

TERMS & DEFINITIONS

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LandScale Terms

- **Adjacency analysis:** An analysis of land uses, features, and potentially sensitive areas adjacent to user-defined landscape boundaries to identify areas that could have significant impacts on the user-defined landscape or be significantly impacted by it.
- **Assessor:** The entity that conducts the LandScale assessment; this could be an organization or team composed of NGOs, consultancies, research institutions, or other entities that have locally relevant expertise on the LandScale assessment scope. (See Assessment Guidelines Section 1.2 for more information on the assessment team composition and capacity).
- **Assessment framework:** A set of goals, indicators, and performance metrics to assess progress towards critical landscape sustainability goals relating to ecosystems, human well-being, governance, and production.
- **Claim:** A proactive message used to communicate progress, improvements or achievements in sustainability at landscape scale, based on the results of a LandScale assessment.
- **Claimant:** An entity seeking to use the results of a LandScale assessment to support a claim.
- **Core:** As applied to indicators, deemed critical to landscape sustainability in all landscapes globally and therefore mandatory for all LandScale assessments.
- **Completeness check:** Level I assurance, affirms whether the assessment has met all substantive requirements of the LandScale assessment process as described in the LandScale Guidelines.
- **Independent third-party verifier:** As applied to the verification mechanism, this is an entity with no material interest in the results of the assessment and no business or personal connections to the entity that has undertaken the assessment, or to parties whose interests might be harmed by the outcomes of the verification process.
- **LandScale assessment:** The process of conducting the LandScale assessment framework, including data collection and analysis to document sustainability status and trends within the landscape boundary.
- **LandScale user:** Anyone that contributes to and/or uses the results from a LandScale assessment.
- **Landscape-dependent:** As applied to indicators, those that are relevant in a landscape because the characteristics being measured are either currently occurring or expected to occur there.
- **Landscape situation analysis:** A mandatory analysis of the internal and external factors that affect and are affected by sustainability within the

landscape, and which can be used for communications purposes as part of LandScale assessments.

- **Landscape stakeholders:** Local communities, indigenous peoples, marginalized groups, government, NGOs, producers, companies, investors, research institutions, etc.; who influence and/or are affected (positively or negatively) by landscape sustainability performance.
- **Performance metrics:** The quantitative or qualitative measures of LandScale indicators that assess how a landscape is performing over time.
- **Pilot - Core:** Pilots that help to co-develop LandScale, were a part of its initial design, are members of the global partners' team, participate in other workstreams, are funded by LandScale, and are testing v0.1 + (Note: Written "Core Pilot(s)").
- **Pilot - Innovator:** A group of early users receiving periodic technical support from the LandScale initiative, testing and using v0.2 from mid-2020. (Note: Written "Innovator Pilot(s)").
- **Reporting platform:** An online platform to communicate the results of LandScale assessments.
- **Quality assurance for assessment results:** Level II verification on the quality of data sources and the rigour of methods used to evaluate LandScale performance metrics and thereby generate assessment results.
- **User-defined landscape:** A landscape boundary defined by LandScale users based on their primary geographic parameters of interest such as a company sourcing areas or ecoregion.
- **Verification mechanism:** Umbrella term referring to all procedures intended to provide assurance that information derived from a LandScale assessment is an accurate reflection of the real situation in the landscape. This encompasses both completeness checks -compliance with LandScale Guidelines- and quality assurance for assessment results.
- **Verifier:** The entity that reviews LandScale assessments for adherence to design criteria and quality of data and results – often an accredited expert or firm.

Additional Terms and Definitions

- **Adverse human rights impacts:** Occurs when an action removes or reduces the ability of an individual to enjoy their human rights. (Adapted from [UN Guiding Principles Reporting Framework](#))
- **Affected rights-holders:** An individual whose human rights have been or may be affected by a company's operations, products or services. (Adapted from [UN Guiding Principles Reporting Framework](#))
- **Agroforestry:** Land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same

land-management units as agricultural crops and/or animals in some form of spatial arrangement or temporal sequence.

