

Annex 2

Glossary of terms

These definitions were collected from publications and the Internet. Definitions and terms in forestry and other fields are highly variable, and policy-makers note a lack of common understanding of terms. Many people and organizations have strived to reach some common understandings about definitions. In forestry, FAO and the International Union of Forest Research Organizations (IUFRO) have collaborated for many years in this area (e.g. FAO/IUFRO, 2002). FAO has also developed terms and definitions for the Global Forest Resources Assessment (FRA), taking into consideration recommendations from experts in various fora. It should be noted that the authors of this guide do not intend to confuse readers by listing more than one definition for the same term. Our intention is mainly to alert readers that, even within a particular sector, a different meaning of the same term may exist. Please note that the International Standards for Phytosanitary Measures (ISPMs) use the definitions specified in ISPM No. 05 exclusively. For the latest IPPC definitions, refer to the IPPC Web site (www.ippc.int) as they may be revised.

Area: An officially defined country, part of a country or all or parts of several countries (ISPM No. 05, 2010)

Bark: The layer of a woody trunk, branch or root outside the cambium (ISPM No. 05, 2010)

The tissues of a tree outside the cambium composed of inner living bark and outer dead bark (BC Ministry of Forests and Range, 2008)

The outer part of woody stems and branches. Anatomically it includes all the plant tissues outside the cambium (Evans, 2000)

Biological control: The use of biotic agents such as insects, nematodes, fungi, and viruses for the control of weeds and other forest pests (BC Ministry of Forests and Range, 2008)

Biological control agent: A natural enemy, antagonist or competitor, or other organism, used for pest control (ISPM No. 05, 2010)

Buffer zone: An area surrounding or adjacent to an area officially delimited for phytosanitary purposes in order to minimize the probability of spread of the target pest into or out of the delimited area, and subject to phytosanitary or other control measures, if appropriate (ISPM No. 05, 2010)

A strip of land where disturbances are not allowed, or are closely monitored, to preserve aesthetic and other qualities adjacent to roads, trails, waterways, and recreation sites. (BC Ministry of Forests and Range, 2008)

Certificate: An official document which attests to the phytosanitary status of any consignment affected by phytosanitary regulations (ISPM No. 05, 2010)

Commodity: A type of plant, plant produce, or other article being moved for trade or other purpose (ISPM No. 05, 2010)

Conifer: A tree belonging to the order of Coniferales, usually evergreen, cone bearing and with needles, awl or scalelike leaves such as pine, spruces, firs, tamarack, often called “softwoods” (Martin, 1996)

Any tree that produces seeds in cones, with no fruit structure around the seed. Leaves are usually needles, scales, or narrow and linear in shape, and evergreen (Hubbard *et al.*, 1998)

Consignment: A quantity of plants, plant products and/or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots) (ISPM No. 05, 2010)

Contaminating pest: A pest that is carried by a commodity, and in the case of plants and plant products, does not infest those plants or plant products (ISPM No. 05, 2010)

Cut branches: A commodity class for fresh parts of plants intended for decorative use and not for planting (ISPM No. 05, 2010)

Debarked wood: Wood that has been subjected to any process that results in the removal of bark. Debarked wood is not necessarily bark-free wood (ISPM No. 05, 2010)

Delimiting survey: Survey conducted to establish the boundaries of an area considered to be infested by or free from a pest (ISPM No. 05, 2010)

Dunnage: Wood packaging material used to secure or support a commodity but which does not remain associated with the commodity (ISPM No. 05, 2010). An example of dunnage is logs used to wedge heavy objects in a container or ships hold to keep them from moving during shipment.

