

Agricultural best management practices: A practice or combination of practices deemed to be best practice for meeting productivity, economic, social, and environmental (sustainability) outcomes. In Canada, these recommended practices are typically developed by government agencies in collaboration with research institutions, industry organizations, and agricultural producers.

Agricultural chemicals: Substances such as *fertilizers*, liming and acidifying agents, road dust stabilizers, *crop protectants* (including insecticides, herbicides, fungicides, and nematicides), and other agricultural inputs used to enhance or support agriculture production.

Agricultural land: Land that is used directly or indirectly in the production of *agricultural products* including *cropland*, *grassland*, *rangeland*, *pasture*, and other land on which *agricultural products* or livestock are produced and resource concerns may be addressed. It may include cultivation under tree cover, cropped marshes, cranberry bogs, incidental areas included in the agricultural operation, and other types of land used for production of livestock.

Agricultural practices: Specific methods including tillage system, planting, application practices for *fertilizers* and *crop protectants*, harvesting, and other cropping practices that are applied to grow and harvest annual or perennial *crops* for food, animal feed, forage, fibre, oilseed, and other *agricultural products*.

Agricultural products: *Crops* for food, animal feed, forage, fibre, oilseed, medicine, cultural practices, fermentation products, or fuel, livestock, and livestock products. These products include, but are not limited to, field *crops*, grains, oilseeds, cattle, hogs, poultry, and dairy (Agriculture and Agri-Food Canada 2023).

Agricultural waste: Refers to *solid waste* that is generated by animal farming or the production and harvest of *agricultural products*. This may include, but is not limited to, poultry and livestock manure and residual materials in liquid or solid form generated from the production and marketing of poultry, livestock, furbearing animals, other livestock products, and *crop residues* from row *crops* and permanent *crops*.

Appropriate: Suitable or proper in the circumstances for a particular purpose. Considerations may include whether an activity will achieve the goal of an *Indicator* or *Performance Measure* in a specific setting, is practical and reasonable, and contributes to achieving regulatory compliance or obtaining social licence.

Appropriate deforestation cutoff date: A date (day, month, and year) specified by the most relevant biome- or geography-specific *deforestation* protocol(s) after which farmed land cannot have been deforested. An example of a relevant *deforestation* protocol could include, but is not limited to, the Canadian Boreal Forest Conservation Framework.

Biosecurity: The Canadian Food Inspection Agency (CFIA) works with stakeholders to develop national farm-level biosecurity standards and producer guidance documents for several crop and animal-based sectors. These standards provide a proactive approach to minimize the introduction and spread of diseases and *pests* (CFIA 2023).

Biodiversity: The variety and abundance of life forms, processes, functions, and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at spatial scales that range from local to regional to global (SFI). This includes soil organisms, pollinators, beneficial organisms, agricultural and *grassland* plants, and *wildlife*.

Carbon farming: The process of changing *agricultural practices* or land use to increase the amount of carbon stored in the soil and vegetation (sequestration) and to reduce greenhouse gas emissions from livestock, soil, or vegetation (avoidance) (Dept Primary Industries and Regional Development, WA).

Certification Body: An independent third party that is accredited and competent to conduct certifications to the *Leading Harvest Standard*.

Climate change: Change in the state of the climate that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. It may be due to natural internal processes or external forcings or to persistent anthropogenic changes in the composition of the atmosphere or in land use (Intergovernmental Panel on Climate Change).

Climate-smart agriculture (practices): Practices and principles that promote sustainable increases in agricultural productivity (including sustainable intensification) while adapting to *climate change* and reducing *greenhouse gas* emissions (Food and Agriculture Organization of the United Nations).

Conservation: 1. *Protection* of plant and animal *habitat*. 2. Management of a renewable natural resource with the *objective* of sustaining its productivity in perpetuity while providing for human use compatible with the sustainability of the resource.

Contract management company: A third-party company used by a *Standard User* to directly operate *enrolled farmland*.