- **Biodiversity:** The variability among living organisms from all sources, including terrestrial, as well as marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems. (Adapted from the [Convention on Biological Diversity](#))
- **Catchment:** The area of land from which all precipitation flows to a common outlet.
- **Child labor:** Work that deprives children of their childhood, their potential, and their dignity, and that is harmful to physical and mental development. Whether or not work performed by children is defined as child labour depends on the child's age, the hours and type of work and the conditions in which the work is performed. (Adapted from [ILO](#))
- **Worst Forms of Child Labour:**
 - All forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including recruitment of children for use in armed conflict.
 - The use, procurement or offering of a child for prostitution, for the production of pornography or for pornographic performances.
 - The use, procurement or offering of a child for unlawful activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties.
 - Work which, by its nature or the environment where it takes place, is likely to harm the health, safety or morals of children (referred to as hazardous child labour). (Adapted from [ILO](#))
- **Youth employment:** Not all work done by children under the age of 18 is classified as child labour. Participation in decent work which does not affect their health, personal development or education can be a very positive experience for children or adolescents who have reached the required age. Indeed, millions of young workers around the world between the ages of 14 and 18 are desperate to find decent youth employment. (Adapted from [ILO](#))
- **Connectivity (of natural ecosystems):** "... the extent to which a landscape facilitates the movements of organisms and their genes." ([Rudnick et al. 2012](#)). To the degree natural ecosystems in a landscape are not artificially fragmented (see *fragmentation*), the species there are adapted to the connectivity of the landscape which supports the ecosystem composition, structure, and function.
- **Conversion (of natural ecosystem):** Change of a natural ecosystem to another land use or a profound change in a natural ecosystem's species composition, structure, or ecological function.
 - Deforestation is one form of conversion (conversion of natural forests).

- Afforestation of ecosystems that were originally non-forest (e.g. natural grassland or savannah) (Adapted from [IPBES](#)).
- Conversion includes severe degradation (see 'degradation') or the introduction of management practices that result in substantial and sustained change in the ecosystem's former species composition, structure, or ecological function.
- Change to natural ecosystems that meets this definition is considered to be conversion regardless of whether or not it is legal. (Adapted from [Accountability Framework](#))
- **Degradation (of natural ecosystem):** Changes within a natural ecosystem that significantly and negatively affect its species composition, structure, and/or ecological function and reduce the ecosystem's capacity to supply products, support biodiversity, and/or deliver ecosystem services. The extent and severity of degradation will vary and may be considered conversion if it:
 - is large-scale as well as progressive or enduring;
 - alters ecosystem composition, structure, and function to the extent that regeneration to a previous state is unlikely; or
 - leads to a change in land use (e.g., to agriculture or other use that is not a natural ecosystem). (Adapted from [Accountability Framework \(AFi\)](#)). For additional explanation see Ecosystem Pillar Concepts at the end of this document.
- **Degraded Land:** The state or condition of land which results from the persistent decline or loss in biodiversity and ecosystem functions and services that cannot fully recover unaided within decadal time scales. Inability to recover unaided refers to i) crossing an ecological tipping point after which the ecosystem is unable to recover or to ii) business as usual land use and management that will prevent an ecosystem from recovering unless aided with a change or cessation of management. (Adapted from [IPBES](#))
- **Duty bearers:** Actors who have a particular obligation or responsibility to respect, promote, and realize human rights and to abstain from human rights violations. The term is most commonly used to refer to State actors, but non-State actors can also be considered duty-bearers. (Adapted from the [Danish Institute for Human Rights and Office of the High Commissioner for Human Rights](#) 2014).
- **Ecosystem:** A dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit ([Convention on Biological Diversity](#)). Ecosystems exist on a continuum that ranges from largely untouched, pristine natural ecosystems to intensively managed, highly modified ecosystems (e.g. arable fields, urban areas).
- **Ecosystem services:** Services provided by the environment or ecosystems, which provide benefits to humans, e.g., water provisioning or carbon storage. (Adapted from [Center for International Forestry Research \(CIFOR\)](#))
- **Forced labor:** Forced labour refers to situations in which persons are coerced to work through the use of violence or intimidation, or by more subtle means

