

Sahana

Glossary of Humanitarian Aid and Emergency

Terms & Acronyms

A

Acceleration

A change in velocity with time; in seismology and in earthquake engineering, it is expressed as a fraction of gravity (g), with reference to vibrations of the ground or of a structure.

Accelerograph

Instrument for recording acceleration.

Acceptable risk

Degree of human and material loss that is perceived by the community or relevant authorities as tolerable in actions to minimize disaster risk.

Accident

A sudden event in which harm is caused to people, property or the built or natural environment.

Accident rate

The number of reportable accidents related to the number of persons working, or the total number of hours worked, or to units, produced in an installation, company, etc. This enables, within limits, a comparison of the safety performance of various installations, companies, etc. provided exactly the same definitions for the accident rate are used

Acid rain

Rain containing dissolved acidic compounds, resulting from chemical pollution of the atmosphere by sulphur and nitrogen compounds. When deposited these increase the acidity of the soil and water causing agricultural and ecological damage.

Aftershock

A smaller earthquake that follows the main shock and originates close to its focus. Aftershocks generally decrease in number and magnitude over time.

Agency

A Government, non government or non profit organisation involved in disaster response or recovery efforts

Agency operations centre

A facility from which a particular agency's resources are commanded, controlled, coordinated and assigned to an incident.

Alarm

Signal giving warning of danger.

Alert

Advisory that hazard is approaching but is less imminent than implied by warning message. See also "warning".

Amplitude

The difference between zero level and peak of any wave such as a seismic wave.

Annual flood

Highest peak discharge in a year.

Antecedent precipitation index (see also antecedent soil moisture)

Weighted summation of past daily precipitation amounts, used as an index of soil moisture.

Anticyclone (area of high pressure, high)

A region where barometric pressure is high or relative to that in the surrounding regions at the same level.

Areal precipitation

The average amount of precipitation which has fallen over a specific area.

Arid zone

An area in which the water resources from ground water and rainfall are insufficient to counterbalance the evaporation.

Aseismic

Nonseismic; used to designate an area free from seismic activity or a tectonic deformation process not accompanied by seismic events.

Ash flow

Pyroclastic flow including a liquid phase and a solid phase composed mainly of ashes.

Assessment

Survey of a real or potential disaster to estimate the actual or expected damages and to make recommendations for prevention, preparedness and response.

Assessment and Response Team (AART)

Team that assesses the severity of emergencies and manages the overall response plan.

Atmospheric pollution

Contamination of the atmosphere by large quantities of gases, solids and radiation produced by the burning of natural and artificial fuels, chemicals and other industrial processes and nuclear

explosions.

Avalanche

The rapid and sudden sliding and flowage of masses of usually incoherent and unsorted mixtures of snow/ice/rock material. (OFDA)

B

Backwater

A rise of water level in a stream caused by a natural or artificial obstruction.

Barometer

Instrument for measuring atmospheric pressure. (H)

Barometric pressure

The pressure exerted by the atmosphere as a consequence of the force of gravity.

Barrage

Barrier across a stream provided with a series of gates or other control mechanisms to control the water-surface level upstream, to regulate the flow or to divert water supplies into a canal. (OFDA)

Beaufort scale

Scale of wind force, measured from 0 (calm) to 12 (hurricane force wind).

Biological disaster

Disaster caused by the exposure of living organisms to germs and toxic substances.

Bio-safety level

A method for rating laboratory safety. Laboratories are designated BSL 1, 2, or 3 based on the practices, safety equipment, and standards they employ to protect their workers from infection by the agents they handle. BSL 1 laboratories are suitable for handling low-risk agents; BSL-2 laboratories are suitable for processing moderate risk agents; and BSL 3 laboratories can safely handle high-risk agents.

Bioterrorism

The intentional use of microorganisms, or toxins, derived from living organisms, to produce death or disease in humans, animals, or plants.

C

Chemical accident

Accidental release occurring during the production, transportation or handling of hazardous chemical substances.

Chlorofluorocarbons (CFC)

A group of chemical compounds used in industry and in the household, of which the excessive and universal use is believed to be one of the causes of ozone depletion, with resulting environmental damage.

Civil defence

The system of measures, usually run by a governmental agency, to protect the civilian population in wartime, to respond to disasters, and to prevent and mitigate the consequences of major emergencies in peacetime. The term "civil defence" is now used increasingly.

Climatic change

Change observed in the climate on a global, regional or sub-regional scale caused by natural processes and/or human activity.

Comprehensive Emergency Management Plan (CEMP)

The overarching jurisdictional emergency plan at the national, state or local level.

Contributions in kind

Non-cash assistance in materials or services offered or provided in case of disaster.

Crop failure

Abnormal reduction in crop yield such that it is insufficient to meet the nutritional or economic needs of the community.

Crop moisture ratio

The ratio of precipitation to the potential evapotranspiration. An index for assessment of agricultural drought.

Current meter (water)

Instrument for measuring the velocity of water.

Cyclone

A large-scale closed circulation system in the atmosphere with low barometric pressure and strong winds that rotate counter clockwise in the northern hemisphere and clockwise in the southern hemisphere. The system is referred to as a cyclone in the Indian Ocean and South Pacific, hurricane in the western Atlantic and eastern Pacific and typhoon in the western Pacific.

