Migration, environment and climate change: Evidence for policy (MECLEP) is a three-year project funded by the European Union, implemented by the International Organization for Migration (IOM) through a consortium with six research partners. The project aims to contribute to the global knowledge base on the relationship between migration and environmental change, including climate change. The innovative research will aim to formulate policy options on how migration can benefit adaptation strategies to environmental and climate change. The six project countries are the Dominican Republic, Haiti, Kenya, Mauritius, Papua New Guinea and Viet Nam.

This version of the Glossary as of July 2014 has been released online but remains a working document subject to review and updates.

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Acknowledgements

This Glossary has been prepared by Susanne Melde, Research and Policy Officer, Migration and Environment, IOM Geneva. The author would like to thank the following colleagues for their input and constructive comments:

IOM:

Frank Laczko, Dina Ionesco, Sieun Lee, Mariam Traoré Chazalnoel, Vera Goldschmidt, Karoline Popp, Daria Mokhnacheva, Elizabeth Warn, Lorenzo Guadagno, Rabab Fatima, Sabira Coelho, Alex Flavell

Université de Versailles Saint-Quentin-en-Yvelines: François Gemenne

UNU-EHS: Koko Warner, Andrea Milan

DRAGON Institute, Can Tho University: Le Anh Tuan

Bielefeld University: Jeanette Schade and Kerstin Schmidt-Verkerk

The author is also grateful to Emma Eggink and Karina Elias for their layout assistance.
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There is a growing recognition that migration can contribute to adaptation to environmental and climate change. The *Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC) recently acknowledged that migration can be an effective adaptation strategy to environmental and climate change (IPCC, 2014). In a similar vein, the European Commission’s Staff Working Document (2013:26) on *Climate change, environmental degradation, and migration* notes that “migration has the potential to contribute to adaptation” in a number of ways. Migration can help people manage risks, diversify livelihoods and cope with environmental changes affecting their lives (IOM, 2008).

To date, however, very few countries have developed explicit policies to promote migration as an adaptation strategy. Migration is not usually integrated into national climate change adaptation plans. Where migration is mentioned in such plans, the emphasis is usually on limiting migration, rather than facilitating it in a proactive way (Martin, 2009; 2013; Warner et al., 2014).

Although there has been a tremendous increase in the number of studies on migration and the environment in recent years, research on the ways in which migration can contribute to adaptation strategies remains limited (Piguet and Laczko, 2014). Understanding the linkages between migration and adaptation is complex as there are many different forms of migration which can impact on adaptation strategies. The concept of adaptation can also be defined in a number of different ways.

This Glossary is being prepared within the framework of an EC-funded project being implemented by IOM and six international research partners entitled “Migration, environment and climate change: Evidence for policy” (MECLEP). This project responds to the call for more empirical research on migration and climate change, in particular in communities of origin (cf. EC, 2013). This is in line with calls for an increased understanding of those links in the framework of the UN Framework Convention on Climate Change (UNFCCC).

The primary objective of MECLEP is to explore how migration can contribute to adaptation strategies in different regions of the world focusing on six case studies around the world – Haiti, Dominican Republic, Kenya, Mauritius, Papua New Guinea and Viet Nam. These countries have been chosen to illustrate how different forms of mobility, migration, displacement, and relocation may affect the environment and adaptation to environmental and climate change.

Human mobility on the one hand and the environment and climate change on the other are often considered two separate research and policy fields. Migration scholars tend to have multi-disciplinary backgrounds, in particular from the social sciences. The topic of climate change and adaptation tends to be approached from a natural science perspective (Schensul and Dodman, 2013). This is also reflected in the technical terms and concepts that both research and policy communities use.

In looking at environmental change as a factor among others in influencing the decision to migrate (Foresight, 2011), terms such as adaptation, resilience and coping enter the debate. This Glossary therefore aims to highlight which factors and terms are important when considering human mobility in the context of climatic stressors. It can be considered as a subset of the mainstream literature in both fields. The Glossary is divided into two parts: The first section focusing on more mobility-related terms, whereas the second links to more environmental and climate change terminology relevant in the context of mobility.
This Glossary aims to guide researchers working on the interrelationships between migration, the environment and climate change. The objective is to ensure coherence among the different research outputs of the MECLEP project, but also aims to be of use to other interested researchers and stakeholders. Whereas these terms are not set in stone, they are aimed at helping to draw out what definitions and conceptualizations of the same terms exist in different countries. Researchers are encouraged to explicitly define the terms used in their work to enable comparison and draw out differences.

