and man-made features.

## LAND EVALUATION

A process whereby the potential of land for the particular use is estimated. It may be categorized as qualitative, quantitative, or economic evaluation.

## LAND RECLASSIFICATION

The process of allocating the desired alienable and disposable land of the public domain to specific uses such as agriculture, residential, industrial, or commercial.

## LAND SUITABILITY

The applicability of a given type of land for a specific kind of land use.

## LAND TENURE

The arrangement of right that allows a person or a community to use specific pieces of land and associated resources (e.g. water, trees, etc) in a certain period of time and for a particular purpose.

## LAND TYPE

A recognizable and definable landscape (i.e., combination of land forms, topography and vegetation) possessing a particular climate, and usually characterized by one type of soil or parent material and a type of land use practiced over a long period.

## LAND UNIT

An area of land defined in terms of land qualities and characteristics that may be demarcated on a map. A hierarchy of land units might consist of land provinces, land systems, land forms and terrain units.

## LAND USE

The manner of utilizing the land, including its allocation, development and management.

## LANDSCAPE

A heterogeneous land area distinguished by differences in land forms, vegetation, land use, cultural features, and aesthetic characteristics within a geographical region.

## MINERAL RESERVATION

Areas established and proclaimed as such by the President of the Philippines upon the recommendation of the Director through the Secretary of DENR including submerged land within the contiguous zone exclusive economic zone.

## NATIVE SPECIES

Species that is normally found as part of a particular ecosystem.

## NATURAL BIOTIC AREA

A protected area under the NIPAS which is set aside to allow the way of life of societies living in harmony with the environment to adapt to modern technology at their pace.

#### NATURAL FOREST

Forest composed of indigenous trees, not planted by man.

#### NATURAL MONUMENT

A protected area under the NIPAS which is relatively small area focused on protection of small features to protect or preserve nationally significant natural features on account of their special interest or unique characteristics.

#### NATURAL REGENERATION

The establishment of a plant or a plant age class from natural seeding, sprouting, suckering or layering.

#### OPEN FOREST

Formations with discontinuous tree layer with coverage of at least 10% and less than 40%. They are either managed or unmanaged forests, in initial state of succession.

#### PINE FOREST

Forest stand composed primarily of native pine species, e.g., *Pinus kesiya* and the *Pinus merkusii*.

#### PIONEER SPECIES

Plants capable of invading bare sites (e.g. newly exposed soil) and persisting there or colonizing them until supplanted by successional species.

#### PLANTATION FOREST

Forest stands established by planting or seeding in the process of afforestation or reforestation.

#### PREMIUM SPECIES

A group of trees species utilized for special purposes that demand either high quality, durability, beauty or strength.

#### PRIVATE LAND

Any land belonging to any private person or group of person or juridical entity by virtue of statutory and/or customary laws.

#### PRODUCTION FOREST

Forest lands that can be made available for timber and agroforestry production, range lands for grazing, and other forest lands special uses.

#### PROPAGATED SPECIES

A plant which has been cultured by a man intervention.

#### PROTECTED AREA

An identified portion of land and water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation.

#### PROTECTION FOREST



An area wholly or partly covered with woody vegetation managed primarily for its beneficial effects on water, climate, soil, aesthetic value and preservation of genetic diversity.

#### PUBLIC FOREST

Land of the public domain which has not been the subject of the present system of classification for the determination of which lands are needed for forest purposes and which are not.

#### PUBLIC LAND

All land of the public domain except which are those not covered by the statutory and customary laws.

#### RECREATIONAL ZONE

A portion of the protected area which has high recreational, tourism, educational, or environmental awareness values where sustainable ecotourism, recreational, conservation education or public awareness activities may be allowed as prescribed in the management plan.

#### REFORESTATION

The establishment of forest plantations on temporarily unstocked lands that are considered as forest. Also called as artificial regeneration.

#### REGENERATION

The process of reestablishing a forest stand by natural or artificial means.

#### RENEWABLE RESOURCE

Resource whose supply becomes available for use at different time intervals and in which present use does not diminish future supply.

#### REPRODUCTIONS

All trees below 5 centimeters in DBH and at least 1.3 meters (30 centimeters for pine) in height.

#### RESIDUAL FOREST

The status or condition of a forest subsequent to commercial logging and which there is more or less sufficient or adequate volume of residuals or the desired species of trees of future harvest.

#### RESOURCE RESERVE

An extensive and relatively isolated uninhabited area normally with difficult access designated as such to protect natural resources of the area for future use, and to prevent or contain development activities that could affect the resource pending the establishment of objectives which are based upon appropriate knowledge and planning.