- such as accumulated debt, retention of identity papers or threats of denunciation to immigration authorities. (Adapted from [ILO](#))
- **Forest landscape restoration (FLR):** The ongoing process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes. FLR is more than just planting trees, it is restoring a whole landscape to meet present and future needs and to offer multiple benefits and land uses over time. FLR should not cause collateral damage to biodiversity. (Adapted from [IUCN](#) and the [International Principles and Standards for the Practice of Ecological Restoration](#)). For additional explanation see Ecosystem Pillar Concepts at the end of this document.
 - **Fragmentation:** The result of typically human actions and developments such as land clearing, development, infrastructure, etc. but may include natural events such as landslides or droughts drying river segments. These actions and events result in subdividing natural ecosystem patches into smaller units and imposition of barriers to species movement resulting in loss of *connectivity, degradation*, and species imperilment.
 - **Governance:** A comprehensive and inclusive concept of the full range of means for deciding, managing, implementing, and monitoring policies and measures. Whereas government is defined strictly in terms of the nation-state, the more inclusive concept of governance recognizes the contributions of various levels of government (global, international, regional, sub-national, and local) and the contributing roles of the private sector, nongovernmental actors, and civil society in addressing the many types of issues facing the global community. (Adapted from [IPCC](#))
 - **Greenhouse gas:** Gases that trap heat in the atmosphere. (Adapted from [US Environmental Protection Agency](#))
 - **Habitat:** The locality or environment in which an animal, plant, or other organism lives. (Adapted from [IUCN](#))
 - **Human rights:** The rights inherent to all human beings, whatever our nationality, place of residence, sex, national or ethnic origin, color, religion, language, or any other status. We are all equally entitled to our human rights without discrimination. These rights are all interrelated, interdependent, and indivisible. (Adapted from [Office of the High Commissioner for Human Rights](#))
 - **Human Rights Impact Assessment:** A process for systematically identifying, understanding, assessing, and addressing the potential human rights impacts of a business operation or project. Engagement with potentially affected rights-holders and other stakeholders are essential in human rights impact assessments. (Adapted from the [Danish Institute for Human Rights](#) and the [Castan Centre for Human Rights Law, International Business Leaders Forum, and OHCHR, 2008](#))
 - **Human well-being:** The key components that humans need for a good life, including basic material needs, freedom and choice, health, good social relations, and personal security. (Adapted from [Millennium Ecosystem Assessment](#))

- **Indicator species:** An animal or plant that serves as a measure of the environmental conditions that exist in a given locale. (Adapted from [Britannica](#))
- **Indicators:** The conditions and processes within the landscape that are indicative of achieving the LandScale goals.
- **Indigenous peoples:** There is no universally agreed definition of indigenous peoples, although some international legal instruments provide definitions. According to the United Nations, rather than define indigenous peoples, the most useful approach is for them to identify themselves according to the fundamental right to self-identification set out in declarations of human rights. (Adapted from [CIFOR](#))
- **Input use efficiency:** A measure of the amount of output produced for a given amount of input, typically agrochemical (e.g., fertilizer) or water use.
- **Jurisdiction:** A political administrative territory within which government authority is exercised.
- **Jurisdictional approaches:** Government-led, comprehensive approaches to forest and land use across one or more legally defined territories. Jurisdictional sustainability approaches seek to protect forests, reduce emissions, and improve livelihoods across entire political administrative territories. (Adapted from [CIFOR](#))
- **Key Biodiversity Area (KBA):** Sites contributing significantly to the global persistence of biodiversity. (Adapted from [A Global Standard for the Identification of Key Biodiversity Areas](#))
- **Land and resource tenure:** The social relations and institutions regulating access to and use of land and resources (e.g., water, minerals). It includes who owns the land and resources, and who uses, manages, and makes decisions about them. The concept refers to both formal (legal) and informal (customary) rules. (Adapted from [CIFOR](#))
- **Land cover:** The observed biophysical cover on the earth's surface. (Adapted from [FAO](#))
- **Land use:** The arrangements, activities, and inputs undertaken in a certain land cover type (a set of human actions). The term 'land use' is also used to denote the social and economic purposes for which land is managed (e.g., grazing, timber extraction, conservation, and city dwelling). (Adapted from [IPCC](#))
- **Land use plan:** A plan that includes the objectives and policies for future land use development in a given locale. In the context of LandScale, a land use plan can be developed and adopted through formal (legal) and informal (customary) means.
- **Land use policy, planning, and management:** The process by which a society, through its institutions, decides where within its territory different socioeconomic activities such as agriculture, housing, industry, recreation, and commerce should take place. This includes protecting well-defined areas from development due to environmental, cultural, historical, or similar