Key sources of the Glossary include the following:

- Glossary of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2013)
- Terminology on disaster risk reduction by UNISDR (2009)
- Glossary on Migration by the International Organization for Migration (2011)
- The State of Environmental Migration 2011 (Gemenne et al., 2012)
- Terminology of the policy brief Integrating Human Mobility Issues Within National Adaptation Plans (Warner et al., 2014)
- Compendium of IOM Activities in Disaster Risk Reduction and Resilience (IOM, 2013)
- Glossary, IOM training on Migration, environment and climate change, Moshi, Tanzania (2014)


Key documents that can be a useful starting point to learn about and assess the interrelationships among migration, environmental degradation and climate change are the following:

- Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2014)
- Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX) (IPCC, 2012a)
- Migration and Global Environmental Change (Foresight, 2011)
- Migration, Environment and Climate Change: Assessing the Evidence (Laczko and Aghazarm, 2009)
- People on the Move in a Changing Climate: The Regional Impact of Environmental Change on Migration (Piguet and Laczko, 2014)
- Climate Change, Environmental Degradation and Migration (IOM, 2012a)
- Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh (IOM, 2010)
A
Anticipatory movement

“This category encompasses those who move because they anticipate future threats to their lives, physical safety, health or subsistence, for example because of slow-onset processes that are beyond their control. This category includes (but is not limited to) those who live in areas that are predicted to experience intensified and recurrent climatic hazards, increased drought and desertification, rising sea levels, and other results of climate change. In some cases the movements may involve entire communities, while at other times individuals and households migrate” (Martin et al., 2014:11). See also (planned) relocation, adaptation.

C
Camp Coordination and Camp Management (CCCM)

“CCCM is cross-cutting in nature and applies to all types of communal settlements, namely planned camps, collective centres, self-settled camps and reception or transit centres. Its role is to ensure effective management and coordination of humanitarian response in camps according to set standards, support the identification of gaps, facilitate information sharing and ultimately advocate for adequate and timely intervention by relevant actors. Effective representation and meaningful participation of the IDP [internally displaced person] as well as host communities is central to the planning and discharging of CCCM responsibilities. CCCM encompasses three distinct functions, namely camp administration, camp management and camp coordination” (IOM, n.d.).

“The Cluster Approach was adopted by the Inter-Agency Standing Committee in 2005 as a means to strengthen predictability, response capacity, coordination and accountability by strengthening partnerships in key sectors of humanitarian response, and by formalizing the lead role of particular agencies/organizations in each of these sectors. [...] At [the] global level, [the Office of the United Nations High Commissioner for Refugees (UNHCR)] and [the International Organization for Migration (IOM)] are the CCCM co-cluster lead agencies. UNHCR leads the cluster for conflict situations and IOM for natural disasters” (IOM, 2012b).

D
Displacement

“A forced removal of a person from his or her home or country, often due to armed conflict or natural disasters” (IOM, 2011:29). For other forms of migration, refer to migration and environmental migration.

- Development-forced displacement and resettlement (DFDR)

“The displacement and resettlement of people and communities by large-scale infrastructural [development] projects” (Oliver-Smith, 2009:3). Often these development projects impact on the environment and force people to move due to human alterations to the natural habitat.
- Internally displaced persons (IDPs)

“[P]ersons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border” (UN, 1998:5).

- Forced displacement

“In a more general sense, forced displacement – or displacement – is the involuntary movement, individually or collectively, of persons from their country or community, notably for reasons of armed conflict, civil unrest, or natural or man-made catastrophes” (IOM, 2011:39). See also internally displaced persons for internal displacement, refugee.

Durable solution

“Any means by which the situation of refugees [and IDPs] can be satisfactorily and permanently resolved to enable them to lead normal lives. Traditionally this involves voluntary repatriation, local integration or resettlement” (based on IOM, 2011:31). See internally displaced persons and refugee.

