

Glossary of Terms regarding Forests and Climate Change

Mitigation

This section presents the definitions regarding mitigation as these are given in the decisions of the Conference of the Parties of the UNFCCC

Actual net greenhouse gas removals by sinks is the sum of the verifiable changes in carbon stocks in the carbon pools within the project boundary, minus the increase in emissions of the greenhouse gases measured in CO₂ equivalents by the sources that are increased as a result of the implementation of the afforestation or reforestation project activity, while avoiding double counting, within the project boundary, attributable to the afforestation or reforestation project activity under the CDM.

Afforestation is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.

Baseline net greenhouse gas removals by sinks is the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the afforestation or reforestation project activity under the clean development mechanism (CDM).

Carbon pools are those carbon pools referred to in paragraph 21 of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*) and are: above-ground biomass, below-ground biomass, litter, dead wood and soil organic carbon.

Cropland management is the system of practices on land on which agricultural crops are grown and on land that is set aside or temporarily not being used for crop production.

Deforestation is the direct human-induced conversion of forested land to nonforested land.

Forest is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 metres at maturity *in situ*. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 metres are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest.

Forest management is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner.

Grazing land management is the system of practices on land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced.

Leakage is the increase in greenhouse gas emissions by sources which occurs outside the boundary of an afforestation or reforestation project activity under the CDM which is measurable and attributable to the afforestation or reforestation project activity.

Long-term CER or “ICER” is a CER issued for an afforestation or reforestation project activity under the CDM which, subject to the provisions in section K below, expires at the end of the crediting period of the afforestation or reforestation project activity under the CDM for which it was issued.

Net anthropogenic greenhouse gas removals by sinks is the actual net greenhouse gas removals by sinks minus the baseline net greenhouse gas removals by sinks minus leakage.

Project boundary geographically delineates the afforestation or reforestation project activity under the control of the project participants. The project activity may contain more than one discrete area of land.

Reforestation is the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989.

Revegetation is a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation contained here.

Small-scale afforestation and reforestation project activities under the CDM are those that are expected to result in net anthropogenic greenhouse gas removals by sinks of less than 8 kilotonnes of CO₂ per year and are developed or implemented by low-income communities and individuals as determined by the host Party. If a small-scale afforestation or reforestation project activity under the CDM results in net anthropogenic greenhouse gas removals by sinks greater than 8 kilotonnes of CO₂ per year, the excess removals will not be eligible for the issuance of tCERs or ICERs.

Temporary CER or “tCER” is a CER issued for an afforestation or reforestation project activity under the CDM which, subject to the provisions of section K below, expires at the end of the commitment period following the one during which it was issued.



Adaptation

This section provides definitions for the concepts and terms regarding adaptation as used in the Adaptation Policy Framework.

Adaptation – a process by which strategies to moderate, cope with, and take advantage of the consequences of climatic events are enhanced, developed, and implemented.

Adaptation baseline - An adaptation baseline includes a description of adaptations to current climate that are already in place. Also see Baseline.

Adaptation Policy Framework (APF) – a structured process to developing adaptation strategies, policies, and measures to enhance and ensure human development in the face of climate change, including climate variability. The APF is designed to link climate change adaptation to sustainable development and other global environmental issues. It consists of five basic components: project scope and design, assessing current vulnerability, characterizing future climate risks, developing an adaptation strategy, and continuing the adaptation process.

Adaptive capacity – the potential or capability of a system to adjust, via changes in its characteristics or behavior, so as to cope better with existing climate variability and change. It is possible to differentiate between adaptive potential, a theoretical upper boundary of responses based on global expertise and anticipated developments within the planning horizon of the assessment, and adaptive capacity that is constrained by existing information, technology and resources of the system under consideration.

Baseline (also called project baseline) – a description of current conditions, including existing or needed information on socioeconomic conditions, climate risks and hazards, and known system vulnerabilities and adaptations. See also vulnerability baseline and adaptation baseline.

Climate change – any change in climate over time, whether due to natural variability or because of human activity.

Climate change vulnerability - the degree to which a system is susceptible to, or unable to cope with the adverse effects of climate change, including climate variability and extremes. See also vulnerability.

Climate variability – variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate on all temporal and spatial scales beyond that of individual weather events. Variability may result from natural internal processes within the climate system (internal variability) or to variations in natural or anthropogenic external forcing (external variability).

Coping range – the range of climate where the outcomes are beneficial or negative but tolerable; beyond the coping range, the damages or loss are no longer tolerable and a society is said to be vulnerable.

Cost-benefit analysis - A quantitative method that make a detailed comparison of the costs and benefits of a particular measure, or set of measures. A decision to fund the project depends on the ratio of benefits to costs – the higher the ratio, the more attractive the investment. Its major advantages are its verifiable bottom line and its

familiarity to ministries and planning agencies. Disadvantages include limitations regarding the ability to directly address equity considerations and represent non-quantifiable benefits.