Covenant of quiet enjoyment: A covenant that promises that the tenant/lessee of an estate in real property will be able to possess the premises in peace, without disturbance by hostile claimants. Quiet enjoyment is a right to the undisturbed use and enjoyment of real property by a *tenant/lessee*.

Cover cropping: Cover cropping is a method of planting that helps build healthy soil. Cover crops keep the ground covered and help with continued carbon sequestration in non-production areas. When chosen and managed properly, cover crops can slow erosion, improve *soil health*, enhance water availability, suppress weeds, help control *pests* and diseases, increase *biodiversity*, benefit production for farmers, and help mitigate *climate change* (BC Climate Agri-Solutions). Common cover crops in Canada include oat, clover, peas, and radish (CAPI 2021).

Critical external factor: Any off-farm attribute or factor that is materially and substantially relevant to the viability, long-term profitability, and sustainability of agricultural production of a management unit or farm. These may include economic factors (e.g., labour availability, regional market demand and opportunities, regulatory changes, *farmland tenant* availability, supplier availability, and technological advancements), environmental factors (e.g., *climate change*, regional availability of water, and other inputs), and social factors (e.g., social licence).

Crop: Plant species that are purposefully grown and/or harvested to satisfy human and livestock needs. They can include plants grown for food, feed, forage, fibre, decorative purposes, oilseed, medicine, cultural practices, fermentation products, or fuel, including, but not limited to, field crops, hay or forage, fruits, vegetables, nuts, grains, and horticultural specialties. *Cover crops* and companion *crops* may be considered *crops* if purposefully grown.

Cropland: Land used primarily for the direct production of agricultural products for harvest, including, but not limited to, land in row crops or close-grown crops, forage crops that are in a rotation with row or close-grown crops, permanent hay land, horticultural crops, orchards, vineyards, cultivation under tree cover cropped marshes, cranberry bogs, and other lands used to produce crops. It may include both irrigated and dryland areas.

Crop productivity: The inherent capacity of a particular site to produce a *crop*, often measured in volume or weight per hectare.

Crop protectants: Also known as pesticides or crop protection products, crop protectants are used to keep crops healthy and abundant by protecting them against pests (insecticides), weeds (herbicides), and diseases (fungicides). Specific chemicals are labelled for very specific uses and quantities. They can be synthetic (developed in laboratories and manufactured) or natural. Chemicals used in agriculture need to be approved by Health Canada. Provinces and territories are responsible for controlling the use of crop protectants.

Crop residues: Materials from growing *crops* left on the soil surface or partially incorporated into the surface layer of *cropland* to reduce *soil erosion*, conserve soil moisture, and improve soil tilth. These materials may include, but are not limited to, stalks, stubble, leaves, chipped branches and vines, and seed pods.

Crop genetic diversity: Variation in genetic and phenotypic characteristics of plants used in agriculture. Its two components are the genetic diversity within each *crop* (within-*crop* diversity, including different *crop* varieties or hybrids of the same species) and the number of *crop* species commonly grown (between-*crop* diversity).

Deforestation: The conversion of *forest* to another land use or the long-term reduction of the tree canopy cover below the minimum 10 percent threshold. It includes areas of *forest* converted to agriculture, *pasture*, water reservoirs, residential and industrial areas, and urban areas (Food and Agriculture Organization of the United Nations).

Ecologically Important Sites: Sites of exceptional ecological importance including areas with *critically imperilled* or *imperilled* species or *natural communities* (potential source: species or *natural communities* with NatureServe global conservation status ranks of G1 or G2), rare *natural communities*, or unique ecological landscape features (inspired by SFI).

Endangered species: A *wildlife* species that is facing imminent extirpation or extinction.

Energy-efficient agricultural practices: Practices that deliver more services for the same energy input or the same services for less energy input (modified from the International Energy Agency definition of energy efficiency).

Enrolled lands: Lands managed by the *Standard User* and enrolled under the *Leading Harvest Standard* and subject to third-party audit to the *Leading Harvest Standard*.