D

Dam (also barrage; barrier; weir)

Barrier constructed across a valley for impounding water or creating a reservoir. (H)

Damage classification

Evaluation and recording of damage to structures, facilities, or objects according to three (or more) categories:

1. "severe damage"

which precludes further use of the structure, facility, or object for its intended purpose.

2. "moderate damage" or the degree of damage to principal members, which precludes effective use of the structure, facility, or object for its intended purpose, unless major repairs are made short of complete reconstruction.

3. "light damage" such as broken windows, slight damage to roofing and siding, interior partitions blown down, and cracked walls; the damage is not severe enough to preclude use of the installation for the purpose for which was intended. (OFDA)

Damping

Limitation of movement or dissipation of energy.

Data collection platform (DCP)

Automatic measuring facility with a radio transmitter to provide contact and transmission of data via satellite. (H)

Debris flow

A high-density mud flow with abundant coarse-grained materials such as rocks, tree trunks, etc.

Declaration of disaster

Official issuance of a state of emergency upon the occurrence of a large-scale calamity, in order to activate measures aimed at the reduction of the disaster's impact.

Deforestation

The clearing or destruction of a previously forested area.

Depression (low, low pressure area)

Region where the barometric pressure is lower relative to that in the surrounding regions at the same level.

Depth (total) of run-off

Run-off volume from a drainage basin, divided by its area.

Desertification

The processes by which an already arid area becomes even more barren, less capable of retaining vegetation, and progressing towards becoming a desert.

Design earthquake

Earthquake parameters selected for designing an earthquake resistant structure according to code requirements.

Design flood

Flood hydrograph or peak discharge adopted for the design of a hydraulic structure according to code requirements.

Design Storm

Rainfall amount and time distribution adopted over a given drainage area, used in determining the design flood. (H).

Detention Reservoir (also flood control reservoir)
Flood storage reservoir with uncontrolled outlets.

Disaster

A serious disruption of the functioning of society, causing widespread human, material or environmental losses which exceed the ability of affected society to cope using only its own resources. Disasters are often classified according to their cause (natural or manmade).

Disaster area survey team (DAST)

A group that is deployed in an area after a disaster to ascertain the extent of damage to population and property and to recommend appropriate responses.

Disaster epidemiology

The medical discipline that studies the influence of such factors as the life style, biological constitution and other personal or social determinants on the incidence and distribution of disease as it concerns disasters.

Disaster insurance

Government sponsored or private insurance policies for protection against economic losses resulting from disaster. (PAHO)

Disaster legislation

The body of laws and regulations that govern and designate responsibility for disaster management concerning the various phases of disaster.

Disaster management

The body of policy and administrative decisions and operational activities which pertain to the various stages of a disaster at all levels.

Disaster medicine

The study and collaborative application of various health disciplines to the prevention, preparedness, immediate response and rehabilitation of the health problems arising from disaster, in co-operation with other disciplines involved in comprehensive disaster management.

Disaster mitigation

See "mitigation".

Disaster phases (syn. disaster cycle, disaster continuum)

Pre- and post-disaster periods subdivided into particular actions. (OFDA)

Disaster response

A sum of decisions and actions taken during and after disaster, including immediate relief, rehabilitation, and reconstruction.

Disaster team

Multidisciplinary, multisectoral group of persons qualified to evaluate a disaster and to bring the necessary relief.

Disaster victim identification (DVI)

Procedures used to positively identify deceased victims of a multiple casualty event

Discharge (syn. flux, rate of flow)

Volume of water flowing through a river (or channel) cross-section in unit time. (H)

Disease control

All policies, precautions and measures taken to prevent the outbreak or spread of communicable diseases.

Dispatch

The act of ordering attack crews and/or support units to respond to a fire, or from one place to another. The activation of emergency service and other resources to respond to requests for assistance. May involve the use of manual or computer-based systems.

Displaced person

Persons who, for different reasons or circumstances, have been compelled to leave their homes. They may or may not reside in their country of origin, but are not legally regarded as refugees. (DM)

Dome

Lava which is too viscous to flow laterally and therefore forms a dome above the erupting vent.

Drainage basin (syn. catchment, river basin, watershed)

Area having a common outlet for its run-off.

Drought

Period of deficiency of moisture in the soil such that there is inadequate water required for plants, animals and human beings.

Drought index

Computed value which is related to some of the cumulative effects of a prolonged and abnormal moisture deficiency.

Dry spell

Period of abnormally dry weather. Use of the term should be confined to conditions less severe than those of a drought. (M)

Dust storm (sand storm)

Dust (sand) energetically lifted to great heights by strong and turbulent winds. (M)

Dynamic testing

Analysis of the response of structures under simulated loads of the type imposed by natural hazards.

E

Earth flow

A mass movement characterized by down slope translation of loose material.

Earthquake

A sudden break within the upper layers of the earth, sometimes breaking the surface, resulting in the vibration of the ground, which where strong enough will cause the collapse of buildings and destruction of life and property.

Earthquake hypocentre (focus)

The place inside the earth where the faulting which is associated with the earthquake originated.
(AD)

Earthquake magnitude ("Richter scale")

See "magnitude."

Earthquake swarm

A series of minor earth tremors (none of which may be identified as the main shock) that occurs within a limited area and time.

Ecosystem

Basic ecological unit formed by the living environment of the animal and vegetable organisms interacting as a single functional entity.