Ecosystem: A dynamic complex of plant, animal and micro-organism communities and their abiotic environment interacting as a functional unit (ISPM No. 05, 2010)
A functional unit consisting of all the living organisms (plants, animals, and

microbes) in a given area, and all the non-living physical and chemical factors of their environment, linked together through nutrient cycling and energy flow. An ecosystem can be of any size – a log, pond, field, forest, or the earth’s biosphere – but it always functions as a whole unit. Ecosystems are commonly described according to the major type of vegetation (i.e. forest, old-growth or range ecosystem) (BC Ministry of Forests and Range, 2008)

Emergency action: A prompt phytosanitary action undertaken in a new or unexpected phytosanitary situation (ISPM No. 05, 2010)

Entry (of a pest): Movement of a pest into an area where it is not yet present, or present but not widely distributed and being officially controlled (ISPM No. 05, 2010)

Eradication: Application of phytosanitary measures to eliminate a pest from an area (ISPM No. 05, 2010)

Establishment: Perpetuation, for the foreseeable future, of a pest within an area after entry (ISPM No. 05, 2010)

Fibreboard: A panel manufactured from fibres of wood or other ligno-cellulosic materials with the primary bond deriving from the felting of the fibres and their inherent adhesive properties (although bonding materials and/or additives may be added in the manufacturing process). It includes fibreboard panels that are flat-pressed and moulded fibreboard products. It is an aggregate comprising hardboard, medium density fibreboard (MDF) and other fibreboard (UNECE *et al.*, 2008)

Field: A plot of land with defined boundaries within a place of production on which a commodity is grown (ISPM No. 05, 2010)

Forest: Land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*. It does not include land that is predominantly under agricultural or urban land use (FAO, 2007)

A biological community of plants and animals which is dominated by trees and other woody plants (Hubbard *et al.*, 1998)

A plant community with trees and other woody plants dominating (Martin, 1996)

See also Naturally regenerated forest, Planted forest

Forestry: The science of establishing, cultivating, and managing forests and their attendant resources (Hubbard *et al.*, 1998)

The science, art, and practice of managing and using trees, forests, and their associated resources for human benefit (North Carolina State University, 2003)

Fuelwood: Woodfuel where the original composition of the wood is preserved (FAO, 2004)

Fumigation: Treatment with a chemical agent that reaches the commodity wholly or primarily in a gaseous state (ISPM No. 05, 2010)

Genetic diversity: The genetic variability within a population or a species. It is one aspect of biological diversity. Genetic diversity can be assessed at three levels: (a) diversity within breeding populations, (b) diversity between breeding populations; and (c) diversity within the species (FAO/IUFRO, 2002)

Genotype: The genetic constitution of an organism as distinguished from its appearance or phenotype (FAO/IUFRO, 2002)

Habitat: Part of an ecosystem with conditions in which an organism naturally occurs or can establish (ISPM No. 05, 2010)

The environment in which a population or individual lives; includes not only the place where a species is found, but also the particular characteristics of the place (e.g. climate or the availability of suitable food and shelter) that make it especially well suited to meet the life cycle needs of that species (BC Ministry of Forests and Range, 2008)

Handicraft: Commodity class of articles derived or made of natural components of wood, twigs, and vines, and including bamboo poles and garden stakes. Handicrafts include the following products where wood is present: Carvings, baskets, boxes, bird houses, manufactured Christmas trees, garden and lawn/patio furniture (rustic), potpourri, silk trees (typically artificial *Ficus* trees), trellis towers, garden fencing and edging, and other items composed of wood (APHIS, 2009)

Hitch-hiker pest: See Contaminating pest

Host range: Species capable, under natural conditions, of sustaining a specific pest or other organism (ISPM No. 05, 2010)

Import permit: Official document authorizing importation of a commodity in accordance with specified phytosanitary import requirements (ISPM No. 05, 2010)

Incidence (of a pest): Proportion or number of units in which a pest is present in a sample, consignment, field or other defined population (ISPM No. 05, 2010)

A measurement of the presence and magnitude of pests within a given area (BC Ministry of Forests and Range, 2008)