reasons, and establishing provisions that control the nature of development activities. (Adapted from [World Bank](#))

- **Landscape:** A geographical mosaic composed of natural and/or human-modified ecosystems resulting from the influence of geological, topographical, soil, climatic, biotic factors, as well as human interactions in a given area. (Adapted from [IUCN](#) and [Little Sustainable Landscapes Book](#))
- **Landscape connectivity:** A measure of the extent to which a particular landscape allows free movement of animals and other ecological flows. ([UN Environment](#))
- **Multidimensional Poverty:** An approach to poverty measurement that incorporates measures of the multiple deprivations experienced by those living in poverty, including deprivations related to health, clean water and sanitation, electricity, schooling, nutrition, etc. This approach recognizes that measures related to income or consumption alone are not sufficient to capture the multifaceted nature of poverty. (Adapted from [Oxford Poverty and Human Development Initiative](#)).
- **Multi-stakeholder partnership (or initiative) (MSP):** A structured collaboration in which different groups of stakeholders can work together to make decisions and take action to conduct LandScale assessments and make advances towards improving landscape sustainability outcomes. (Adapted from [MSP Guide](#))
- **Natural ecosystem:** An ecosystem that substantially resembles—in terms of species composition, structure, and ecological function—one that is or would be found in a given area in the absence of major human impacts. Natural ecosystems comprise organisms that are known to have evolved locally or have recently migrated from neighboring localities due to changing environmental conditions, including climate change. Natural ecosystems include some human-managed natural ecosystems (including ecosystems referred to as traditional cultural ecosystems or semi-natural ecosystems) where much of the natural species composition, structure, and ecological function are present. [3] (Adapted from [AFi](#) and the [International Principles and Standards for the Practice of Ecological Restoration](#)). For additional explanation see Ecosystem Pillar Concepts at the end of this document.
- **Natural Forest:** A forest that is a natural ecosystem. Natural forests possess many or most of the characteristics of a forest native to the given site, including species composition, structure, and ecological function. ([AFi](#)). For additional explanation see Ecosystem Pillar Concepts at the end of this document.
- **Population segment:** The groups of human populations within a landscape that are differentiated by gender, age, socioeconomic status, ethnicity, culture, language, and/or other features.
- **Primary data:** Data collected in the field through measurements, surveys, interviews, focus groups, etc., and used for the purpose of LandScale assessments.