Equal Opportunity Employment: To provide employment where an employer agrees not to discriminate against any employee or job applicant because of race, colour, religion, national origin, sex, physical or mental disability, or age.

Equitable: Equity is the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other dimensions of inequality (e.g. sex, gender, ethnicity, disability, or sexual orientation). (WHO)

Fair wage or fair compensation: Often used interchangeably with living wage. However, a fair wage is a broader concept that encompasses the idea of equitable compensation for work performed. It means paying workers a wage that is reasonable, and in line with their skills, experience, and market conditions.

Farmland: Land owned or operated by an agricultural operation. It includes *cropland*, summer fallow, improved and unimproved *pasture*, woodlands and *wetlands*, all other land (including idle land), and land on which farm buildings are located (Statistics Canada 2023).

Farmland tenant/lessee: A tenant/lessee of *farmland* where the lease is managed by a *Standard User*.

Farm labour contractor: A farm labour contractor provides labour to producers in connection with the planting, cultivating, or harvesting of *agricultural products*. Although the workers may work on a variety of farms owned by different producers, they are the employees of the farm labour contractor (Government of British Colombia).

Fertilizer: Any substance or mixture of substances, containing nitrogen, phosphorus, potassium, or other plant food, manufactured, sold, or represented for use as a plant nutrient (CFIA).

Forest: Land with tree crown cover (or equivalent stocking level) of more than 10 percent and an area of more than 0.5 hectares with tree species largely of indigenous origin. The trees should be able to reach a minimum height of 5 meters at maturity in situ. It may consist either of closed forest formations where trees of various heights and undergrowth cover a high proportion of the ground or open forest formations with a continuous vegetation cover in which tree crown cover exceeds 10 percent. It does not include land that is predominantly under agricultural or urban land use (FAO 2018).

Gender-equitable: The fair treatment for men and women according to their respective needs. This may include equal treatment or treatment that is different, but which is considered equivalent in terms of rights, benefits, obligations, and opportunities (UNESCO). Equivalency between men and women does not mean that women and men have to become the same, but that their rights, responsibilities, and opportunities will not depend on whether they were born male or female.

Grasslands: Natural or seminatural land defined by the following characteristics: (1) a non-wetland formation; (2) vascular vegetation has at least 10 percent cover; (3) graminoids have at least 25 percent cover (but if less than 25 percent cover, graminoids exceed that of other herbaceous and shrub cover); (4) broad-leaved herbs (forbs) may have variable levels of cover and dominance; (5) shrubs have less than 25 percent canopy cover; (6) and trees: (i) in temperate zones, typically have less than 10 percent canopy cover, are less than 5 meters tall, and are single-layered or (ii) in tropical regions, typically have less than 40 percent canopy cover, are less than 8 meters tall, and are single-layered (Dixon et al. 2014).

Greenhouse gases: Greenhouse gases are gases in the atmosphere such as water vapour, carbon dioxide, methane, and nitrous oxide that can absorb infrared radiation, trapping heat in the atmosphere. This greenhouse effect means that emissions of greenhouse gases due to human activity cause global warming (IPCC, 2019).

Groundwater: Above the water table lies the unsaturated zone. Here the spaces in the rock and soil contain both air and water. Water in this zone is called soil moisture. The entire region below the water table is called the saturated zone, and water in this saturated zone is called groundwater (Government of Canada).

Groundwater depletion: A long-term decline in levels of *groundwater*, which can be caused by a combination of increased human usage (of ground and connected *surface water*) and changes to recharge (e.g. rainfall and human usage).

Groundwater regulatory agency: A local, regional, provincial, or federal public authority or government agency with statutory authority to exercise regulatory or supervisory oversight in the use and/or extraction of *groundwater*.

Habitat: A place, natural or otherwise (including climate, food, cover, and water), where an individual or population of animal species or plant species naturally or normally lives and develops.

Hazardous waste: Waste with properties such as flammability, corrosiveness, or inherent toxicity. These wastes and materials can pose a variety of risks, from skin damage on contact to the contamination of groundwater, surface water, and soil as a result of leaching into the environment (Government of Canada).

