

## 9. GLOSSARY

(Acronyms are listed at the beginning of this report)

**Agri-environmental incentives** – voluntary public programs which pay or help pay farmers for environmentally-friendly practices or land use changes on their land.

**Agri-environmental indicators** – Measure of a key environmental condition, risk, or change resulting from agriculture, or change resulting from agriculture, or of management practices used by producers (AAFC, Environment Bureau, *Agri-Environment Indicators*). Indicators are developed as a set of agri-environmental attributes which can be linked to the outcome of changes over time in initial conditions.

**Agri-environmental payments** (or environmental payments) - payments to farmers or land-owners for the external public, non-use environmental benefits their on-farm activities provide.

**Agroecosystem** – Ecosystem under agricultural management; an open, dynamic system connected to other ecosystems through the transfer of energy and materials (AAFC).

**Agrotourism** – Tourism related to the enjoyment of agricultural land; a type of Ecotourism (AFFC).

**Biodiversity, or biological diversity** – Variety of species and ecosystems on the earth and the ecological processes of which they are part; includes three components; ecosystem diversity, species diversity, and genetic diversity (AAFC). As put by D. Tilman, from an economic point of view, biodiversity is “the variety of life at all levels of organization, from the level of genetic variation within and among species to the level of variation within and among ecosystems and biomes.”

**Biome** – larger than an **ecosystem**; an area of the earth containing specific sets of ecosystems and their species.

**Biotechnology** – Within agriculture, refers to the science and methods of genetic engineering to produce new varieties of crops or livestock with superior features (AAFC).

**Carbon sequestration** – Biochemical process by which atmospheric carbon is absorbed by living organisms, including trees, soil micro-organisms, and crops; storage of carbon in soil, with the potential to reduce atmospheric carbon dioxide levels (AAFC).

**Common Agricultural Policy (CAP)** – a major agreement among EU members which governs agricultural policy and much other rural development policy, including **multifunctionality** and **agri-environmental incentives** programs, for example.

**Consensus decision-making** – usually achieved by a process of discussion, accommodation and trade-off, where all members of the decision-making process are in agreement (in contrast, see **democratic decision-making**).

**Contingent valuation** – an economic survey method devised to provide a monetary value to environmental goods and services by gauging peoples' willingness to pay for specific ones or willingness to accept compensation for forgoing production to provide them, for example (see **environmental goods and services**)

**Critical habitat** – habitat that is essential for the maintenance and long term survival of a wildlife species (AAFC).

**Cross compliance** – a regulatory measure which ties the eligibility for the benefits of a public program to the fulfilment of a requirement not directly related to the program. (source: *Economic Instruments and Disincentives to Sound Environmental Practices* Final Report of the Task Force, Canada Ministry of Environment, 1994)

**Democratic decision-making** – where a decision is made on the basis of a majority taken by democratic vote (see also **consensus decision-making**).

**Domestic support** – in agriculture, support of national governments to individuals in agriculture or to the sector in general; as opposed to export or trade support. Can be direct, as in income stabilization, or indirect, as in research, training or agri-environmental support

**Driving force** – societal influences (e.g. market signals, government policy, production technologies) or farming factors (e.g. production strategies, production practices, inputs, practices) that shape the environmental effects of agriculture.

**Eco-efficiency** – a process where more abundant or valuable products or services are produced using relatively fewer material and energy inputs, in turn minimizing losses to the environment and reducing pollution (AFFC).

**Environment** – literally everything physical that surrounds us. This is now used to refer to both natural and human-made environments and can refer to any size scale.

**Environmental farm plan** – plan outlining environmental concerns on an individual farm, as well as steps to address these concerns; voluntarily prepared and carried out by the farmer (AFFC).

**Environmental goods and services** – the term comes from formal economics and refers to public goods (as opposed to private goods) deriving from the environment which, because they have no market, have no price and are therefore difficult to measure effectively. See **contingent valuation**

**Environmentally sustainable agriculture** – Agriculture that can be carried on indefinitely without significantly harming the environment (AAFC).

**European Union (EU)** – the economically and politically unified body of 15 Member States in Europe, with others seeking membership (see **Common Agricultural Policy (CAP)**)

**Ex ante evaluation** - as opposed to *ex post* evaluation, *ex ante* evaluation frameworks are those which are included with the program and implementation design itself and based on the aims of the program. This is now the preferred mode.

**Ex post evaluation** – as opposed to *ex ante* evaluation, *ex post* program evaluation is done after-the-fact and attempts to assess the outcome of a program. This mode is now in disfavour.

**Extensification** – as opposed to “intensification” of agriculture; the deliberate reduction in inputs and/or yield in farming from e.g. set-aside, retirement of farmland, organic farming etc.

**Farm conservation club** – voluntary association of farmers with a shared interest in improving environmental management on their farms (definition from AAFC).

**Habitat availability** - how accessible and useable a habitat is to a species, depending on factors such as the abundance of the habitat type within the species’ range; current level of occupancy; landscape patchiness; seasonal changes in species’ needs; and occurrence of competitors, predators, and disease (AAFC).

**Integrated pest management** – control of pests using a combination of techniques such as crop rotations, cultivation, and biological and chemical pest controls (AAFC).

**Intrinsic or existence value** – not a market value. It allows that something has an intangible value - just for being. It therefore cannot be quantified, that is, it cannot be precisely measured (see **value**).

**Multifunctionality** – as used in Europe, Japan and some other nations; agriculture, in addition to producing food, hides and fibre, also provides many other goods and services not priced in the market. These include environmental outputs such as rural amenities and dis-amenities, but also social and cultural functions. (source: Anna Alberini and Joseph Cooper *Applications of the Contingent Valuation method in Developing Countries: a Survey* FAO of the United Nations, Rome, 2000).

**Non-point source pollution** – as opposed to point-source pollution which originates from a single identifiable source. This is pollution, such as from farms, which originates from a large area.

**Participatory exercise** – a form of local decision-making where stakeholders or local actors themselves identify their needs and construct their own solutions under the facilitation, not the direction, of another agency. Being a truly bottom-up form, it is now a preferred method in international development, for example.

**Precision farming** – farm management at a level that allows inputs to be tailored to variable conditions across short distances in a single field (AAFC).

**Riparian** – related to the land bordering a stream or other body of water (AAFC).

**Risk indicator** – indicator that estimates the potential for some form of resource degradation by considering relevant contributing factors (AAFC).

**Sustainable Agricultural Practices** – agricultural practices which do not compromise the future practice and viability of farming.

**Stakeholder** – any individual or interest group, including e.g. government, which has a stake in the outcome of a process which is being mediated.

**Stakeholder analysis** – as opposed to economic methods, a form of decision-making or analysis which draws from the stated responses of individuals of interest groups addressing a particular question.

**State indicator** – indicator that expresses an actual resource condition, usually based on direct field measurements(AAFC).

**Subsidiarity** – this is the principle where some responsibility for decision-making is deliberately placed at the level of society for which the policy will most impact. It is part of decentralization and deconcentration of government.

**Sustainable Development** – following the Brundtland Report, this is “development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”

**Trade liberalization** – process whereby trade in goods and services among nations is enhanced through more open markets and the reduction or elimination of trade barriers such as tariffs (AAFC).

**Value** – when used in its economic sense refers to its market value, of which there are many particular forms, such as use value, marginal value etc. (see **intrinsic or existence value**).

**World Trade Organization** – the successor to GATT (General Agreement on Tariffs and Trade). An international organization of member states devoted to promoting and “disciplining” liberal and free trade, holding periodic Ministerial meetings, the latest in Doha, Qatar in November, 2001 (see **domestic support**).