E Evacuation

“Evacuation is the rapid movement of people away from the immediate threat or impact of a disaster to a safer place of shelter. It is commonly characterized by a short time frame, from hours to weeks, within which emergency procedures need to be enacted in order to save lives and minimize exposure to harm.

Evacuations may be:

- **Mandatory:** An evacuation ordered and directed by authorities when it is judged that the risk to a population is too great to allow them to remain where they are, and where sheltering in place would likely entail a higher level of risk. This places a duty of responsibility on authorities to ensure that people have the information and assistance needed for safe and timely evacuation and that evacuees are cared for.

- **Advised:** An official evacuation advisory message may be issued to enable early response and informed decision-making by the population at risk on whether and when to evacuate. An advisory may precede a mandatory order to evacuate as the level of the threat and the risk associated with the alternative of sheltering in place increases. As for mandatory evacuations, authorities are usually seen to have a responsibility to facilitate safe and timely evacuations for those in need of assistance.

- **Spontaneous:** When people evacuate their current location due to actual or perceived risk using their own means (self-evacuation) and without (or before) being officially advised or directed to do so. This may include people who leave areas outside a designated evacuation zone (also known as shadow evacuations)” (IOM, 2014:9–10).

Evacuee

“A person who has evacuated a hazardous location in response to the immediate threat or impact of a disaster, either through their own initiative and resources (self-evacuated) or through the direction and assistance of authorities and/or emergency responders” (IOM, 2014:10).
Human mobility in the context of environmental and climate change

“Population mobility [in the context of environmental change] is probably best viewed as being arranged along a continuum ranging from totally voluntary migration [...] to totally forced migration” (Hugo, 1996:107).

Please note that the following definitions, like most migration-related definitions, are not universally accepted but working definitions:

- **Environmental migrant**
  
  “Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad” (IOM, 2011:33).

- **Environmentally displaced person**

  “Persons who are displaced within their country of habitual residence or who have crossed an international border and for whom environmental degradation, deterioration or destruction is a major cause of their displacement, although not necessarily the sole one. This term is used as a less controversial alternative to environmental refugee or climate refugee [in the case of those displaced across an international border] that have no legal basis or raison d’être in international law, to refer to a category of environmental migrants whose movement is of a clearly forced nature” (IOM, 2011:34). *See internally displaced persons and refugee.*

- **Migration influenced by environmental change**

  “Where environmental change can be identified as affecting the drivers of migration, and thus is a factor in the decision to migrate” (Foresight, 2011:34).

Migration

“The movement of a person or a group of persons, either across an international border, or within a State. It is a population movement, encompassing any kind of movement of people, whatever its length, composition and causes; it includes migration of refugees, displaced persons, economic migrants, and persons moving for other purposes, including family reunification” (IOM, 2011:62–63). *See also adaptation, and IOM (2011) for more migration-related terms.*

- **Internal migration**

  “A movement of people from one area of a country to another area of the same country for the purpose or with the effect of establishing a new residence. This type of migration may be temporary or permanent. Internal migrants move but remain within their country of origin ([such as in] rural to urban migration)” (IOM, 2011:51).
International migration

“[A]n international migrant is [...] any person who changes his or her country of usual residence” (UN DESA, 1998:17).

- **Long-term migrant**: “[A] person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence” (UN DESA, 1998:18).

- **Short-term migrant**: A person “who move[s] to a country other than that of [his or her] usual residence for a period of at least 3 months but less than a year (12 months) except in cases where the movement to that country is for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage” (UN DESA, 1998:18).

Cross-border migration


Labour migration

“Movement of persons from one State to another, or within their own country of residence, for the purpose of employment. Labour migration is addressed by most States in their migration laws. In addition, some States take an active role in regulating outward labour migration and seeking opportunities for their nationals abroad” (IOM, 2011:58).

Refugee

“A person who, ‘owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinions, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country. (Art. 1(A)(2), Convention relating to the Status of Refugees, [...] 1951 as modified by the 1967 Protocol)”’ (IOM, 2011:79–80).