Indigenous species: Species or genotypes which have evolved in the same area, region or biotope and are adapted to the specific predominant ecological conditions

at the time of establishment. Tree species which have evolved in the same area, region or biotope where the forest stand is growing and are adapted to the specific ecological conditions predominant at the time of the establishment of the stand (Schuck *et al.*, 2002)

Species native to the country or area. Antonym: non-native or exotic (FAO, 1994)

See also Native species

Infestation (of a commodity): Presence in a commodity of a living pest of the plant or plant product concerned. Infestation includes infection (ISPM No. 05, 2010)

Inoculum: Microbial spores or parts (such as mycelium) (FAO, 2001)

Inspection: Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/or to determine compliance with phytosanitary regulations (ISPM No. 05, 2010)

Introduced 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 alien species (WRI, IUCN and UNEP, 1992)

A species, subspecies or lower taxon occurring outside its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans) (FAO, 2007). This definition refers to trees.

An established species not native to the ecosystem, region or country (FAO/IUFRO, 2002)

Introduction: The entry of a pest resulting in its establishment (ISPM No. 05, 2010)

Invasive species: Species that are non-native to a particular ecosystem and whose introduction and spread cause, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health (FAO, 2007)

Log: Any section of the bole, or of the thicker branches, of a felled tree after limbing and bucking (Dykstra and Heinrich, 1996)

A section of a woody stem bucked to a specific merchantable length for manufacturing into products. Sometimes used more narrowly for a given standard log length, usually of 16 feet, when estimating volume of standing timber (West Virginia University, 1998).

A piece of the woody stem (trunk or limb) of a tree (Martin, 1996)

The bole of a tree; trimmed wood that has not been sawn further than to form cants (APHIS, 2010)

Lot: A number of units of a single commodity, identifiable by its homogeneity of composition, origin etc., forming part of a consignment (ISPM No 5, 2010)

Lumber: Sawn products produced from logs. Also called sawnwood (Dykstra and Heinrich, 1996)

Logs that have been sawn into boards, planks, or structural members such as beams (APHIS, 2010)

A manufactured product derived from a log through sawing or planning (ALSC, 2005)

Medium density fibreboard (MDF): Dry-process fibreboard. When density exceeds 0.8 g/cm³, it may also be referred to as “high-density fibreboard” (HDF) (UNECE *et al.*, 2008)

Monitoring: An official ongoing process to verify phytosanitary situations (ISPM No. 05, 2010)

Monoculture: In general, even-aged, single-species forest crops (BC Ministry of Forests and Range, 2008)

National plant protection organization (NPPO): Official service established by a government to discharge the functions specified by the IPPC (ISPM No. 05, 2010)

Native species (indigenous): A species, subspecies, or lower taxon, occurring within its natural range (past or present) and dispersal potential (i.e. within the range it occupies naturally or could occupy without direct or indirect introduction or care by humans) (IUCN, 2000)

See also Indigenous species

Natural enemy: An organism which lives at the expense of another organism in its area of origin and which may help to limit the population of that organism. This includes parasitoids, parasites, predators, phytophagous organisms and pathogens (ISPM No. 05, 2010)

The parasites, parasitoids, predators and pathogens associated in nature with a specific wild population of plants or animals (Dunster and Dunster, 1996)

Naturally regenerated forest: Forest predominantly composed of trees established through natural regeneration (FAO, 2007)

Non-wood forest products: Goods derived from forests that are tangible and physical objects of biological origin other than wood. Generally includes non-wood plant and animal products collected from areas defined as forest. Specifically includes the following regardless of whether from natural forests or plantations: gum arabic, rubber/latex and resin; and Christmas trees, cork, bamboo and rattan. Generally excludes products collected in tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations and agroforestry systems when crops are grown under tree cover. Specifically excludes the following: woody raw materials and products, such as chips, charcoal, fuelwood and wood used for tools, household equipment and carvings; grazing in the forest; and fish and shellfish (FAO, 2007)