Imperiled (species): At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. (NatureServe)

Indicator: A specific metric that provides information about an organization's agricultural and environmental performance and that is integral to assessing conformance to the *Leading Harvest Standard*.

Indigenous Peoples: Aboriginal Peoples is also used. The Canadian Constitution recognizes three groups of Aboriginal Peoples: Indians (more commonly referred to as First Nations), Inuit, and Métis. These are three distinct peoples with unique histories, languages, cultural practices, and spiritual beliefs (Government of Canada).

Indigenous "Aboriginal" rights: Refer to practices, traditions, and customs that distinguish the unique culture of each First Nation and were practiced prior to European contact. These are rights that some Aboriginal peoples of Canada hold as a result of their ancestors' longstanding use and occupancy of the land. The rights of certain peoples to hunt, trap, and fish on ancestral lands are examples of Aboriginal rights. Aboriginal rights vary from group to group depending on the customs, practices, and traditions that have formed part of their distinctive cultures. Aboriginal rights are protected under s.35 of the Constitution Act, 1982.

There are areas in Canada where Aboriginal people's claims to Aboriginal rights and title have not been dealt with by treaty or in any other legal way. Historically, in most of British Columbia, Yukon and Nunavut, as well as parts of Québec, Newfoundland, and Labrador, treaties were not made with First Nations or Inuit people who lived there. To address this fact and other outstanding claims of Aboriginal rights and title, the comprehensive land claims process (or the making of modern treaties) was established in 1973 (Government of Canada).

Integrated Pest Management: Integrated pest management (IPM) is an all-encompassing approach to pest management in agriculture. It uses a combination of pest management tactics and is more environmentally friendly than relying only on pesticides (Agriculture and Agri-food Canada). *Appropriate techniques may include, but are not limited to, enhancement of natural enemies, planting pest-resistant crops, adaptation of cultural management, and judicious use of crop protectants.*

Land use conversion: A change in the extent or composition of an ecosystem or *habitat* where there is a shift from one land use to another that is considered significant or irreversible.

Living wage: The minimum income necessary for an employee or contract worker to meet their basic needs, which can include minimum food, child care, health insurance, housing, transportation, and costs of other basic necessities (e.g., clothing, personal care items, etc.), such that public assistance is not necessary to meet basic needs. It does not address other needs such as entertainment, recreation, or income for unpaid vacation (MIT).

Low-emission technologies: Advanced technologies used to significantly reduce *greenhouse gas* emissions levels, airborne pollutants, and other adverse environmental impacts. This can include high-efficiency equipment and technology using *renewable energy* (e.g., hybrid vehicles, solar energy).

Lowest risk, most selective treatment options: A treatment used to control site-specific *pests* that *minimizes* impact on non-target organisms and people and has the least overall impact while meeting management *objectives*. Considerations may include the target *pest*, the degree of control needed, cost, the season and timing of application, rates and methods, terrain, crop conditions, and the presence

Minimize: To do only that which is necessary and appropriate to accomplish the task or objective described.

or absence of water bodies.

Native habitats: Areas where native species naturally occur and that have the living and nonliving environmental conditions necessary for survival, including areas for feeding, shelter, *protection*, and/or reproduction.

Natural communities: An assemblage of indigenous interacting plant and animal species and their common environment, recurring in specific ecological areas across the landscape. There are specific definitions of natural communities defined principally by the dominant vegetation. Some of these are defined in this glossary and include *forests*, *grasslands*, *rangelands*, *and wetlands*.

Natural forest: *Forest* composed of indigenous trees and not classified as a planted *forest*.

Nutrient management: To manage the amount, source, placement, form, and timing of the application of nutrients and soil amendments such as animal manures to ensure adequate soil fertility for plant production and to minimize the potential for environmental degradation, particularly water quality impairment and unnecessary air emissions.

Objective: A fundamental goal.