“In addition to the refugee definition in the 1951 Refugee Convention, Art. 1(2), [the] 1969 Organization of African Unity (OAU) Convention defines a refugee as any person compelled to leave his or her country ‘owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country [of] origin or nationality’” (IOM, 2011:80).

“Similarly, the 1984 Cartagena Declaration states that refugees also include persons who flee their country ‘because their lives, security or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violations of human rights or other circumstances which have seriously disturbed public order’” (ibid.).

Forced migration

“A migratory movement in which an element of coercion exists, including threats to life and livelihood, whether arising from natural or man-made causes (e.g. movements of refugees and internally displaced persons as well as people displaced by natural or environmental disasters, chemical or nuclear disasters, famine, or development projects)” (IOM, 2011:39). See also displacement and internally displaced persons.
- Governance of migration

“System of institutions, legal frameworks, mechanisms and practices aimed at regulating migration and protecting migrants. Used almost synonymously with the term ‘migration management’, although migration management is also sometimes used to refer to the narrow act of regulating cross-border movement at the state level” (IOM, 2011:43).

- Migration management

“A term used to encompass numerous governmental functions within a national system for the orderly and humane management for cross-border migration, particularly managing the entry and presence of foreigners within the borders of the State and the protection of refugees and others in need of protection. It refers to a planned approach to the development of policy, legislative and administrative responses to key migration issues” (IOM, 2011:63). See also governance of migration.

- Mixed migration flows

“Complex migratory population movements that include refugees, asylum-seekers, economic migrants and other migrants, as opposed to migratory population movements that consist entirely of one category of migrants” (IOM, 2011:63).

- Migration crisis

Crises with migratory dimensions. “[T]erm that describes the complex and often large-scale migration flows and mobility patterns caused by a crisis which typically involve significant vulnerabilities for individuals and affected communities and generate acute and longer-term migration management challenges. A migration crisis may be sudden or slow in onset, can have natural or man-made causes, and can take place internally or across borders” (IOM, 2012c:1–2).

N

Nomad

“An individual, often a member of a group, who does not have a fixed place or residence and migrates from place to place, often searching for water, food, or grazing land” (IOM, 2011:67).

P

Pastoralism

“A livelihood strategy based on moving livestock to seasonal pastures primarily in order to convert grasses, forbs, tree-leaves, or crop residues into human food. The search for feed is however not the only reason for mobility; people and livestock may move to avoid various natural and/or social hazards, to avoid competition with others, or to seek more favorable conditions. Pastoralism can also be thought of as a strategy that is shaped by both social and ecological factors concerning uncertainty and variability of precipitation, and low and unpredictable productivity of terrestrial ecosystems” (IPCC, 2013:20).

- Pastoralist displacement

“Internally displaced pastoralists are persons or communities who have lost access to their habitual pastoral living space as a result of or in order to avoid the impacts of conflict, violence, human rights violations, cattle rustling, natural or human-made disasters, or similar sudden onset events, as a result of drought, environmental degradation or similar slow onset processes, due to direct intervention by state or private actors, or due to a combination, sequence or accumulation of any of the aforementioned causes, and who have not crossed an internationally recognised state border” (Schrepfer and Caterina, 2014:20).
Pastoralist dropout

“The dropping out of pastoralism is an economic failure, not primarily linked to external factors. Displacement is mainly caused by external factors and any ensuing economic stress is a result of it.” “The terms ‘drop-out’ and ‘internally displaced pastoralist’ are often used interchangeably, but while there is an overlap, they are not synonymous. A pastoralist may drop out without having been displaced, and a displaced pastoralist may drop out following their displacement” (Schrepfer and Caterina, 2014:17).

Relocation

Permanent voluntary migration, with an emphasis on re-building livelihoods in another place (own definition). The World Bank defines it as “a process whereby a community’s housing, assets, and public infrastructure are rebuilt in another location” (World Bank, 2010:77). Others have emphasized other dimensions in defining relocation as the “permanent (or long-term) movement of a community (or a significant part of it) from one location to another, in which important characteristics of the original community, including its social structures, legal and political systems, cultural characteristics and worldviews are retained: the community stays together at the destination in a social form that is similar to the community of origin” (Campbell, 2010:58–59).