Occurrence: The presence in an area of a pest officially recognized to be indigenous or introduced and not officially reported to have been eradicated (ISPM No. 05, 2010)

Organism: Any biotic entity capable of reproduction or replication in its naturally occurring state (ISPM No. 05, 2010)

Oriented strand board (OSB): A structural board in which layers of narrow wafers are layered alternately at right angles in order to give the board greater elastomechanical properties. The wafers, which resemble small pieces of veneer, are coated with e.g. waterproof phenolic resin glue, interleaved together in mats and then bonded together under heat and pressure. The resulting product is a solid, uniform building panel having high strength and water resistance (UNECE *et al.*, 2008)

A structural panel made of narrow strands of fiber oriented lengthwise and crosswise in layers, with a resin binder (Evans, 2000)

Outbreak: A recently detected pest population, including an incursion, or a sudden significant increase of an established pest population in an area (ISPM No. 05, 2010)

Particle board: A panel manufactured from small pieces of wood or other ligno-cellulosic materials (e.g. chips, flakes, splinters, strands, shreds and shives) bonded together by the use of an organic binder together with one or more of the following agents: heat, pressure, humidity, a catalyst, etc. The particle board category is an aggregate category including oriented strandboard (OSB), waferboard and flaxboard (UNECE *et al.*, 2008)

Pathway: Any means that allows the entry or spread of a pest (ISPM No. 05, 2010)

Pest: Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products (ISPM No. 05, 2010)

Any organism that is out of place or causes stress to a desired organism (North Carolina State University, 2003)

See also Quarantine pest, Regulated pest, Regulated non-quarantine pest

Pest free area (PFA): An area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained (ISPM No. 05, 2010)

Pest free place of production (PFPP): Place of production in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained for a defined period (ISPM No. 05, 2010)

Pest free production site: A defined portion of a place of production in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained for a defined

period and that is managed as a separate unit in the same way as a pest free place of production (ISPM No. 05, 2010)

Pest risk (for quarantine pests): The probability of introduction and spread of a pest and the magnitude of the associated potential economic consequences (ISPM No. 05, 2010; see Glossary supplement No 2)

Pest risk analysis (PRA): The process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the strength of any phytosanitary measures to be taken against it (ISPM No. 05, 2010)

Pest risk management (for quarantine pests): Evaluation and selection of options to reduce the risk of introduction and spread of a pest (ISPM No. 05, 2010)

Pest status (in an area): Presence or absence, at the present time, of a pest in an area, including where appropriate its distribution, as officially determined using expert judgment on the basis of current and historical pest records and other information (ISPM No. 05, 2010)

Phytosanitary certificate: Certificate patterned after the model certificates of the IPPC (ISPM No. 05, 2010)

Phytosanitary certification: Use of phytosanitary procedures leading to the issue of a phytosanitary certificate (ISPM No. 05, 2010)

Phytosanitary import requirements: Specific phytosanitary measures established by an importing country concerning consignments moving into that country (ISPM No. 05, 2010)

Phytosanitary measure: Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of quarantine pests, or to limit the economic impact of regulated non-quarantine pests (ISPM No. 05, 2010)

Phytosanitary security (of a consignment): Maintenance of the integrity of a consignment and prevention of its infestation and contamination by regulated pests, through the application of appropriate phytosanitary measures (ISPM No. 05, 2010)

Plant products: Unmanufactured material of plant origin (including grain) and those manufactured products that, by their nature or [by the nature of] their process[ing], may create a risk for the introduction and spread of pests (ISPM No. 05, 2010)

Planted forest: Forest predominantly composed of trees established through planting and/or deliberate seeding (FAO, 2007)

Plants: Living plants and parts thereof, including seeds and germplasm (ISPM No. 05, 2010)

Plants for planting: Plants intended to remain planted, to be planted or replanted (ISPM No. 05, 2010)

