

Glossary Climate Centre

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Term	Description	Sources ^[1]
Adaptive capacity	<p>The ability of systems, institutions, individuals (both human and non-human organisms) to adjust to potential damage, take advantage of opportunities, or respond to the consequences of climate impacts.</p> <p>It is important to note the difference between coping and adaptive capacity. While coping aims to maintain the system and its functions in the face of adverse conditions, adaptation involves changes and requires reorganization processes.</p>	IPCC, 2014
Anticipatory Action (AA)/Early Warning Early Action (EWEA)	<p>A set of actions that are taken to prevent or mitigate potential disaster impacts before a shock or acute impacts of a shock are felt. These actions are carried out in anticipation of a hazard impact and are based on a prediction of how the event will unfold (early warning systems). Anticipatory actions should not be a substitute for longer-term investment in risk reduction but contribute to managing residual risk.</p>	Anticipati on Hub, 2020
Climate	<p>Description of the average, long term weather conditions in a given area, over an extended period. The World Meteorological Organisation understands climate as the average weather over a 30-year period.</p> <p>Most commonly, variables such as temperature and precipitation are included in the understanding of a climate of a given area, and a more nuanced understanding incorporates variables such as wind, air pressure or humidity, for example.</p>	IPCC, 2014; WMO, 2019
Climate action	<p>The urgent steps taken to combat climate change and its associated impacts. This includes the measures taken to strengthen the resilience and adaptive capacity of individuals and communities to climate-related hazards. Climate action is the focus of Goal 13 of the UN Sustainable Development Goals.</p>	ECOSOC, 2019
The Climate and Environment Charter for Humanitarian Organizations (the Charter)	<p>This document aims to foster a strong commitment to climate action across the humanitarian community. It outlines seven commitments to guide the humanitarian sector's approach to a) the increasing risks resulting from climate change and b) to address its own carbon and environmental footprint.</p>	Climate Charter, 2021
Climate change	<p>A significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). It can result from both natural changes (e.g., changes oceanic circulation) and human activities (such as greenhouse gasses emission or deforestation).</p> <p>A significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer) that is attributed directly or indirectly to human activity (e.g., deforestation, GHG emissions) that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.</p>	IPCC, 2022

Climate change adaptation (CCA)	<p>The actions taken to reduce the negative impact of climate change, while taking advantage of potential new opportunities. It involves adjusting policies and actions because of observed or expected changes in climate. It involves preparing for and responding to the expected changes in temperature, rainfall, sea levels, and other climate variables.</p> <p>Adaptation measures can be taken at different levels. Making programmes and operations ‘climate-smart’ contributes to climate change adaptation.</p>	IPCC, 2014; IPCC, 2022
Climate change mitigation	<p>Actions taken to reduce or prevent the emission of greenhouse gases and other pollutants into the atmosphere, with the goal of reducing the magnitude and/or rate of long-term climate change.</p>	IPCC, 2022
Climate finance	<p>Local, national or transnational financing (drawn from public, private and alternative sources of financing) that seeks to support climate change mitigation and adaptation actions.</p>	UNFCCC, 2023
Climate and weather extremes	<p>Extreme weather or climate event. The occurrence of a value of a weather or climate variable above (or below) a threshold value near the upper (or lower) ends of the range of observed values of the variable. For simplicity, both extreme weather events and extreme climate events are referred to collectively as ‘climate extremes.’</p>	IPCC, 2022
Climate information	<p>Information about the past, current state or future of the climate system that is relevant for mitigation, adaptation and risk management. It may be tailored or ‘co-produced’ for specific contexts and values.</p>	IPCC, 2022
Climate-related hazard	<p>A potentially damaging climate-related physical event, phenomenon, or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Examples include heatwaves, droughts, floods, storms, wildfires, and sea-level rise.</p>	IPCC, 2022
Climate-related risk	<p>Refers to the probability that a particular climate-related hazard will occur and the potential adverse impacts for lives, livelihoods, health and well-being, ecosystems and species, economic, social and cultural assets, services, and infrastructure.</p> <p>Climate-related risks can be assessed based on a variety of factors, including the magnitude and frequency of the hazard, the vulnerability of the exposed system, and the capacity of the affected population or organization to cope with the impacts.</p>	IPCC, 2014
Climate Risk Management	<p>Climate Risk Management focuses on risks across different timescales – short, medium, long-term – and therefore using information from weather, seasonal and climate forecasts and predictions, and translating such information into meaningful information to enable more comprehensive planning and implementation.</p> <p>It is an approach to climate-sensitive decision making that involves proactive ‘no regrets’ strategies aimed at maximizing positive and minimizing negative outcomes for communities and societies in climate-sensitive areas.</p>	UNDRR UNDP
Climate risk screening	<p>The screening process is a methodology to identify climate risks, key gaps, opportunities and priorities for climate action at operational and institutional level, through collaboration between the mission and the Climate Centre screening teams.</p>	Climate Centre