- **Economic activities:** Any activity that involves producing, distributing, or manufacturing products or services. In the context of LandScale, these products and services are related to the agriculture, forestry, and/or extractive industries as well as infrastructure development.
- **Productivity:** In the context of LandScale, productivity is the crop, livestock, or timber yield per area of land (e.g., tonnes per hectare).
- **Protected area:** An area of land and/or sea that is a) especially dedicated to the protection and maintenance of biological diversity, as well as of natural and associated cultural resources; and b) managed through legal or other effective means equivalent to IUCN Protected Area Management Categories I-VI. Also areas that have been proposed for protected area status by the relevant statutory body but have not yet been officially declared as such, as well as areas protected under international conventions. (Adapted from [Climate, Community, and Biodiversity Standards Program](#) and [IUCN](#))
- **Protected area downgrading, downsizing and degazettement (PADDD):** Legal changes that ease restrictions on the use of a protected area (downgrade), shrink a protected area's boundaries (downsize) or eliminate legal protections entirely (degazette) (Adapted from [Mascia and Pailler 2010](#)).
- **Regenerative agriculture:** A system of farming principles and practices that increases biodiversity, enriches soils, improves watersheds, enhances ecosystem services, and contributes to climate resilience and vitality for farming and ranching communities, while maintaining or enhancing agricultural yields. (Adapted from [Terra Genesis International](#))
- **Remediation:** Refers to both the process of providing remedy for a negative human rights impact and the substantive outcomes that can counteract, or make good, the negative impact. These outcomes may take a range of forms such as apologies, restitution, rehabilitation, financial or non-financial compensation, and punitive sanctions (whether criminal or administrative, such as fines), as well as the prevention of harm through, for example, injunctions or guarantees of non-repetition. ([UN Guiding Principles Reporting Framework](#))
- **Restoration:** The process of assisting the recovery of an ecosystem (natural or managed), as well as its associated conservation values, which has been degraded, damaged, or destroyed. (Adapted from [AFi](#)). For additional explanation see Ecosystem Pillar Concepts at the end of this document.
- **Rights holders:** Individuals or social groups that have particular entitlements in relation to specific duty-bearers. In general terms, all human beings are rights-holders under the Universal Declaration of Human Rights. In particular contexts, there are often specific social groups whose human rights are not fully realized, respected or protected. (Adapted from the [Danish Institute for Human Rights](#)).
- **Risk assessment:** The qualitative and/or quantitative scientific estimation of risks. ([IPCC](#))

- **Salient human rights risks:** Those human rights that are at risk of the most severe negative impacts through a company's activities or business relationships ([UN Guiding Principles Reporting Framework](#)).
- **Secondary data:** Data that have already been collected and made available by other data sources and that can be used for the purpose of LandScale assessments.
- **Sequestration (of carbon dioxide):** Capturing and storing carbon dioxide (a greenhouse gas) through uptake of vegetation. This occurs above and below ground with the latter increasing soil organic carbon.
- **Soil health:** "...the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans." ([NRCS](#))
- **Stakeholders:** A person, group, or other entity who has interests or concerns related to landscape sustainability; this includes those who can influence decisions as well as those affected by decisions. (Adapted from [UNDP](#))
- **Standard of living:** The levels of wealth, comfort, material goods, and necessities available to an individual or group. The elements of a decent standard of living include food, water, housing, education, health care, transportation, clothing, and other essential needs, including provision for unexpected events. (Adapted from the [Rainforest Alliance](#))
- **Supply shed:** An important land area related to the production of a specific commodity, where there is concentration of production in a given geographic area. It typically includes processing mills and the smallholder farms or plantations associated with the mills, as well as other plantations and smallholders that produce that commodity.
- **Sustainable land management practices:** Land management practices that meet the changing human needs for the production of goods while simultaneously ensuring the long-term productive potential of land resources, including soils, water, animals, and plants, as well as the maintenance of their environmental functions. (Adapted from [UN 1992 Rio Earth Summit](#))
- **Landscape approach:** *A conceptual framework whereby stakeholders in a landscape aim to reconcile competing social, economic and environmental objectives. It seeks to move away from the often-unsustainable sectoral approach to land management. A landscape approach aims to ensure the realisation of local level needs and action (i.e. the interests of different stakeholders within the landscape), while also considering goals and outcomes important to stakeholders outside the landscape, such as national governments or the international community. A landscape approach may be undertaken by one or more stakeholders who engage in actions independently, or by multiple actors as part of a collaborative, multi-stakeholder process. This multi-stakeholder process is referred to as integrated landscape management (Denier et al 2015, Little Sustainable landscapes Book)*
- **Sustainable landscape partnership:** A sustainable landscape partnership is a formal or informal agreement between actors (referred to as members) in the form of a project, program, platform, initiative or set of activities, that: (1) explicitly seeks to enhance landscape sustainability across food and other

production activities, biodiversity and ecosystem conservation, human well-being, and governance (i.e. all the pillars of LandScale); (2) works at the landscape scale and includes deliberative planning, policy, management, or support activities at this scale; (3) involves inter-sectoral and multi-level coordination or alignment of activities, policies, or investments across ministries, local government entities, farmer and community organizations, NGOs, donors and/or the private sector. ([Zanzanaini, C., et al., 2017](#))