Plywood: A panel consisting of an assembly of veneer sheets bonded together with the direction of the grain in alternate plies generally at right angles. The veneer sheets are usually placed symmetrically on both sides of a central ply or core that may itself be made from a veneer sheet or another material. It includes *veneer plywood* (plywood manufactured by bonding together more than two veneer sheets, where the grain of alternate veneer sheets is crossed, generally at right angles); *core plywood* or *blockboard* (plywood with a solid core (i.e. the central layer, generally thicker than the other plies) that consists of narrow boards, blocks or strips of wood placed side by side, which may or may not be glued together); *cellular board* (plywood with a core of cellular construction); and *composite plywood* (plywood with the core or certain layers made of material other than solid wood or veneers) (UNECE *et al.*, 2008)

A flat panel made up of a number of thin sheets or veneers, of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it. The veneers sheets are united, under pressure, by a bonding agent (Evans, 2000)

Panel products manufactured by gluing together layers of veneer with the grain of alternate of layers oriented at right angles to provide strength (Hubbard *et al.*, 1998)

Provenance: The original geographic source of seed, pollen or propagules. In forestry literature the term is usually considered synonymous with “geographic origin” and preferred to “origin” (FAO/IUFRO, 2002)

Pulp: Commodity class of soft moist mass of wood fiber used in the manufacture of paper. Pulp is made up by reducing wood chips to fibers, either by grinding them up, or by chemical means, and then turning the fibers into slurry (Evans, 2000)

Quarantine pest: A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled (ISPM No. 05, 2010)

Regional plant protection organization (RPPO): An intergovernmental organization with the functions laid down by Article IX of the IPPC (ISPM No. 05, 2010)

Regulated area: An area into which, within which, and/or from which plants, plant products or other regulated articles are subjected to phytosanitary regulations or procedures in order to prevent the introductions and/or spread of quarantine pests or to limit the economic impact of regulated non-quarantine pests (ISPM No. 05, 2010)

Regulated article: Any plant, plant product, storage place, packaging, conveyance, container, soil and any other organism, object or material capable of harbouring or spreading pests, deemed to require phytosanitary measures, particularly where international transportation is involved (ISPM No. 05, 2010)

Regulated non-quarantine pest: A non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party (ISPM No. 05, 2010)

Regulated pest: A quarantine pest or a regulated non-quarantine pest (ISPM No. 05, 2010)

Roundwood: All roundwood felled or otherwise harvested and removed. It comprises all wood obtained from removals, i.e. the quantities removed from forests and from trees outside the forest, including wood recovered from natural, felling and logging losses during the period, calendar year or forest year. It includes all wood removed with or without bark, including wood removed in its round form, or split, roughly squared or in other form (e.g. branches, roots, stumps and burls (where these are harvested) and wood that is roughly shaped or pointed (UNECE *et al.*, 2008) Wood not sawn longitudinally, carrying its natural rounded surface, with or without bark (ISPM No. 05, 2010)

Sawnwood: Wood that has been produced from both domestic and imported roundwood, either by sawing lengthways or by a profile-chipping process and that, with a few exceptions, exceeds 5 mm in thickness. It includes: planks, beams, joists, boards, rafters, scantlings, laths, boxboards, sleepers and 'lumber', etc., in the following forms: unplaned, planed, grooved, tongued, fingerjointed, chamfered, rabbeted, V-jointed, beaded, etc. (FAO, 2005) Wood sawn longitudinally, with or without its natural rounded surface with or without bark (ISPM No. 05, 2010)

Seeds: A commodity class for seeds for planting or intended for planting and not for consumption or processing (ISPM No. 05, 2010)

Silviculture: The art, science, and practice of establishing, tending, and reproducing forest stands of desired characteristics. It is based on knowledge of species characteristics and environmental requirements (North Carolina State University, 2003)

Species: A population or series of populations of organisms that are capable of interbreeding freely with each other but not with members of other species (FAO/IUFRO, 2002)