Climate shocks	The realization of climate risks, which fundamentally affects peoples' lives, livelihoods, health and well-being; ecosystems and species; economic, social and cultural assets; services; and infrastructure.	Sinha, 1999
Climate-smart programs and operations (CSPO)	<p>Programmes and operations have made use of available climate and weather information, both short-term weather and seasonal forecasts and long-term climate projections. in designing and/ or adjusting activities to ensure that they contribute to reducing long-term climate risks and vulnerabilities, including potential unprecedented climate extremes.</p> <p>In doing so, programmes and operations ensure that, at a minimum, they do not place people at increased risk in the future considering likely new climate extremes and growing vulnerabilities, and if possible/ appropriate, empower communities to anticipate, absorb and adapt to climate shocks and long-term changes.</p>	Climate Centre,
Climate variability	Natural fluctuations in climatic conditions on all scales beyond individual weather events. Variability may be due to natural internal processes within the climate system (for example due to El Niño), or through natural or human external factors.	WMO, 2019
Compound risk and cascading risk	<p>A situation where multiple, interrelated, and simultaneous hazards and vulnerabilities occur to create an increased likelihood of a negative impact or harm to a population or community. A compound risk may be caused by various factors, such as natural hazards, conflict, displacement, disease outbreaks, economic and social inequality, and environmental degradation.</p> <p><i>Note: Compound risk events are independent of each other, and one is not the causal factor for the other. Cascading risk can be understood as the risk posed by sequential occurrences of two or more events, where the first event triggers one or more events, in a domino effect.</i></p>	IPCC 2022
Coping capacity	The ability of people, organizations and systems, (using available skills and resources) to maintain the system and its functions in the face of adverse conditions, emergencies or disasters.	UNDRR, 2023
Disaster	<p>A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.</p> <p><u>Slow onset events</u> evolve gradually from incremental changes occurring over many years or from an increased frequency or intensity of recurring events (e.g. drought), whereas a <u>rapid onset event</u> may be a single, discrete event that occurs in a matter of days or even hours (e.g. flash flood). Note that, aligned with the United Nations Office for Disaster Risk Reduction (UNDRR) policy, we do not use the term "natural disaster" on purpose.</p>	UNDRR, 2023; UNFCCC, 2012
Disaster Risk Reduction (DRR)	<p>Disaster risk reduction is aimed at preventing new and reducing existing disaster risk (which occur due to hazard, exposure, vulnerability capacity) and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.</p> <p><i>In recent years there has been a growing convergence between DRR and CCA but they do not overlap completely. Broadly speaking, DRR deals with all hazards, including hydro-meteorological and geophysical hazards, while CCA deals exclusively with climate-related hazards. DRR is predominantly interested in climate extremes leading</i></p>	UNDRR, 2023

	<i>to disasters whereas CCA also considers the long-term adjustment to changes in gradual changing climatic condition, including the opportunities that this can provide.</i>	
Environmental degradation	A process through which the natural environment is compromised, reducing biological diversity and the general health of the environment. This process can be entirely natural in origin, or it can be accelerated or caused by human activities	GEMET, 2021
Environmental footprint or impact	The impacts which activities can have on the environment, including through disturbance of the natural processes and greenhouse gas emissions (the latter also known as 'carbon footprint').	GEMET, 2021
Exposure	Refers to the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas. It is possible to be exposed but not vulnerable	UNDRR, 2023
Forecast-based Action and Financing/ Anticipatory Action	Used synonymously, Forecast-based Financing and Anticipatory Action support action to be taken to reduce the impacts of a hazard before it occurs or the impacts are felt, based on a forecast of when, where and how the event will occur. Anticipatory Action is the term most used currently while Forecast-based Action and Financing were the original terms established when the concept was operationalized and is still used for some of programmes within the IFRC network.	IFRC 2020
Greenhouse effect/ Enhanced Greenhouse effect	The natural greenhouse effect is caused by the natural amounts of greenhouse gases which are vital to sustain life (such as water, carbon dioxide, nitrous oxide, methane and ozone). In the absence of the natural greenhouse effect the surface of the Earth would be approximately 33 °C cooler. The enhanced greenhouse effect refers to the additional radiative forcing resulting from increased concentrations of greenhouse gases induced by human activities.	WMO, 2019
Green Response	Green Response - an approach to humanitarian disaster response that rests on environmental sustainability, making efforts to avoid, minimize and manage potential damage to the local environment and the GHG emissions brought on by humanitarian operations.	IFRC, 2021
Impact-based Forecast	A product that combines a hydrometeorological forecast with an impact assessment containing information about when, where and how likely certain impacts are. Impact-based Forecasts layer vulnerability and exposure data with a hazard forecast to guide decision-making about risk reduction or anticipatory actions.	Climate Centre, 2020
Hazard	The potential occurrence of a natural or human-induced physical event or trend that may cause loss of life, injury or other health impacts as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources.	IPCC, 2022
Loss and Damage	Research has taken Loss and Damage to refer to political debate under the United Nations Framework Convention on Climate Change (UNFCCC) following the establishment of the Warsaw Mechanism on Loss and Damage in 2013, which is to 'address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change.' Lowercase letters (losses and damages) have been taken to refer broadly to harm from (observed) impacts and (projected) risks and can be economic or non-economic.	IPCC, 2022; Mechler et al., 2018
Maladaptation	Actions that may lead to increased risk of adverse climate-related outcomes, including via increased greenhouse gas (GHG) emissions, increased or shifted vulnerability to climate change, more inequitable	IPCC, 2022