Planned relocation: Categories of planned relocation in the context of climate change

“There are several different sub-categories of people who may need to be relocated as a result of the effects of climate change, including:

- people who need to be relocated from areas prone to sudden-onset natural disasters which are increasing in severity and intensity as a result of climate change (e.g. flood areas);
- people who need to be relocated because their livelihoods are threatened by slow-onset effects of climate change (e.g. increasing drought frequency, salinization of water resulting from sea level rise);
- people who need to be relocated because their lands are needed for mitigation measures (e.g. expansion of forests as carbon sinks) or adaptation projects (e.g. water reservoirs); and
- people who need to be relocated because their country or parts of their country could become unsuitable for habitation or supporting livelihoods related to the negative effects of climate change (e.g. small island states facing sea level rise)” (Ferris, 2013:32).

Resettlement

“The relocation and integration of people (refugees, internally displaced persons, etc.) into another geographical area and environment, usually in a third country” (IOM, 2011:85). The focus can be on the individual, not necessarily communities as in relocation. In the context of environmental and climate change, the movement of individuals or communities to a designated site. “In the refugee context, the transfer of refugees from the country in which they have sought refuge to another State that has agreed to admit them. The refugees will usually be granted asylum or some other form of long-term resident rights and, in many cases, will have the opportunity to become naturalized” (ibid.).

Forced resettlement/relocation

“Involuntary transfer of individuals or groups within the jurisdiction of a State away from their normal residence as part of a government policy” (IOM, 2011:39).
Retreat (Retreat, Accommodation, Protection)

“Adaptive measures in response to sea level rise [...]:

- **Retreat**: Abandonment of land and structures in vulnerable areas, and resettlement of inhabitants.
- **Accommodation**: Continued occupancy and use of vulnerable areas.
- **Protection**: Defense of vulnerable areas, especially population centers, economic activities, and natural resources” (IPCC, 1990:146–147).

Solution (for evacuees and IDPs)

“A result through which evacuees and other internally displaced persons no longer have specific assistance needs linked to their displacement, and can enjoy their human rights without discrimination due to their displacement. This can be achieved through: 1) sustainable reintegration at the place of origin (‘return’), 2) sustainable local integration in areas where evacuees have taken refuge (‘local integration’), or 3) sustainable settlement in another part of the country (‘relocation’)” (IOM, 2014:12).

Trapped populations

“Populations who do not migrate, yet are situated in areas under threat, [...] at risk of becoming ‘trapped’ [or having to stay behind], where they will be more vulnerable to environmental shocks and impoverishment.” This applies in particular to poorer households who may not have the resources to move and whose livelihoods are affected by environmental change (Foresight, 2011:25).
A

Adaptation (linked to migration)

“In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities” (IPCC 2012b:3).

“Migration and mobility are adaptation strategies in all regions of the world that experience climate variability” (IPCC, 2014:2). Adaptation in this context of mobility is understood in broad terms, so as to include forced and voluntary migration, internal and cross-border migration, positive and negative impacts of environmental degradation and climate change on migration, displacement and planned relocation. Adapting to broader environmental events, such as natural disasters, including geophysical events such as earthquakes and tsunamis, and man-made disasters is included in the definition. See also coping, resilience and disaster risk reduction.

- **Autonomous adaptation**

  “Adaptation in response to experienced climate and its effects, without planning explicitly or consciously focused on addressing climate change. Also referred to as spontaneous adaptation” (IPCC, 2013:3).

- **Community-based adaptation**

  “Local, community-driven adaptation. Community-based adaptation focuses attention on empowering and promoting the adaptive capacity of communities. It is an approach that takes context, culture, knowledge, agency, and preferences of communities as strengths” (IPCC, 2013:7). See also “in situ” adaptation.

- **Ecosystem-based adaptation**

  “[T]he use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change. Ecosystem-based adaptation uses the range of opportunities for the sustainable management, conservation, and restoration of ecosystems to provide services that enable people to adapt to the impacts of climate change. It aims to maintain and increase the resilience and reduce the vulnerability of ecosystems and people in the face of the adverse effects of climate change. Ecosystem-based adaptation is most appropriately integrated into broader adaptation and development strategies” (Secretariat of the Convention on Biological Diversity, 2009:41).