Evaluation – a process for determining systematically and objectively the relevance, efficiency, effectiveness and impact of the adaptation strategies in the light of their objectives.

Food insecurity – a situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. It may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level. Food insecurity may be chronic, seasonal, or transitory. More recent literature focuses on livelihood security—an expansion of food security to include multiple stresses and sectors to which livelihoods might be exposed.

Hazard – a physically defined climate event with the potential to cause harm, such as heavy rainfall events, droughts, floods, storms, long-term changes in mean climatic variables such as temperature.

Hybrid - “Hybrid” approaches apply uniform and site-specific methods in tandem and within an iterative process to develop and assess the range of adaptation strategies.

Indicator – an item that can be clearly characterized and possibly quantified that represents an abstract concept, such as human well-being.

Logical Framework Analysis Approach/Logframe – a project planning tool that includes project goals, objectives and activities, with specific outputs and measurable indicators of achievements.

Measure – see “Policies and measures.”

Monitoring – a mechanism or mechanisms to track progress in implementation of an adaptation strategy and its various components in relation to targets.

Policies and measures – usually addressed together, policies and measures address the need for climate adaptation in distinct, but sometimes overlapping ways. Policies typically refer to instruments that government can use to change economic and other behaviors. Policies are usually composed of taxes, command-and-control regulations (e.g., performance specifications for technologies), market mechanisms such as trading schemes, incentives such as subsidies for new management techniques, and information gathering (as on the likely impacts of climate change) or dissemination (as on the merits of new technologies or behavior changes). Measures are usually specific actions amenable to implementation, such as re-engineering irrigation systems, planting different crops, or initiating a new industry. Many “projects” could be also termed “measures”.

Priority system - A priority system is the focus of the APF process. It is a system that is characterized as highly vulnerable to different climate hazards, as well as being strategically important at local and/or national levels. It has been identified as a priority system through a stakeholder-driven process.

Probability - defines the likelihood of an event or outcome occurring. Probability can range from being qualitative, using word descriptions such as likely or highly confident, to quantified ranges and single estimates, depending on the level of understanding of the causes of events, historical time series and future conditions.

Reference scenario – an internally coherent description of a possible future without consideration of climate change; the reference scenario is used for comparison with alternative scenarios that include consideration of climate change and options for adaptation policies and measures.

Risk (climate-related) – The result of the interaction of physically defined hazards with the properties of the exposed systems - i.e., their sensitivity or [social] vulnerability. Risk can also be considered as the combination of an event, its likelihood, and its consequences - i.e., risk equals the probability of climate hazard multiplied by a given system's vulnerability.

Scenario – a plausible and often simplified description of how the future may develop, based on a coherent and internally consistent set of assumptions about driving forces and key relationships. Scenarios may be derived from projections, but are often based on additional information from other sources, sometimes combined with a narrative storyline.

Sector – a part or division, as of the economy (e.g., the manufacturing sector, the services sector) or the environment (e.g., water resources, forestry).

Site-specific approaches – These approaches seek to develop and assess detailed adaptation strategies on the basis of specific perceptions of vulnerability that have emerged from the full range of stakeholders at the site level (e.g., local communities, local project).

Socioeconomic vulnerability - an aggregate measure of human welfare that integrates environmental, social, economic and political exposure to a range of harmful perturbations . See also vulnerability.

Stakeholder – those who have interests in a particular decision, either as individuals or as representatives of a group. This includes people who influence a decision, or can influence it, as well as those affected by it.

Strategy – a broad plan of action that is implemented through policies and measures. Strategies can be comprehensive (i.e., focusing on national, cross sectoral scales) or targeted (i.e., focusing on specific sectors, regions, or measures).

System - a system may be a region, a community, a household, an economic sector, a business, a population group, or other systems, such as an agricultural system, that are exposed to varying degrees to different climate hazards, defined in TP 4 as events with the potential to cause harm (see priority system).

Uncertainty – an expression of the degree to which a value (e.g., the future state of the climate system) is unknown.

Uniform approaches – These approaches seek to develop and assess broad adaptation strategies on the basis of a comprehensive perception of vulnerability that may exist – for example across sectors, across regions, across development challenges.

Vulnerability – The degree to which an exposure unit is susceptible to harm due to exposure to a perturbation or stress, and the ability (or lack thereof) of the exposure unit to cope, recover, or fundamentally adapt (become a new system or become extinct). It can also be considered as the underlying exposure to damaging shocks, perturbations or stresses, rather than the probability or projected incidence of those

shocks themselves. See also socioeconomic vulnerability and climate change vulnerability.

Vulnerability baseline - A vulnerability baseline includes a description of current vulnerabilities to climate variability and events. Also see Baseline.