Pasture: (1) Grazing lands comprised of introduced or domesticated native forage species that are used primarily for the production of livestock. They receive periodic renovation and/or cultural treatments such as tillage, fertilization, slashing, and weed control, and may be irrigated. They are not in rotation with *crops*. (2) A grazing area enclosed and separated from other areas by fencing or other barriers; the management unit for grazing land. (3) Forage plants used as food for grazing animals. (4) Any area devoted to the production of forage, native or introduced, and harvested by grazing.

Performance Measure: A means of judging whether an *Objective* has been fulfilled.

Pests: A pest is a harmful, noxious, or troublesome organism. Pests include insects, weeds, plant pathogens (fungi, bacteria, viruses, and nematodes), rodents, and other plant or animal pests. A non-native pest (also known as alien species or exotic pests) are pests that are introduced to a country or region deliberately or by accident, outside of their natural *habitat* (British Colombia).

Policy: A written statement of commitment to meet an *Objective* or to implement a defined *program* or plan to achieve an *Objective* or outcome.

Prime agricultural land: Prime agricultural areas represent large, generally contiguous blocks of land that enable current and future opportunities for agriculture. They are characterized by the presence of:

- Specialty crop areas and/or areas with Canada Land Inventory (CLI) Classes 1 - 3 lands;
- Other areas associated with prime agricultural land including CLI Classes 4 - 7 lands and additional areas with a local concentration of farms with characteristics of ongoing agriculture; and,
- Agricultural areas with organic soil (not part of the CLI classification system).

Small pockets of existing non-agricultural uses may be found within prime agricultural areas (Ontario).

Process: A series of purposeful actions or operations that leads to a sought-after end or outcome. This can include a set or sequence of informal or formal practices, procedures, or routines.

Professional work environment: A non-discriminatory workplace environment free from harassment and composed of competent, respectful, mature, and accountable employees working toward a common goal.

Program: An organized system, *process*, or set of activities to achieve an *Objective*, *Performance Measure*, or *Indicator*.

Protection: Maintenance of the status or integrity, over the long term, of identified attributes or values including management where *appropriate*, giving consideration to past disturbance, land use, and *pest* risk when determining *appropriate conservation* strategies.

Rangeland: Rangelands are ecosystems that support native or introduced vegetation that have the potential to be grazed and are managed as a natural ecosystem for multiple uses and values. Grazing is a natural process that supports ecosystem health and function.

Regulatory action information: Information related to compliance with government regulations such as permits, reports, and corrective action documentation.

Renewable energy: Energy from sources that are naturally replenishing but flow-limited. It is virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time, including wood, waste, geothermal, wind, photovoltaic, tidal and wave, hydropower, and solar thermal energy.

Riparian area: A riparian area is defined as a strip of moisture-loving vegetation growing along the edge of a natural water body (Agriculture and Agri-food Canada).

Runoff: Water from precipitation or irrigation on an area that does not infiltrate, but instead is discharged from the area. The water that flows off the surface of the land is called surface *runoff.* Water that enters the soil before reaching *surface* water is called *groundwater runoff* or seepage flow from *groundwater.*

Soil amendments: Materials that typically are added to soil, plants, or the plant-growth environment to enhance plant growth. These include fertilizers, compost, sludge, manure, microbes, additives, materials improving soil condition (i.e., adjusting the pH of the soil, improving soil structure and texture, aeration adjustment, and moisture conservation among others), materials controlling or suppressing crop pests, and others or combinations thereof. Inorganic soil amendments are composed of synthetic chemicals and/or minerals, while organic soil amendments are often composed of organic matter from plant/animal sources and/or microbes, and may include materials such as manure, earthworm castings, soil, sphagnum peat, grass clippings, straw, wood chips, various composts, seaweed, guano, or naturally occurring mineral deposits, and living microorganisms, among others.

Soil erosion: A process by which soil and rock are removed by water and wind and then transported and deposited in other locations.

Soil fertility: The quality that enables soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favourable.

Soil health: The capacity of soil to function as a vital living ecosystem that sustains *crops*, soil organisms, and humans. Its maintenance includes consideration of the physical, chemical, and biological characteristics of soil.