Ejecta

Material ejected from a volcano, including large fragments (bombs), cindery material (scoria), pebbles (lapilli) and fine particles (ash).

El Niño

An anomalous warming of ocean water resulting from the oscillation of a current in the South Pacific, usually accompanied by heavy rainfall in the coastal region of Peru and Chile, and reduction of rainfall in equatorial Africa and Australia.

Element at risk

The population, buildings and civil engineering works, economic activities, public services and infrastructure, etc. exposed to hazards.

Emergency

An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which requires a significant and coordinated response. Any event which arises internally or from external sources which may adversely affect the safety of persons in a building or the

community in general and requires immediate response by the occupants. An unplanned situation arising, through accident or error, in which people and/or property are exposed to potential danger from the hazards of dangerous goods. Such emergencies will normally arise from vehicle accident, spillage or leakage of material or from a fire. In terms of dam operation, any condition which develops unexpectedly, endangers the integrity of the dam or downstream property and life and requires immediate action.

Emergency action plan

A plan of action to be taken to reduce the potential for property damage and loss of life in an area affected by an incident or disaster.

Emergency management team

The team which enables an incident controller's response strategy to be carried out by support agencies through their own commanders, and assists the emergency response coordinator in determining resource acquisition needs, and in ensuring a coordinated response to the emergency

Emergency medical system (EMS)

The aggregate of resources and personnel required to deliver medical care to those with an unpredicted, immediate health need outside established medical facilities.

Emergency medicine

The specialized institutional system and resources required to meet immediate and unexpected medical needs.

Emergency operations center (EOC)

Officially designated facility for the direction and co-ordination of all activities during a Declaration of Disaster

Environmental degradation

Unfavourable modification of the ecological state and environment through natural processes and/or human activities.

Epicentre

That point on the earth's surface directly above the place of origin (i.e., focus or hypocenter) of an earthquake. (OFDA)

Epidemic

1. An unusual increase in the number of cases of an infectious disease which already exists in the region or population concerned.
2. The appearance of a significant number of cases of an infectious disease introduced in a region or population that is usually free from that disease.

Epidemiology

See "disaster epidemiology".

Erosion

Loosing or dissolving and removal of rock or soil as a result of water, ice or wind action.

Evaluation

Post disaster appraisal of all aspects of the disaster and its effects.

Evapotranspiration

The combined loss of water from a given area, by evaporation from the soil and by transpiration from plants.

Exceedance probability

Probability that a given magnitude of an event will be equalled or exceeded.

Explosivity index.

Percentage of pyroclastic ejecta among the total product of a volcanic eruption.

Exposure time

The time period of interest for seismic risk calculations, seismic hazard calculations, or design of structures. For structures, the exposure time is often chosen to be equal to the design lifetime of the structure. (GS)

Eye (of the storm)

The calm center of a tropical cyclone.

F

Fallout

The deposition of radioactive particles from the atmosphere arising from:

- 1) natural causes
- 2) nuclear bomb explosions and
- 3) induced radioactivity and atomic reactor accidents.

Famine

A catastrophic food shortage affecting large numbers of people due to climatic, environmental and socio-economic reasons.

Fault

A planar or gently curved fracture in the earth's upper layers across which displacement occurs.

Falla

Firewall

Walls which are intended to be fire barriers.

First aid

The immediate but temporary care given on site to the victims of an accident or sudden illness in order to avert complications, lessen suffering, and sustain life until competent services or a physician can be obtained.

Flash flood

Flood of short duration with a relatively high peak discharge. Causes inundation, and because of its nature is difficult to forecast.

Flood

Significant rise of water level in a stream, lake, reservoir or a coastal region.

Flood alarm level

Water level which is considered to be dangerous and at which warnings should commence.

Flood-bypass channel, also floodway

Channel built to divert flood flows from a point upstream of a region to a point downstream.

Flood control

The management of water resources through construction of dams, reservoirs, embankments, etc. to avoid floods. (OFDA)

Flood forecasting

Procedure for estimation of stage, its discharge values, time of occurrence, and duration of a flood, especially of its peak discharge.

Floodplain

An area adjacent to a river, formed by the repeated overflow of the natural channel bed. (OFDA)

Floodplain zoning

A plan that defines the main zones of a potential flood area, usually accompanied by housing restrictions or other recommendations to prevent flood damages.

Flood proofing

Techniques for preventing flood damage to the structure and contents of buildings in a floodhazard area. (H)

Flood routing (reservoir routing or stream flow routing)

Procedure of determining of the flood hydrograph change by the flood movement through the river channel, reservoir or other storage.

Flood wave

Rise in streamflow to a crest to such a magnitude that it causes flooding, and its subsequent recession.

Focal depth

Vertical distance from the earth's surface to the place of origin (hypocenter, focus) of an earthquake.

Focus (earthquake)

The point beneath the earth's surface where an earthquake rupture starts and from which waves radiate.

Forecast

Statement or statistical estimate of the occurrence of a future event. This term is used with different meanings in different disciplines, as well as "prediction".

Foreshock

Earthquake which is often part of a distinctive sequence which precedes and originates close to the focus of a large earthquake (main shock).