- **“In situ” adaptation**

  Adaptation in the place where environmental degradation and climate change effects occur. See also community-based adaptation.

- **Maladaptation**

  Maladaptation is a process that directly results in increased vulnerability to climate variability and change, and/or significantly undermines capacities or opportunities for present and future adaptation.
More specifically, maladaptation refers to initiatives, such as policy, plan or project initiatives, initially designed for adaptation but that are actually at high risk of inducing adverse effects either on the system in which it is developed, or on another connected system, or both. Adverse effects can be environmental, sociocultural, institutional and/or economic, and they result from the insufficient consideration of the future impacts of climate change and related uncertainty in the design phase of the initiative (Magnan et al., forthcoming).

**Adaptive capacity**

“[A]daptive capacity refers to the ability to anticipate and transform structure, functioning, or organization to better survive hazards” (IPCC, 2012a:72).

This definition underlines the need for access to resources to be able to move in the context of climate change, as well as other characteristics that play a role in the decision to migrate. Indeed, age, gender, cultural and ethnic belongings, marital status, education and migration history will most likely also play a role (Foresight, 2011; Warner et al., 2012).

**Climate change**

“[A] change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to other natural climate variability that has been observed over comparable time periods” (UN Framework Convention on Climate Change, 1992. Article 1).

**Coping**

“The use of available skills, resources, and opportunities to address, manage, and overcome adverse conditions, with the aim of achieving basic functioning of people, institutions, organizations, and systems in the short to medium term” (IPCC, 2013:8). See also resilience.

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**Coping capacity**

“The ability of people, institutions, organizations, and systems, using available skills, values, beliefs, resources, and opportunities, to address, manage, and overcome adverse conditions in the short to medium term” (IPCC, 2013:8).

**Deforestation**

“Conversion of forest to non-forest” (IPCC, 2013:9).

**Desertification**

“[L]and degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities” (UNCCD, 1994. Article 1). **Land degradation** is the “reduction or loss [...] of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as (i) soil erosion caused by wind and/or water; (ii) deterioration of the physical, chemical and biological, or economic properties of soil; and (iii) long-term loss of natural vegetation” (UNCCD, 1994. Article 1).
**Disaster**

“A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources” (UNISDR, 2009).

- **Natural disaster**

  Natural disasters are divided into five subgroups:

  - **Biological disasters:** Insect infestations, epidemics and animal attacks […]
  - **Geophysical disasters:** Earthquakes and tsunamis, volcanic eruptions, dry mass movements (avalanches, landslides, rockfalls and subsidence of geophysical origin)
  - **Climatological disasters:** Droughts (with associated food insecurities), extreme temperatures and wildfires
  - **Hydrological disasters:** Floods (including waves and surges), wet mass movements (avalanches, landslides, rockfalls and subsidence of hydrological origin)
  - **Meteorological disasters:** Storms (divided into nine sub-categories)” (Emergency Events Database (EM-DAT), cited in IFRC, 2013:225–226).

**Disaster risk reduction (DRR)**

“The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events” (UNISDR, 2009).

**Disaster risk management (DRM)**

“The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster” (UNISDR, 2009).

**Drought**

“[T]he naturally occurring phenomenon that exists when precipitation has been significantly below normal recorded levels, causing serious hydrological imbalances that adversely affect land resource production systems” (UNCCD, 1994. Article 1).

**Early warning system**

“The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately in order to reduce the possibility of harm or loss” (IOM, 2014:10).
Environmental change

“[C]hanges in the physical and biogeochemical environment, over a large scale, either caused naturally or influenced by human activities” (Foresight, 2011:50) (including industrial accidents), either through fast-onset or slow-onset events. As ecosystem services and exposure to hazard are important drivers of migration, “global environmental change will affect the risk calculations involved in moving and people's decisions to stay or move from their settlements” (ibid.). Environmental change thus affects the environmental drivers of migration (Foresight, 2011). Environmental change includes both environmental degradation and climate change. See also global environmental change.