Soil loss: Soil erosion where the removal of topsoil occurs faster than the soil-forming processes can replace it due to natural, animal, and human activity.

Soil degradation: is defined as a change in the soil health status resulting in a diminished capacity of the ecosystem to provide goods and services for its beneficiaries. Degraded soils have a health status such, that they do not provide the normal goods and services of the particular soil in its ecosystem. (FAO)

Soil mismanagement: Agricultural operations, practices, and/or treatments that result in the decline of *soil health* and *soil productivity*, including *soil loss*.

Soil productivity: The capability of soil to produce a specified plant or sequence of plants under specific management.

Solid waste: Any solid, semisolid, liquid, or contained gaseous materials discarded from agricultural operations. It includes garbage, construction debris, commercial refuse, sludge from water supply or waste treatment plants, and other discarded materials.

Special sites: Sites that include *unique geological features* or *unique culturally important features* that are recognized regionally or nationally or by *Indigenous Peoples*.

Species at risk: An extirpated, *endangered*, *threatened* species, or a species of special concern (ECCC).

Special concern species: A *wildlife* species that may become a threatened or an *endangered species* because of a combination of biological characteristics and identified threats (ECCC).

Standard user: An organization certified or committed to being certified by an accredited *Certification Body* to be in conformance with the *Leading Harvest Standard*.

Sub-national: Sub-national government is defined as the sum of state governments and local/regional governments (OECD). In Canada, sub-national governments include provinces, counties, municipalities, and districts.

Surface water: Water that is on the Earth's surface, such as in a stream, river, lake, or reservoir.

Surplus food: A food that is still perfectly edible and safe for human consumption, but exists, for example, because it has failed to meet aesthetic specifications, or is past its 'sell by' or 'best before' dates. Much of this food ends up as waste. If diverted in time, a sizeable share of this food can instead be redirected for human consumption, helping to alleviate hunger, and creating several benefits for the generating firms. (FAO)

Threatened species: A *wildlife* species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction (ECCC).

Unique culturally important features: Features having significance for or being representative of human activities or beliefs. Examples could include, but are not limited to, documented areas such as archaeological sites, unusual historical sites, cemeteries, and sacred sites. Typically, these sites have been documented in databases established by state governments or the federal government and have been significant historically.

Unique geological features: Naturally occurring physical features on Earth's surface, which are unique or locally rare, typically limited in extent (0.1 to 100 acres), and often less than 10 acres. Examples could include, but are not limited to, exceptional waterfalls, stream or river gorges, canyons, arches, caves or mine entrances, outcrops of fossil beds, or rare mineral deposits, bluffs, buttes, and cliffs.

Verifiable monitoring system: A system capable of being audited by a third party that includes: 1. a means to characterize *farmland* under the authority of a *Standard User*, 2. a *process* to identify and use sources of available data regarding the use of *agricultural best management practices*, and 3. a method to assess *farmland tenant* performance.

Viable occurrences: Occurrences of species with good or excellent viability according to NatureServe, including occurrences that exhibit favourable characteristics with respect to population size and/or quality and quantity of occupied *habitat*, and, if current conditions prevail, the occurrence is likely to persist for the foreseeable future (i.e., at least 20-30 years) in its current condition or better (NatureServe).

Water quality: Water quality is a term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its intended use. Water quality for agricultural use varies depending on the: water source (e.g. river, stream, pond, ditch, lake, well, dugout or municipal, etc.), and usage of the water, e.g., irrigation, crop washing, cleaning and sanitation procedures, or for livestock (Government of British Columbia).

Wetlands: Wetlands are submerged or permeated by water, either permanently or temporarily, and are characterized by plants adapted to saturated soil conditions. Wetlands include fresh and saltwater marshes, wooded swamps, bogs, seasonally flooded *forest*, sloughs, or any land area that can keep water long enough to let wetland plants and soils develop (Government of Canada).

Wildlife: Aquatic (freshwater), marine, and terrestrial fauna.