Forest/grassland fire

Fires in forest or brush grasslands that cover extensive areas and usually do extensive damage. They may start by natural causes such as volcanic eruptions or lightning, or they may be caused by arsonists or careless smokers, by those burning wood or by clearing a forest area. (OFDA)

Forward control centre

A facility, where the controller is located, at or near the scene of an emergency to facilitate better control and management of a particular emergency. In emergencies where the impact is widespread there may be the need to locate more than one forward control centre in which case the title of each forward control centre should be preceded by the place name. The forward control centre may be located in an existing building or be a self-contained mobile unit.

Front (atmospheric)

1. The interface or transition zone between air masses of different physical properties (temperature, humidity).
2. Line of intersection of the surface separating two air masses usually with the ground.

Fujita-Pearson scale (FPP scale)

A 3-digit scale for tornadoes devised by Fujita (F scale) and Pearson (PP scale) to indicate tornado intensity (0-5), path length (0-5) and path width (0-7). (M)

G

Gale

Wind with a speed between 34 and 40 knots (Beaufort scale wind force 8). (M)

Global Observing System (GOS)

The co-ordinated system of methods, techniques and facilities for making observations on a world-wide scale within the framework of the World Weather Watch. (M)

Geographical Positioning Systems (GPS)

Technologies to determine a location from Satellite transmissions

Ground motion

Seismic vibration of the ground at a particular point, recorded by accelerograph or seismograph in order to determine the vibrational characteristics of an earthquake or explosion.

Groundwater level

The level at which soil and porous rock begins to be saturated with water.

Gust

Sudden, brief increase of the wind speed over its mean value. (M)

H

Ham radio network

The international amateur radio network, frequently a valuable contribution by the community to

Hazard

A threatening event, or the probability of occurrence of a potentially damaging phenomenon within a given time period and area.

Hazardous material (HAZMAT)

A substance or material which has been determined by an appropriate authority to be capable of posing an unreasonable risk to health, safety and property.

Heatwave

A long lasting period with extremely high surface temperature.

Hydrograph

Graph showing the variation in time of some hydrological data such as water stage, discharge, sediment load, etc. Hydrograph is mostly used for stage or discharge.

Hydrological forecast

Statement of expected hydrological conditions for a specified period.

Hydrological warning

Emergency information on an expected hydrological phenomenon which is considered to be dangerous. (H)

I

Ice break up

Disintegration of the ice cover (H)

Ice jam (syn. ice dam, ice gorge)

Accumulation of ice at a given location which, in a river, restricts the flow of water. (H)

Ice storm (glaze storm)

Intense formation of ice on objects by the freezing, on impact, of rain or drizzle. (M)

Temporal de cencellada

Incident

An event, accidentally or deliberately caused, which requires a response from one or more of the statutory emergency response agencies. A sudden event which, but for mitigating circumstances, could have resulted in an accident. An emergency event or series of events which requires a response from one or more of the statutory response agencies.

Incident action plan

A statement of objectives and strategies to be taken to control or suppress an incident, and approved by the incident controller. Describes the actions to be taken to control or suppress an incident. There are three incident action plan formats:

- incident action plan - type 1 The unwritten or oral format for small incidents where the incident controller can talk individually to all actively concerned in the incident.
- incident action plan - type 2 Incident action plan type 2 is used for medium incidents and includes a summary of actions taken, current situation information and the control objectives for the incident. The type 2 plan is also very useful for briefing incoming personnel or providing a situation report.
- incident action plan - type 3 Incident action plan type 3 used for large incidents is a more substantial document which lists the intentions and actions of the various functional units of the incident control system.

Incident control system (ICS)

A control structure to systematically and logically manage suppression of emergency incidents including wildfires, from small, simple incidents to large, difficult or multiple situations. It is designed to develop in a modular fashion from the top (incident controller) downwards. The combination of facilities, equipment, personnel, procedures, and communications operating within a common organisational structure with responsibility for the management of allocated resources to effectively accomplish stated objectives relating to an incident

Induced seismicity

Earthquake activity resulting from man-made activities such as mining, large explosions, or forcing large quantities of liquid deep into the ground, e.g. oil-fields, waste disposal or reservoir filling.

Infestation

A pervasive influx and development of insects or parasites affecting humans, animals, crops and materials.

Information report

Report with the same content as that of situation report but issued by an agency in the event that international assistance has not been subject of an official request by the government.

Intelligence

Information that has been evaluated.

Intensity (macroseismic)

A number by which the consequences of an earthquake at a particular place are scaled by its effects on persons, structures, and earth materials. Intensity scales in most common use are the modified Mercalli (MM) and Medvedev, Sponheuer and Karnik (MSK), both having twelve degrees.

International humanitarian law (IHL)

A set of international rules, whether treaty based or customary, specifically intended to govern the humanitarian problems which are the direct consequences of international and non-international armed conflicts. These rules limit, for humanitarian reasons, the right of parties to a conflict to use whatever means and methods of warfare they choose, and protect persons and the objects which could be affected by the conflict.

International Organisation for Standardisation (ISO)

An international standards-writing body headquartered in Geneva, Switzerland, composed of national standards associations from some 55 countries. All member countries are given equal status and are entitled to one vote regardless of size or economic development. Technical work is carried on in committees.