Environmental degradation

“The reduction of the capacity of the environment to meet social and ecological objectives and needs. [...] Degradation of the environment can alter the frequency and intensity of natural hazards and increase the vulnerability of communities. The types of human-induced degradation are varied and include land misuse, soil erosion and loss, desertification, wildland fires, loss of biodiversity, deforestation, mangrove destruction, land, water and air pollution, climate change, sea level rise and ozone depletion” (UNISDR, 2009).

Exposure

“The presence of people, livelihoods, species or ecosystems, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected” (IPCC, 2013:12) by environmental and climate change impacts.

Extreme weather event/Extreme climate event

“An extreme weather event is an event that is rare at a particular place and time of year. Definitions of rare vary, but an extreme weather event would normally be as rare as or rarer than the 10th or 90th percentile of a probability density function estimated from observations. By definition, the characteristics of what is called extreme weather may vary from place to place in an absolute sense” (IPCC, 2013:13).

“The distinction between extreme weather events and extreme climate events is not precise, but is related to their specific time scales:

- An extreme weather event is typically associated with changing weather patterns, that is, within time frames of less than a day to a few weeks.
- An extreme climate event happens on longer time scales. It can be the accumulation of several (extreme or non-extreme) weather events (e.g., the accumulation of moderately below average rainy days over a season leading to substantially below-average cumulated rainfall and drought conditions)” (IPCC, 2012a:117).

“For simplicity, both extreme weather and extreme climate events are referred to collectively as ‘climate extremes’” (IPCC, 2012a:557).

“Extreme events are often but not always associated with disaster. This association will depend on the particular physical, geographic, and social conditions that prevail. [...] Non-extreme physical events also can and do lead to disasters where physical or societal conditions foster such a result” (IPCC, 2012a:31).
F
Flood

“The overflowing of the normal confines of a stream or other body of water, or the accumulation of water over areas not normally submerged. Floods include river (fluvial) floods, flash floods, urban floods, pluvial floods, sewer floods, coastal floods, and glacial lake outburst floods” (IPCC, 2013:13).

Food security

“A state that prevails when people have secure access to sufficient amounts of safe and nutritious food for normal growth, development, and an active and healthy life” (IPCC, 2013:13).

G
Global Environmental Change (GEC)

“[I]ncludes changes in the physical and biogeochemical environment, either caused naturally or influenced by human activities such as deforestation, fossil fuel consumption, urbanization, land reclamation, agricultural intensification, freshwater extraction, fisheries over-exploitation and waste production” (GECAFS, n.d.). See also environmental change.

H
Hazard

“A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage” (UNISDR, 2009).

– Natural hazard

“Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage” (UNISDR, 2009).

Human security

“A condition that is met when the vital core of human lives is protected, and when people have the freedom and capacity to live with dignity. In the context of climate change, the vital core of human lives includes the universal and culturally specific, material and non-material elements necessary for people to act on behalf of their interests, and to live with dignity” (IPCC, 2013:15).

There is robust evidence that poverty, discrimination of many kinds, and extreme natural and technological disasters undermine human security, which can be enhanced by actions to reduce vulnerability to climate change (Warner et al., 2014).

Humanitarian crisis

“[A]n event or series of events which represents a critical threat to the health, safety, security or wellbeing of a community or other large group of people, usually over a wide area. Armed conflicts, epidemics, famine, natural disasters and other major emergencies may all involve or lead to a humanitarian crisis that extends beyond the mandate or capacity of any single agency.
Humanitarian crises can be grouped under the following headings:

- Natural Disasters (earthquakes, floods, storms and volcanic eruptions).
- Man-made Disasters (conflicts, plane and train crashes, fires and industrial accidents).
- Complex Emergencies (when the effects of a series of events or factors prevent a community from accessing their basic needs, such as water, food, shelter, security or health care).

Such ‘complex emergencies’ are typically characterized by:

- extensive violence and loss of life;
- displacements of populations;
- widespread damage to societies and economies;
- the need for large-scale, multi-faceted humanitarian assistance;
- the hindrance or prevention of humanitarian assistance by political and military constraints;
- significant security risks for humanitarian relief workers in some areas” (Humanitarian Coalition, n.d.).