See also Indigenous species, Introduced species, Native species

Spread: Expansion of the geographical distribution of a pest within an area (ISPM No. 05, 2010)

Surveillance: An official process which collects and records data on pest occurrence or absence by survey, monitoring or other procedures (ISPM No. 05, 2010)

Survey: An official procedure conducted over a defined period of time to determine the characteristics of a pest population or to determine which species occur in an area (ISPM No. 05, 2010)

Systems approach(es): The integration of different risk management measures, at least two of which act independently, and which cumulatively achieve the appropriate level of protection against regulated pests (ISPM No. 05, 2010)

Technically justified: Justified on the basis of conclusions reached by using an appropriate pest risk analysis or, where applicable, another comparable examination and evaluation of available scientific information (ISPM No. 05, 2010)

Timber: Trees suitable for conversion into industrial forest products. Sometimes this term is used as a synonym for industrial roundwood, and it may also be used to refer to certain large sawn wood products (e.g. bridge timbers) (Dykstra and Heinrich, 1996)

Treatment: Official procedure for the killing, inactivation or removal of pests, or for rendering pests infertile or for devitalization (ISPM No. 05, 2010)

Vector: Literally “a carrier”. An animal carrying a micro-organism pathogenic for members of another species; the vector may or may not be essential for the completion of the life cycle of the pathogenic micro-organism (FAO, 2003)

Organisms transmitting pathogens or parasites (FAO, 2010c)

An agent, such as an insect, that may transmit a fungus or other micro-organisms (Tainter and Baker, 1996)

Veneer sheets: Thin sheets of wood of uniform thickness, not exceeding 6 mm, rotary cut (i.e. peeled), sliced or sawn. It includes wood used for the manufacture of laminated construction material, furniture, veneer containers, etc. (UNECE *et al.*, 2008)

Visual examination: The physical examination of plants, plant products, or other regulated articles using the unaided eye, lens, stereoscope or microscope to detect pests or contaminants without testing or processing (ISPM No. 05, 2010)

Voucher specimen or culture: One which acts as a voucher for some specific fact/hypothesis/conclusion, and is, for the fungi typically a dried ‘botanical’ collection (referred to as a ‘gathering’ in the International Code of Botanical Nomenclature) or for some taxa a living culture (e.g. yeasts). (McNeill *et al.*, 2006)

Weed: Plant growing where it is not wanted. Generally used to describe plants which colonize readily, and can compete for resources with a planted crop (FAO, 2001)

An aggressive, invasive, easily dispersed plant, one which commonly grows in cultivated ground to the detriment of a crop (van den Bosch, Messenger and Gutierrez, 1981)

Wood: A commodity class for round wood, sawn wood, wood chips or dunnage, with or without bark (ISPM No. 05, 2010)

Woodfuel: Wood from forests, shrubs and other trees used as fuel. Woodfuels can be divided into four types of products: fuelwood, charcoal, black liquor and other (i.e. methanol, ethanol, pyrolitic gas) (FAO, 2004)

Wood-based panels: A product category that is an aggregate comprising veneer sheets, plywood, particle board and fibreboard (UNECE *et al.*, 2008)

Wood chips: Chipped woody biomass in the form of pieces with a defined particle size produced by mechanical treatment with sharp tools such as knives. Wood chips have a subrectangular shape with a typical length 5 to 50 mm and a low thickness compared to other dimensions (FAO, 2004)

Wood that has been reduced to small pieces and is suitable for pulping, for particle board and/or fibreboard production, for use as a fuel, or for other purposes (UNECE *et al.*, 2008)

Wood fragments broken or shredded from any wood (APHIS, 2010)

Wood mulch: Bark chips, wood chips, wood shavings, or sawdust intended for use as a protective or decorative ground cover (APHIS, 2010)

Wood packaging materials: Wood or wood products (excluding paper products) used in supporting, protecting or carrying a commodity (includes dunnage) (ISPM No. 05, 2010)