International Rescue Committee (IRC)

A non-profit, non-sectarian voluntary organisation providing relief, protection, and resettlement services for refugees and victims of oppression or violent conflict

Isobar

A line represented on a map or chart, connecting points on the surface that have equal barometric pressure over a given time or period. (OFDA)

Isohyet

A line drawn on a map or chart connecting points with equal amounts of precipitation, for equal periods of time.

Isoseismal

A line surrounding geographic points at which the observed macroseismic intensity is the same.

Isotherm

Line drawn on a map or chart connecting points with equal temperature.

L

Lahar

A term originating in Indonesia, designating a debris flow over the flank of a volcano.

Land Degradation

Progressive deterioration of land quality or land forms resulting from natural phenomena or human activity.

Landslide

In general, all varieties of slope movement, under the influence of gravity. More strictly refers to down-slope movement of rock and/or earth masses along one or several slide surfaces.

Landslide stabilization

Measures to prevent a landslide.

Lava flow

Molten rock which flows down-slope from a volcanic vent, typically moving at between a few metres to several tens of kilometres per hour.

Lead time

Period of a particular hazard between its announcement and arrival, also used for the mobilization of resources needed in relief operations.

Levee (syn. bund, dike, embankment, stop bank)

Water-retaining earthwork used to confine streamflow within a specified area along the stream or to prevent flooding due to waves or tides. (H)

Lifelines

The public facilities and systems that provide basic life support services such as water, energy, sanitation, communications and transportation.

Liquefaction

Loss of resistance to shear stress of a water-saturated sandy soil.

Locust control

The use of monitoring techniques and remedial actions to control locust infestations. See "infestation". (M)

Logistics

The range of operational activities concerned with supply, handling, transportation and distribution of materials. Also applicable to the transportation of people.

M

Major incident

An event which requires response by police, emergency services and the community which may affect a wider area over a longer period of time but is not a declared disaster.

Magma

The molten matter including liquid rock and gas under pressure which may emerge from a volcanic vent.

Magnitude ("Richter scale")

Devised by C.F. Richter in 1935, an index of the seismic energy released by an earthquake (as contrasted to intensity that describes its effects at a particular place), expressed in terms of the motion that would be measured by a specific type of seismograph located 100 km from the epicentre of an earthquake. Nowadays several "magnitude scales" are in use. They are based on amplitudes of different types of seismic waves, on signal duration or on the seismic moment.

Main shock

The biggest of a particular sequence of earthquakes.

Management by objectives

A process of consultative management where the incident management team determine the desired outcomes of the incident. These outcomes or objectives are then communicated to the commander and crews involved in the operation

Management structure

A framework for control and coordination arrangements, during multi-service operations, normally prescribed through legislation or government direction

Malnutrition

A diseased state resulting from an absence or deficiency in the diet of one or more essential nutrients, either manifest or detectable by tests. Malnutrition can also be due to an excess of the wrong food.

Mass wasting

A general term for the dislodging and downslope transport of soil and rock material under the direct application of gravitational body stresses. (OFDA)

Maximum probable Hood (see design flood; standard project flood)

Greatest flood that may be expected, taking into account all pertinent factors of location, meteorology, hydrology and terrain. (H)

Mean return period

The average time between occurrences of a particular hazardous event.

Microzonation (microzoning)

Subdivisión of a region into areas where similar hazard-related effects can be expected. (OFDA). Seismic microzonation is the mapping of a local seismic hazard using a large scale (order of magnitude from 1/5000 to 1/10 000).

Mitigation

Measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and environment.

Mobile Satellite Communication System (SATCOM)

Used after breakdown of other communication facilities in disaster affected areas by disaster aid teams to perform via Satellite exchange of detailed information by telex, phone, fax with their headquarters concerning detailed requirements ensuring a most effective way for the delivery of appropriate relief supplies.

Mobile welfare teams

A mobile team of trained workers (with their own transport and a required amount of equipment) who can be used to start unplanned welfare centres or to boost existing welfare centres.(

Monitoring (syn. surveillance)

System that permits the continuous observation, measurement and a valuation of the progress of a process or phenomenon with a view to taking corrective measures.

Monsoon

Seasonally heavy rains and wind the direction of which varies from one season to another. They occur particularly in the Indian Ocean and South Asian areas.

Mortality

The number, magnitude or frequency of deaths over a period of time among the total sick and well population of an area. The numerical expression of deaths, usually given as a mortality rate.

Mudflow

The down-slope transfer of fine earth material mixed with water.

Multi-modal redundant communications

Communications which use multiple modes (eg. radio, telephone, microwave, satellite) and have in-built redundancy (if one link fails there are alternative routes), eg. telephone lines through separate exchanges.

Mutual aid emergency agreements

Agreements established with appropriate agencies in the surrounding community, defining initial notification and response assignments

N

Non-governmental organization (NGO)

Non-profit making organization operating at the local, national or international levels. Distinct from a governmental organization, having no statutory ties with a national government.

Non-structural elements

Those parts of a building (e.g. partitions, ceilings, etc.) which do not belong to the load-bearing system.

Non-structural flood mitigation

System for reduction of the effects of floods using non-structural means, e.g. land-use planning (flood plain zoning), advance warning systems, flood insurance. (H)

Nowcast

A description of current weather and a short-period (0-2 hours) forecast. (M)

Nuclear accident

Accidental release of radiation occurring in civil nuclear facilities, exceeding the internationally established safety levels.