#### SANITATION CUTTING

A direct control measure which involves the removal of all infested trees containing the brood or attacking adults or disease inoculums from an infested area to reduce the source of infestation/ infection and prevent further build up and spread of pests at the fastest possible time to minimize economic and ecological impact/damage on the natural stand/plantation.

#### SELECTIVE LOGGING

A systematic removal of mature, over-mature and defective trees in such a manner that leave adequate number and volume of healthy residual trees of desired species necessary to assure future crop of timber and forest cover for the protection and conservation of soil, water and wildlife.

#### SOIL AND WATER CONSERVATION

A field of human endeavor included in the concept of "watershed management" but specifically devoted to the effective use of water resource for human good.

#### SOIL EROSION

The detachment and transport of soil materials brought about by water, surface runoff, wind, gravity, earthquake and others. It could be man-induced or geological (nature process) in nature.

#### SUSTAINABLE DEVELOPMENT

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

#### SUSTAINABLE FOREST MANAGEMENT

The process of managing a forest to achieve one or more clearly specified objectives of management with regard to production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undesirable effects on the physical and social environment.

#### SUSTAINABLE USE

The use of the components of biological diversity in a way and at a rate that does not lead to a long-term decline thereby

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

#### TENURE

Guaranteed peaceful possession and use of specific forest and land area and the resources found therein, covered by an agreement, contract or grant which cannot be altered or abrogated without due process.

#### TIMBER

Wood material which include standing trees in a form suitable for construction, carpentry, joinery, or reconversion for manufacturing purposes.

#### TREE

A woody and perennial plant, typically large and with a well-defined stem or stems carrying a more or less definite crown; sometimes defined as attaining a minimum diameter of 12.7 centimeters and a minimum height of 4.6 meters at maturity with no branches within 1 meter.

#### TREE FARM

Any small forest land or tract of land purposely planted with tree crops

#### TREE PARK

A particular area within a barangay city or municipality which has been identified by an LGU and delineated by DENR exclusively for growing trees of any kind, flowering ornamental, that have scenic, aesthetic and ecological value.

## TROPICAL RAINFOREST

A type of forest found in areas with high regular rainfall and no more than two months of low rainfall, and consisting of a completely closed canopy of trees that prevents penetration of sunlight to the ground and discourages ground-cover growth.

## URBAN AREA

An area within city limits or densely populated containing built-up elements of residential, commercial, industrial or institutional sector.

## URBAN FORESTRY

The establishment and management of forest in urban environment for physiological and psychological well being of the people.

## VEGETATION

The total mass of plant life that occupies a given area.

## VULNERABLE SPECIES

Species or subspecies that is not critically endangered nor endangered but is under threat from adverse factors throughout their range and is likely to move to the endangered category in the near future.

## WATER QUALITY

The characteristics of water which define its use in terms of physical, chemical, biological, bacteriological or radiological characteristics by which the acceptability of water is evaluated.

## WATER RESOURCES

Refers to the quality and quantity of water produced naturally as one of the Earth's major resources.

## WATERSHED

(1) A land area drained by a stream fixed body of water and its tributaries having a common outlet for surface-runoff. (2) A land area drained by a stream or fixed body of water and its tributaries having a common outlet for surfacerunoff Also basin, catchments.

## WATERSHED MANAGEMENT

The process of guiding and organizing land and other resource uses in a watershed to provide desired goods and services without adversely affecting soil and water resources.

## WATERSHED RESERVATION

A forest land reservation established to protect or improve the conditions of water yield thereof or reduce sedimentation.

## WEATHERING

The mechanical or chemical disintegration and discoloration of surface of wood caused by exposure to light, action of dust and sun carried by wind, and alternate shrinking and swelling of surface fibers brought about by changes in the weather.

## WILDERNESS AREA

Land of the public domain which has been reserved as such by law to preserve its natural conditions, maintain its hydrologic quality and restrict public use in the interest of national welfare and security.

## WILDLIFE

All wild species of plants and animals.

## WILDLIFE MANAGEMENT

The practical application of scientific and technical principles to wildlife and population and habitat so as to maintain or manipulate such population essentially for recreational or scientific purposes.

## WILDLIFE REFUGE

An area designated for the protection of wild animals, within which hunting and fishing are either prohibited or strictly regulated.

## WILDLIFE SANCTUARY

A protected area under the NIPAS which assures the natural conditions necessary to protect nationally significant species, groups of species, biotic communities or physical features of the environment where these may require specific human manipulations for their perpetuation.

## WILDLIFE TRADE

The act of engaging in the exchange, exportation or importation, purchase or sale of wildlife, their derivatives or by-products, locally or internationally.

## WOOD WASTES

The collective term for logging and processing wastes.

## YOUNG PLANTATION FOREST

A forest plantation where trees have not yet reached a height of 5 meters.