Glossary

Adaptation
Adjustments in response to actual or expected climate change, to reduce negative impacts or take advantage of opportunities.

Climate
The average weather. The mean and variability of temperature, rainfall, wind etc. over a relatively long period of time (typically 30 years). One popular phrase can help distinguish weather from climate: "Climate is what you expect. Weather is what you get".

Climate change
Any change in climate over time. In principle, climate change can be due to natural processes or a result of human activity. The media often refers to "global warming" (an increase in the average temperature of our planet), which is actually just one manifestation of global climate change. Other manifestations include changes in rainfall patterns and in the frequency or intensity of extreme weather events. In the context of the United Nations Framework Convention on Climate Change (UNFCCC), the term is linked to human activities that alter the composition of the atmosphere, particularly greenhouse-gas emissions due to burning of fossil fuels.

Climate risk management
An approach to systematically manage climate-related risks affecting activities, strategies or investments, by taking account of the risk of current variability and extremes in weather as well as long-term climate change.

From a Red Cross/Red Crescent perspective, climate risk management is doing what we have always done in terms of disaster management, health and care, food security and so on, but paying attention to (1) the way risks are changing, and (2) options to reduce the risks in addition to being prepared to respond after the event.

Coastal erosion
Landward movement of the shoreline due to the forces of waves and currents. Coastal erosion can get worse due to sea level rise and more intense storms associated with climate change.

Community-based disaster preparedness (CBDP)
A process that seeks to develop and implement strategies and activities for disaster preparedness (and often risk reduction) that are locally appropriate and locally "owned".

Complex disaster
A disaster that has no single root cause (such as a storm) but emerges due to a combination of factors, which may involve an extreme weather event, conflict and/or migration, environmental degradation and other issues. Complex emergencies are becoming more likely due to climate change, which may alter hazards and amplify underlying vulnerabilities.

Disaster
A situation in which the impact of a hazard (such as a storm or other extreme weather event) negatively affects vulnerable individuals or communities, to a degree that their lives are directly threatened or sufficient harm is done to economic and social structures to undermine their ability to survive or recover.

Disaster (risk) management
A systematic process of implementing policies, strategies, and measures to reduce the impacts of natural hazards and related environmental and technological disasters. This includes, among other things, disaster risk reduction, preparedness, response, recovery and rehabilitation.

Disaster preparedness
Activities that contribute to the pre-planned, timely and effective response of individuals and communities to reduce the impact and deal with the consequences of a (future) disaster.

Disaster recovery
Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community.

Disaster rehabilitation
The set of actions taken after a disaster to enable basic services to resume functioning, to repair physical damage and community facilities, to revive economic activities and support the psychological and social well-being of the survivors.

Disaster relief/response
Coordinated activities aimed at meeting the needs of people who are affected by a disaster.

Disaster risk reduction
Measures at all levels to curb disaster losses, through reducing exposure to different hazards, and reducing the vulnerabiilty of populations. Effective disaster risk-reduction practices use a systematic approach to reduce human, social, economic and environmental vulnerability to natural hazards.

Early warning
Providing timely and effective information about an imminent hazard that allows people to take action to avoid a disaster or prepare for effective response. Early-warning systems depend on a chain of things: understanding and mapping the hazard; monitoring and forecasting; processing and disseminating understandable warnings to political authorities and the population; and undertaking the right, timely actions in response to the warnings.

El Niño-Southern Oscillation (ENSO)
An anomaly in sea surface temperature and atmospheric pressure in the tropical Pacific Ocean that occurs roughly every four to seven years and can lead to changes in seasonal rainfall in certain regions of the planet (large parts of Africa, Latin America, South East Asia and the Pacific). An ENSO cycle includes two phases: El Niño and la Niña.

Extreme weather event
Weather that is extreme and rare in a particular place, such as extremely intense rainfall, extreme heat, a very strong windstorm. By definition, the characteristics of what is called "extreme weather" vary from place to place. Often it is defined as something that on average has happened less than once every thirty, fifty or a hundred years.

Global warming
The rise in average temperature on earth due to the increasing amounts of greenhouse gases in the atmosphere. The media often uses this term to refer to "climate change" (a concept that includes global warming as well as other changes).

Greenhouse gas (GHG)
A gas, such as carbon dioxide and methane, that absorbs and re-emits infrared radiation. When pollution adds these gases to the earth's atmosphere, they trap more solar energy in our planet (like in a greenhouse) warming the earth's surface and contributing to climate change.

Hazard
A potentially damaging physical event that may cause loss of life or injury, property damage, social and economic disruption or environmental degradation.

Humanitarian values
The values that shape humanitarian action. Values based on the Fundamental Principles of the Red Cross and Red Crescent Movement include the protection of life, health and human dignity, respect for others and the acceptance of responsibility to help others without discrimination based on nationality, race, gender, religious beliefs, class or political opinions.

Hurricane
See Tropical cyclone

International Federation (of Red Cross and Red Crescent Societies)
The world's largest humanitarian organization. Founded in 1919, the International Federation comprises 186 member Red Cross and Red Crescent societies, a Secretariat in Geneva and more than 60 delegations strategically located to support activities around the world.

Intergovernmental Panel on Climate Change (IPCC)
The most credible source of knowledge on climate change, IPCC is a panel established in 1988 to assess scientific, technical and socio-economic information. Every five or six years, it produces assessments based mainly on peer reviewed

and published scientific/technical literature on climate change, its potential impacts, and options for adaptation and mitigation.