**Livelihood**

“At the individual and household levels, vulnerability and resilience depend largely on people’s livelihoods. Livelihoods comprise the capabilities, material and social assets, and activities required to sustain a means of living (Chambers and Conway, 1991). Livelihood options depend on available [human, social and financial] capital and on the [socioeconomic, natural] and political context in which people live. They determine how people occupy and use their environment; what options they are faced with in the face of hazards; what impacts they suffer from such hazards; and how effectively they recover” (IOM, 2013:14; IPCC, 2013:18).

**Loss and Damage**

“[L]oss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events” (UNFCCC, 2011: paragraph 25).

The two terms are treated largely synonymous in UNFCCC documents (UNFCCC, 2013), therefore the following distinction is recommended:

“**Damage** is therefore the negative impacts that can be repaired or restored (such as windstorm damage to the roof of a building, or damage to a coastal mangrove forest from coastal surges which affect villages). While, ‘[L]oss’ is the negative impacts that cannot be repaired or restored (such as loss of geologic freshwater sources related to glacial melt or desertification, or loss of culture or heritage associated with potential population redistribution away from areas that become less habitable due to climate change)” (CDKN, 2012).

**Mitigation (of climate change)**

“Mitigation [...] refers to the reduction of the rate of climate change via the management of its causal factors (the emission of greenhouse gases from fossil fuel combustion, agriculture, land use changes, cement production, etc.)” (IPCC, 2012a:36).
Mitigation  (of disaster risk and disaster)

“The lessening of the potential adverse impacts of physical hazards (including those that are human-induced) through actions that reduce hazard, exposure, and vulnerability” (IPCC, 2013:19).

National adaptation plans (NAPs)

“[A] means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach” (UNFCCC, 2014a).

National adaptation programmes of action (NAPAs)

“[A] process for Least Developed Countries (LDCs) to identify priority activities that respond to their urgent and immediate needs to adapt to climate change – those for which further delay would increase vulnerability and/or costs at a later stage” (UNFCCC, 2014b).

Protection

“The concept of protection encompasses all activities aimed at ensuring full respect for the rights of the individual in accordance with the letter and the spirit of the relevant bodies of law, i.e. human rights law, international humanitarian law and refugee law. Human rights and humanitarian organizations must conduct these activities in an impartial manner (not on the basis of race, national or ethnic origin, language or gender)’ (Inter-Agency Standing Committee)” (IOM, 2011:75).

“Protection given to a person or a group by an organization, in keeping with a mandate conferred either by international instruments, in application of customary international law, or by the activities of the organization. Such protection has as its aim to ensure respect for rights identified in such instruments as: 1951 Refugee Convention, 1949 Geneva Conventions, and 1977 Protocols, right of initiative of the International Committee of the Red Cross, de facto protection by the International Organization for Migration, International Labour Organization Conventions and human rights instruments” (ibid.).

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, 2012a:5).

Risk

“The potential for consequences where something of human value (including humans themselves) is at stake and where the outcome is uncertain. Risk is often represented as probability of occurrence of hazardous events or trends multiplied by the consequences if these events occur” (IPCC, 2013:23).
Risk management

“The plans, actions, or policies implemented to reduce the likelihood and/or consequences of risks or to respond to consequences [of climate change impacts or extreme weather events]” (IPCC, 2013:23; see also Warner et al., 2014).

S
Slow-onset event

“Including sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification” (UNFCCC, 2011).

Survival

The act or fact of surviving (Concise Oxford English Dictionary, 2002), especially under adverse or unusual circumstances, such as in this context of natural and man-made disasters, including floods, storms, earthquakes, volcano eruptions and man-made disasters, but also slow-onset events.

T
Transformation

“A change in the fundamental attributes of a system, often based on altered paradigms, goals, or values. Transformations can occur in technological or biological systems, financial structures, and regulatory, legislative, or administrative regimes” (IPCC, 2013:27).

V
Vulnerability

“The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts including sensitivity or susceptibility to harm and lack of capacity to cope and adapt” (IPCC, 2013:28).
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