	outcomes, or diminished welfare, now or in the future. Most often, maladaptation is an unintended consequence.	
Resilience	Resilience. The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions.	IPCC, 2022
	The ability of communities (and their members) exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects. In short, it is the capacity to deal with change and continue to develop.	Stockholm Resilience Centre
	<i>Climate smart programming aims to contribute to the long-term resilience of communities to climate-related risks.</i>	
Sustainable (development)	The reconciliation of environmental, social, and economic demands. Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their needs	WCED,1987; IPCC, 2022
Vulnerability	The predisposition of people or assets to be damaged/destroyed/affected when exposed to a hazard. The term describes a person or group’s inability to anticipate, cope with, resist and/or recover from the impact of natural or human shocks or hazards without compromising their long-term prospects.	IPCC, 2022
Weather	The daily observed meteorological conditions (such as wind, rain, snow, sunshine) in a given area over a specific time period.	WMO, 2019

Reference list:

[Anticipation Hub. 2023.](#)

[Adger WN, Pulhin JM, Barnett GD, Dabelko GK, Hovelsrud M, Levy Ú, Spring O, and Vogel, CH, 2014. “Human security.” In: Field CB. et al. \(eds.\) Climate Change 2014: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, pp. 755-791. Cambridge University Press, Cambridge, UK.](#)

[General Multilingual Environmental Thesaurus \(GEMET\). “Environmental Degradation.” General Multilingual Environmental Thesaurus.](#)

[International Committee of the Red Cross \(ICRC\). 2020. When Rain Turns to Dust: Understanding and responding to the combined impact of armed conflicts and the climate and environment crisis on people.](#)

[Intergovernmental Panel on Climate Change \(IPCC\). 2014. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, pp. 35-94.](#)

[Intergovernmental Panel on Climate Change \(IPCC\). 2023. About the IPCC.](#)

[IPCC. 2007. Solomon S, Qin D, Manning M, Chen Z, Marquis M, Averyt KB, Tignor M, and Miller HL. \(eds.\) Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the](#)

[Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.](#)

[IPCC. 2018. Summary for Policymakers. In: Masson-Delmotte V, Zhai P, Pörtner HO, Roberts D, Skea J, \(et al\) \(eds.\) Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global green- house gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.](#)

[IPCC 2022. Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change \[H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama \(eds.\)\]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 37–118](#)

[Mechler, R., L.M. Bouwer, T. Schinko, S. Surminski and J. Linnerooth–Bayer \(eds.\), 2018: Loss and Damage from Climate Change: Concepts, Methods and Policy Options. Springer International Publishing. 561 pp. Cham, Switzerland](#)

[Sinha S. and Lipton M. 1999. Damaging Fluctuations, Risk and Poverty: A Review. Poverty Research Unit](#)

[United Nations Economic and Social Council \(ECOSOC\). 2019. Special edition: progress towards the Sustainable Development Goals. Report of the Secretary-General. United Nations Economic and Social Council.](#)

[United Nations Framework Convention on Climate Change \(UNFCCC\). 2023 About the secretariat.](#)

[UNFCCC.2023 Introduction to Climate Finance](#)

[UNFCCC .2012. Slow onset events synopsis.](#)

[UNDRR. 2022. Scoping Study On Compound, Cascading And Systemic Risks In The Asia Pacific, United Nations Office for Disaster Risk Reduction \(UNDRR\).](#)

[United Nations Office for Disaster Risk Reduction \(UNDRR\). 2023 Terminology.](#)

[World Commission on Environment and Development. 1987. Report of the World Commission on Environment and Development: Our Common Future.](#)

[World Meteorological Organization \(WMO\). 2019. Commission for Climatology FAQ. Geneva: World Meteorological Organization.](#)

[World Meteorological Organization \(WMO\). 2023. Our mandate.](#)

^[1] This glossary follows the definitions of leading institutions (IPCC, UNDRR etc.), with alterations in wording to improve accessibility to a non-expert humanitarian audience.