- **Sustainable waste management practices:** Waste management practices that emphasize reducing, reusing, and recycling waste in order to minimize environmental impacts and protect dwindling resources.
- **Threatened species:** Any species classified as Critically Endangered, Endangered, or Vulnerable according to the IUCN Red List. (Adapted from [IUCN](#))
- **Tree (forest) plantation:** A forest predominantly composed of trees established through planting and/or deliberate seeding that lacks key elements of a natural forest native to the area, such as species composition and structural diversity. ([AFi](#)). For additional explanation see Ecosystem Pillar Concepts at the end of this document.
- **Vulnerable and/or marginalized groups:** Those segments of the human population that are relegated to the fringes of society due to a lack of access to rights, resources, and/or opportunities. In the context of LandScale, vulnerable and/or marginalized groups may include indigenous communities, smallholders, women, and/or youth. (Adapted from [INWORK](#))
- **Workers' rights:** The fundamental principles and rights at work, which include access to freedom of association and collective bargaining, working hour restrictions, protection from discrimination, and safe working environments. (Adapted from [ILO](#))

Ecosystem Pillar Concepts

The following explanations expand on the definitions provided above.

1. Degradation

Degradation impacts one or all of the ecosystem components of composition (through reduction or elimination of species populations); structure through changes to patch size and connectivity from fragmentation or tree harvesting that can change canopy height and density; and function through synergistic effects that change ecosystem productivity and processes that, for example, filter and retain water. Degradation can result from human-induced and/or natural drivers:

- Human activities represent the most important force shaping the degradation of ecosystems in all of the world's major biomes. Human-induced or anthropogenic direct drivers of degradation include, for example, land-use intensification, infrastructure and other

industrial developments, introduction of invasive species, harvesting of wild species, alteration of fire regimes, etc.

- Direct natural drivers of degradation include, for example, landslides, natural climate variation, tectonic activity, and are not the result of human activities.
- Degradation is often the result of multiple direct drivers.
- Global change drivers, such as climate change, often exacerbate impacts.

Degradation takes many forms. For example:

- The introduction of invasive species is associated with changes in species composition, vegetation structure and above ground biomass, changes in fire regimes, and the spread of pests and disease.
- Changes in grazing land management are linked to fragmentation of native vegetation, loss of biodiversity, soil erosion and compaction, invasive species, woody encroachment, change in fire regimes, changes in runoff and infiltration regimes of water, nutrients and agrochemicals.
- Human-induced changes in the frequency, intensity, season and timing of fire are associated with changes in species composition and above ground biomass, soil erosion, species invasions, and changes in runoff and infiltration regimes of water, nutrients and agrochemicals.
- Development of dams and reservoirs are a major cause of river fragmentation, disconnecting upstream and downstream ecosystems and affecting species dispersal and migration as well as flows of organic and inorganic matters.

The extent and severity of degradation will vary and may be considered conversion if it:

- is large-scale and progressive or enduring;
- alters ecosystem composition, structure, and function to the extent that regeneration to a previous state is unlikely; or
- leads to a change in land use (e.g., to agriculture or other use that is not a natural ecosystem).

(Sources: IPBES 2018; The Accountability Framework)

2. Ecosystem restoration

May be achieved through any intentional activity that initiates or accelerates the recovery of an ecosystem from a degraded state. There are usually a variety of restoration measures available for each ecosystem type and its baseline condition (see the [Annex 6. Restoration Typology](#)).

Ecosystem restoration will need to take into account changing environmental conditions including climate change. In certain circumstances, this may involve facilitating transition towards compatible and resilient ecosystems that differ in composition, structure and/or ecological function compared with historical reference ecosystems. For example, severe changes in fire regimes may mean that recovery to pre-disturbance conditions is no longer possible.