N-year event (see also return period)

Magnitude of an event, the mean return period of which is N years.

O

Oil spill

The contamination of a water or land area by oil.

P

Palmer index

A mathematical representation of drought conditions

Peak discharge (syn. maximum discharge, peak flow)

Maximum discharge for a given flood hydrograph.

Permafrost

Layer of soil or rock in which the temperature has been continuously below 0°C for at least some years. (H)

Planning meeting

A meeting to prepare the incident action plan, attended by the incident management team and others and held as required.

Planning process

The collective and collaborative efforts by which agreements are reached and documented between people and organisations to meet their communities' emergency management needs. It is a sequence of steps which allows emergency management planning to take place.

Plate tectonics

The concept that the earth's upper layers are made up of several large rigid plates whose boundaries are fault zones along which slippage takes place.

Polar front

Quasi-permanent atmospheric front of great extent, in middle latitudes, which separates polar air and tropical air. (M)

Polder

A mostly low-lying area artificially protected from surrounding water and within which the water table can be controlled. (H)

Pollution

Degradation of one or more elements or aspects in the environment by noxious industrial, chemical or biological wastes, from debris of man-made products and from mismanagement of natural and environmental resources.

Population at risk

A well-defined population whose lives, property, and livelihoods are threatened by given hazards. Used as a denominator.

Post-emergency assistance measures

Financial and other assistance provided to emergency affected persons, communities or organisations to assist their recovery from an emergency.

Potable water (drinking water)

Water that satisfies health standards, with respect to its chemical and bacteriological

Precipitation gauge/precipitation gage

General term for any device that measures the amount of precipitation; principally a rain-gauge or snow-gauge. (H)

Precipitation intensity (rainfall intensity)

Amount of precipitation collected in unit time interval. (H)

Precursor

Phenomenon indicating a probable occurrence of an earthquake or a volcanic eruption.

Prediction

A statement of the expected time, place and magnitude of a future event (for earthquakes and volcanic eruptions).

Predictor

Meteorological or hydrological element, or an index compiled from several elements, which is known (often empirically) to be highly correlated with a quantity which is to be forecast and is used to forecast it. (M)

Prepared community

A community which has developed effective emergency management arrangements at the local level, resulting in: · an alert, informed and active community which supports its voluntary organisations; · an active and involved local government; and, · agreed and coordinated arrangements for prevention, preparedness, response, and recovery.

Preparedness

Activities designed to minimize loss of life and damage, to organise the temporary removal of people and property from a threatened location and facilitate timely and effective rescue, relief and rehabilitation See also "prevention".

Prevention

Encompasses activities designed to provide permanent protection from disasters. It includes engineering and other physical protective measures, and also legislative measures controlling land use and urban planning See also "preparedness".

Psychological services

The specific forms of assistance, ranging from initial support through to longer-term clinical treatment, provided by trained personnel within this framework.

Probable (possible) maximum precipitation (PMP) (syn. extreme rainfall)

Amount of precipitation that is the upper limit for a given duration over a particular basin.

Public awareness

The process of informing the community as to the nature of the hazard and actions needed to save lives and property prior to and in the event of disaster

Public education

The process of educating the public in hazard identification and mitigation

Pyroclastic flow

High density flow of solid volcanic fragments suspended in gas which flows downslope from a volcanic vent (at speeds up to 200 km/h) which may also develop from partial collapse of a vertical eruption cone, subdivided according to fragment composition and nature of flowage into: ash flow, glowing avalanche, nuee ardente, pumice flow

Q

Quicksand

Saturated sandy deposits which, under the influence of hydrostatic pressures, are buoyant and are able to flow.

Quantified risk assessment (QRA)

A risk assessment that is based essentially on quantified inputs.

R

Radar

Radio method of determining at a single station the direction and distance of an object.

Rating curve (rating table)

Curve showing the relation between water stage and discharge of a stream at a flow gauging station. If digitised, it is a rating table.

Reconstruction

Actions taken to re-establish a community after a period of rehabilitation subsequent to a disaster. Actions would include construction of permanent housing, full restoration of all services, and complete resumption of the pre-disaster state. (OFDA)

Recovery

The coordinated process of supporting emergency-affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing.

* Measures which support emergency-affected individuals and communities in the reconstruction of the physical infrastructure and restoration of emotional, economic and physical well-being.

Recovery management (principles of)

Disaster recovery is most effective when:

- management arrangements recognise that recovery from disaster is a complex, dynamic and protracted process;
- agreed plans and management arrangements are well understood by the community and all disaster management agencies;
- recovery agencies are properly integrated into disaster management arrangements;
- community service and reconstruction agencies have input to key decision making;
- conducted with the active participation of the affected community;
- recovery managers are involved from initial briefings onwards;
- recovery services are provided in a timely, fair, equitable and flexible manner; and,
- supported by training programs and exercises.

Refugees

According to international legislation persons having a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion mostly outside the country of nationality and unable to return or avail himself of the protection of that country. Includes mass exodus of peoples for reasons of conflict and natural disasters moving outside their country of origin.

Rehabilitation

The operations and decisions taken after a disaster with a view to restoring a stricken community to its former living conditions, whilst encouraging and facilitating the necessary adjustments to the changes caused by the disaster.

Relief

Assistance and/or intervention during or after disaster to meet the life preservation and basic subsistence needs. It can be of emergency or protracted duration.