Kyoto Protocol
The first protocol to the United Nations Framework Convention on Climate Change (UNFCCC, the international treaty on climate change). It assigns legally binding commitments for industrialized countries to reduce their greenhouse-gas emissions by 2012, and includes some funding mechanisms for adaptation to climate change. The Kyoto Protocol was adopted in 1997 and entered into force in 2005. It is expected to be followed by a second protocol to the UNFCCC, which should be ready for ratification in 2009.

Mitigation
This word has different meanings for practitioners in the climate change and disaster-management communities, often leading to confusion:

Mitigation (climate change)
Measures to reduce greenhouse-gas concentrations in the atmosphere, and thus ultimately the magnitude of climate change. Measures include energy conservation, using renewable energy such as wind or solar energy instead of coal, oil or gas; and planting trees that absorb carbon dioxide from the atmosphere.

Mitigation (disaster management)
Measures aimed at moderating or reducing the severity of disaster impact. They include such things as building retention walls, water reservoirs, and reforestation to avoid landslides. From the perspective of the climate change community, these measures would be labeled as "adaptation" because they help reduce the negative impacts of climate change.

Monsoon
A seasonal prevailing wind in tropical and sub-tropical regions. It lasts for several weeks and leads to substantial changes in rainfall.

National Society
Red Cross or Red Crescent society of a given country, and member of the International Federation.

Natural hazards
Natural events that may harm people or their assets. Natural hazards can be classified by origin: *geological* (such as earthquakes and volcanic eruptions), *hydrometeorological* (such as floods, heatwaves, storms) or *biological* (such as pests and locust swarms). Some natural hazards can be more likely to occur with human induced climate change.

Precipitation
Rain, snow or hail.

Recovery
See Disaster recovery

Reconstruction
See Disaster reconstruction

Risk
The probability of harmful consequences due to interaction between hazards and vulnerable conditions.

Salt-water intrusion
Increase of salinity in underground freshwater located close to the coast. It can be caused by excessive withdrawal of water from the freshwater source (aquifer) or by sea-level rise.

Sea-level rise
An increase in the average level of the sea or ocean. The global sea level is rising as a result of increasing global temperature because: (1) melting of ice in mountains and glaciers leads to more water in the ocean, and (2) warmer water in the oceans expands, occupying more volume. Local sea levels are determined by a combination of the global sea-level rise and the local rise or subsidence of the land (for instance due to geological processes).

Seasonal forecasting
Forecasting of probable weather conditions in a certain region during a certain period (for instance a month, or a season) based on observed and projected oceanic and atmospheric conditions. These projections, sometimes months in advance, can help prepare for various emergencies, from hurricanes to malaria.

Tropical cyclone
(sometimes called just cyclone)
A violent, rotating storm with heavy wind and rain. The most severe versions are called hurricanes (in the North Atlantic, the Northeast Pacific east of the dateline, or the South Pacific east of 160E) or typhoon (in the Northwest Pacific west of the dateline). Tropical cyclones only form and intensify above warm water, and are probably becoming more intense due to the warming of the ocean surface caused by global warming.

Typhoon
See Tropical cyclone

United Nations Framework Convention on Climate Change (UNFCCC)
A global treaty aimed to avoid dangerous climate change by reducing greenhouse gas emissions and supporting developing countries to cope with the unavoidable changes. Decisions are taken by the Conference of the Parties (COP), which meets every year. The UNFCCC was signed in 1992 and ratified by most nations in 1994.

Vector-borne disease
A disease transmitted by an insect or other organism (the vector). Examples include malaria and dengue. Vector-borne diseases can be affected by climate because temperature and rainfall affect the distribution of the vector and/or the transmission season.

Vulnerability
The degree to which someone or something can be affected by a particular hazard (from sudden events such as a storm to long-term climate change). Vulnerability depends on physical, social, economic and environmental factors and processes. It is related, for instance, to the places where people live, the strength of their houses, the extent to which their crops can survive adverse weather, or whether they have organized evacuation routes and shelters.

- *Physical* vulnerability relates to the built environment and may be described as "exposure"
- *Social* vulnerability is caused by such things as levels of family-ties and social networks literacy and education, health infrastructure, the state of peace and security
- *Economic* vulnerability is suffered by people of less-privileged class or caste, ethnic minorities, the very young and old etc. They suffer proportionally larger losses in disasters and have limited capacity to recover. Similarly, an economy lacking a diverse productive base is less likely to recover from disaster impact which may also lead to forced migration
- *Environmental* vulnerability refers to the extent of natural-resource degradation, such as deforestation, depletion of fish stocks, soil degradation and water scarcity which threaten food security and health.

Vulnerability and Capacity Assessment (VCA)
A tool widely used by the Red Cross and Red Crescent to identify the strengths and weaknesses of people facing disaster risk. The VCA process helps uncover key community risks and is used to plan strategies for reducing them. During an assessment, information is gathered by means of community maps, historical and seasonal calendars, asset inventories, livelihood and other surveys, and interviews with local people. "Transect walks" are also held in which Red Cross/Red Crescent staff and volunteers walk through a community with its inhabitants, learning of key hazards and the area's social and physical features. Additional information then provides context and validation for the community-based findings.

This glossary builds on definitions provided by sources including the International Federation of Red Cross and Red Crescent Societies, the Intergovernmental Panel on Climate Change Fourth Assessment Report, and the United Nations Development Programme/Global Environment Facility Adaptation Policy Frameworks, the United Nations International Strategy for Disaster Reduction. Definitions have been shortened or adjusted to meet audience requirements.