To be considered restorative, project or landscape level efforts must result in an overall improvement of environmental conditions (also referred to as a 'net-positive' effect). For example, activities that do not or will not improve current environmental conditions or those that cause harm (e.g., afforestation of native grasslands causing a net loss for biodiversity) are not considered restorative.

(Sources: The Accountability Framework; Gann et al. 2019; IPBES 2015, 2018; Kotiaho et al. 2018).

3. Natural ecosystem

Natural ecosystems include:

- Largely “pristine” natural ecosystems that have not been subject to major human impacts in recent history and retain nearly all components of composition, structure, and function of reference sites (many remaining stands of primary forest may be too small to have the complete complement of species for example).
- Regenerated natural ecosystems that were subject to major impacts in the past (for instance by agriculture, livestock raising, tree plantations, or intensive logging) but where the main causes of impact have ceased or greatly diminished and the ecosystem has attained species composition, structure and ecological function similar to prior or other contemporary natural ecosystems;
- Managed natural ecosystems (including ecosystems that could be referred to as “semi-natural”) where much of the ecosystem’s composition, structure, and ecological function are present. This includes managed natural forests as well as native grassland or rangeland ecosystems that are and/or have evolved under traditional agricultural, pastoral, or other human activities and can be centuries old and depend on traditional management for their characteristic composition, structure, and function. These ecosystems are highly valued for their biodiversity and ecosystem services. They differ from ecosystems that have been created to provide ecosystem services but that result in degraded ecosystems with lower biodiversity values (e.g. arable fields, species-poor agricultural grasslands, mineral extraction areas, and urban landscapes with city parks).

- Natural ecosystems that have been partially degraded by anthropogenic or natural causes (e.g., harvesting, fire, climate change, invasive species, or others) but where the land has not been converted to another use and where much of the ecosystem’s composition, structure, and ecological function remain present or are expected to regenerate naturally or by management for ecological restoration.

(Source: The Accountability Framework; Gann et al. 2019)

4. Natural forest

Natural forests include:

- Primary forests that have not been subject to major human impacts in recent history. These should have nearly all components of composition, structure, and function of reference sites (many remaining stands of primary forest may be too small to have the complete complement of species for example.).
- Regenerated (second-growth) forests that were subject to major impacts in the past (for instance by agriculture, livestock raising, tree plantations, or intensive logging) but where the main causes of impact have ceased or greatly diminished and the ecosystem has attained much of the species composition, structure, and ecological function of prior or other contemporary natural ecosystems.
- Managed natural forests where much of the ecosystem’s composition, structure, and ecological function exist in the presence of activities such as:
 - i. Harvesting of timber or other forest products, including management to promote high-value species
 - ii. Low intensity, small-scale cultivation within the forest, such as less-intensive forms of swidden agriculture in a forest mosaic
- Forests that have been partially degraded by anthropogenic or natural causes (e.g., harvesting, fire, climate change, invasive species, or others) but where the land has not been converted to another use and where degradation does not result in the sustained reduction of tree cover below the thresholds that define a forest or sustained loss of other main elements of ecosystem composition, structure, and ecological function.

The categories “natural forest” and “tree plantation” are mutually exclusive, though in some cases the distinction may be nuanced. Please see the [Operational Guidance on Applying the Definitions Related to Deforestation, Conversion, and Protection of Ecosystems](#) for further discussion of boundary cases.

(Source: The Accountability Framework)

5. Tree plantation

Tree plantations generally have one or a few tree species and tend to include one or more of the following characteristics:

- planted on cleared land
- harvested regularly
- trees are of even ages
- products from the plantation are managed and processed for commercial production

Tree plantations can consist of trees planted for timber, pulp, non-timber forest products (e.g., rubber latex), or ecosystem services (e.g., soil stabilisation). Plantations dominated by agricultural species (e.g., fruits or oil palm) are considered agriculture, not tree plantations.

There exist a range of “boundary cases” where sites have some characteristics of tree plantations and some characteristics of natural forests. Please see the Operational Guidance on Applying the Definitions Related to Deforestation, Conversion, and Protection of Ecosystems for more information on such cases.

(Source: The Accountability Framework)