Remote sensing

The observation and/or study of an area, object or phenomenon from an aerial distance, frequently using data collected by satellite.

Rescue

The safe removal of persons or animals from actual or threatened danger of physical harm.

Rescue Coordination Centre (RCC)

A unit responsible for promoting efficient organisation of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.

Resettlement

Actions necessary for the permanent settlement of persons dislocated or otherwise affected by a disaster to an area different from their last place of habitation

Risk

A concept used to describe the likelihood of harmful consequences arising from the interaction of hazards, communities and the environment.

* The chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.

* A measure of harm, taking into account the consequences of an event and its likelihood. For example, it may be expressed as the likelihood of death to an exposed individual over a given period.

* Expected losses (of lives, persons injured, property damaged, and economic activity disrupted) due to a particular hazard for a given area and reference period. Based on mathematical calculations, risk is the product of hazard and vulnerability.

Risk analysis

A systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences.

* The systematic use of available information to study risk.

Rockfall

Free-falling or precipitous movement of a newly detached segment of bedrock of any size from a cliff or other very steep slope

Rockslide

A downward, usually sudden and rapid movement of newly detached segments of bedrock over an inclined surface or over pre-existing features (OFDA)

Rupture zone

Area of fault breakage corresponding to a particular earthquake sequence.

S

Sahana

The word "Sahana" means "Relief" in Sinhalese. The Sahana Disaster Management System is collaboratively developed by the community to provide an automated system to manage disaster relief efforts

Sanitation

The application of measures and techniques aimed at ensuring and improving general hygiene in the community, including the collection, evacuation and disposal of liquid and solid wastes, as well as measures for creating favourable environmental conditions for health and disease prevention.

Satellite applications

The use of satellite technology for the purpose of communications or data transmission for monitoring, warning and dissemination of information pertinent to emergency response and/or disaster management.

Sea surge

A rise in sea level that results in the inundation of areas along coastlines. These phenomena are caused by the movement of ocean and sea currents, winds and major storms.

Search and rescue

The process of locating and recovering disaster victims and the application of first aid and basic medical assistance as may be required.

Search and rescue incident

The specific situation that causes the search and rescue system to be activated.

Search and rescue operation

In whole or in part the action taken during the currency of a search and rescue incident.

Sea surge

A rise in sea level that results in the inundation of areas along coastlines. These phenomena are caused by the movement of ocean and sea currents, winds and major storms. (OFDA)

Secondary hazards

Those hazards that occur as a result of another hazard or disaster, i.e., fires or landslides following earthquakes, epidemics following famines, food shortages following drought or floods.

Sector

A specific area of an incident or disaster which is under the control of a sector commander who is supervising a number of crews.

Seiche

A free or standing wave oscillation of the surface of water in an enclosed basin that is initiated by local atmospheric changes, tidal currents or earthquakes (OFDA)

Seismic-activity rate

The mean number per unit time of earthquakes with specific characteristics (e.g., magnitude 6) originating on a selected fault or in a selected area (GS)

Seismic belt

An elongated earthquake zone, usually located along the boundaries of tectonic plates

Seismic isolation

Systems used to limit the transfer of strong ground motion to a structure

Seismic zone

An area within which ground motion and seismic-design requirements for structures are similar (GS)

Seismicity

The distribution of earthquakes in space and time (UNDRO)

Seismograph

An instrument for recording vibratory motion of the ground (OFDA)

Severe weather threat index - SWEAT index (threat score)

An index used to predict thunderstorms and tornadoes.

Situation analysis

A deliberate process where the current incident situation, the factors that are relevant to the incident, the courses open and their consequences are reviewed and alternative strategies are assessed and an incident action plan is recommended.

Situation report (SITREP)

A brief report that is published and updated periodically during an emergency which outlines the details of the emergency, the needs generated, and the responses undertaken as they become known

Shear wall

A structural element which resists lateral forces.

Shelter

Physical protection requirements of disaster victims who no longer have access to normal habitation facilities. Immediate post-disaster needs are met by the use of tents. Alternatives may include

polypropylene houses, plastic sheeting, geodesic domes and other similar types of temporary housing.

Simulation exercise

Decision making exercise and disaster drills within threatened communities in order to represent disaster situations to promote more effective coordination of response from relevant authorities and the population.

Situation report

A brief report that is published and updated periodically during a relief effort and which outlines the details of the emergency, the needs generated and the responses undertaken by all donors as they become known. Sitreps are issued by UNDRO, by UNHCR, ICRC and LRCS.

SMS/GOES (Synchronous Meteorological Satellites/ Geostationary Operational Environmental Satellites)

Satellites orbiting over the equator at the same rate as Earth's rotation and providing images of visible and infrared portions of the spectrum for the same area every 30 minutes. The satellites can collect and distribute environmental data from remote unattended data collection platforms on land, in water or in the atmosphere and rapidly transmit these data to ground receiving stations.

Societal risk

The risk of a number of fatalities occurring. The societal risk concept is based on the premise that society is more concerned with incidents which kill a larger number of people than incidents which kill fewer numbers.

Soil conditions

The conditions of earth (moisture content, desagregation, density, etc.) that may mitigate or intensify disaster agents, such as drought, flooding or seismic movement. (OFDA)

Soil creep

The gradual and steady movement of soil and loose rock material down a slope that may be gentle but is usually steep; it is also called surficial creep. (OFDA)

Soil moisture

Content of water in the portion of the soil which is above the table water including water vapour present in the soil pores. In some cases refers strictly to moisture within the root zone of plants.

Squall

Atmospheric phenomenon characterized by an abrupt and large increase of wind speed with a duration of the order of minutes, which diminishes rather suddenly. It is often accompanied by showers or thunderstorms. (M)

Stages of activation

Investigation, alert, operational, stand-down

Staging area

A prearranged, strategically placed area where support response personnel, vehicles and other equipment can be held in readiness for use during an emergency.

Standard Emergency Warning Signal (SEWS)

A sound designed alert the community to the need to listen to an announcement concerning an actual or imminent emergency.

Staple food

A food that is regularly consumed in a country or community and from which a substantial proportion of the total calorie supply is obtained. (OFDA)

Standard operating procedure (SOP)

A set of directions detailing what actions could be taken, as well as how, when, by whom and why, for specific events or tasks.

Starvation

The state resulting from extreme privation of food or of drastic reduction in nutrient intake over a period of time leading to severe physiological, functional, behavioral and morphological differences.

Stockpiling

The process of prior identification, availability and storage of supplies likely to be needed for disaster response.

Storm

1. An atmospheric disturbance involving perturbations of the prevailing pressure and wind fields, on scales ranging from tornadoes (1 km across) to extratropical cyclones (2000-3000 km across).
2. Wind with a speed between 48 and 55 knots (Beaufort scale wind force 10). (M)

Storm surge

A sudden rise of sea as a result of high winds and low atmospheric pressure; sometimes called a storm tide, storm wave, or tidal wave. Generally affects only coastal areas but may intrude some distance inland. (OFDA)

Strike teams

A set number of resources of the same type that have an established minimum number of personnel. Strike teams always have a leader (usually in a separate vehicle), and have a common communications system. Strike teams are usually made up of five resources of the same type such as: vehicles, crews, earth moving machinery, etc.

Structural flood mitigation

Structural system for reduction of the effects of floods using physical solutions, including reservoirs, levees, dredging, diversions, and flood-proofing. (H)

Subsidence

Collapse of a considerable area of land surface, due to the removal of liquid or solid underlying or removal of soluble material by means of water.

Supplementary plans

Plans which augment the specific responses described in the emergency plan, with information about patient dependency, the types of hazards prevalent in a particular area or specific responses necessary in relation to particular hazards or emergencies.

Support agency

An agency which provides essential services, personnel, or material to support or assist a control agency or affected persons.

Synoptic chart (weather chart, weather map)

Geographical map on which meteorological data, analysed or forecast for a specific time, are presented to describe the atmospheric conditions at the synoptic scale. (M)

T

Table top exercise

An umbrella term for some types of indoor discussion exercise. They may feature a model of the area on which a prepared scenario is played out, or simply using a projected map, not in real time. The model or map is used to illustrate the deployment of resources, but, no resources are actually deployed. Additionally, responses may be prepared in syndicate, in plenary, or under the guidance of a facilitator who maintains the pace and asks probing questions. A cost effective, and highly efficient, exercise method that should be conducted as a prelude to a field exercise as part of a graduated series.

Tactical exercise without troops (TEWT)

TEWTs are used to relate theory and/or emergency management arrangements to a simulated operational situation on the ground. This allows controllers, operations officers, etc. to be practised and tested in problem solving and decision making techniques as well as applying operational procedures without actually deploying their resources to a field situation.

Tactics

These are the tasking of personnel and resources to implement the incident strategies. Incident control tactics are accomplished in accordance with appropriate agency procedures and safety directives. Tactics are normally determined at division/ sector level with a corresponding allocation of resources and personnel.

Task force

A combination of resources assembled for a specific purpose. Task forces always have a leader (usually in a separate vehicle) and have a common communications system. Task forces are established to meet tactical needs and may be demobilised as single resources.

Technology transfer (or cooperation)

Information and equipment provided by one country or area to another, along with the responsibility of training individuals in the use of that information, technology and/or equipment.

(OFDA)

Telemetry

The use of data communications devices from the sensors *in situ*, to a receiving station.

Telemetría

Tephra

Material ejected from a volcano, with the exception of lava.

Terracing

Horizontal cuts, benches or embankments made along hillsides to reduce erosion, improve cropping, hold back runoff, improve infiltration of rain, or carry out some other conservation function. (OFDA)

Terrorism

The calculated use of violence or the threat of violence to attain goals that are political, religious, or ideological in nature. This can be done through intimidation, coercion, or instilling fear. Terrorism includes a criminal act against persons or property that is intended to influence an audience beyond the immediate victims.

Tidal bore (wave)

An abrupt rise of tidal water (caused by atmospheric activities) moving rapidly inland from the mouth of an estuary. (OFDA)

Tornado (syn. twister)

A violently rotating storm of small diameter; the most violent weather phenomenon. It is produced in a very severe thunderstorm and appears as a funnel cloud extending from the base of a Cumulonimbus to the ground. (M)

Torrent control

Structures (rock or other materials) constructed to halt the erosion of stream channels. (OFDA)

Trauma

Injury of any nature

Tremor

A shaking movement of the ground associated with an earthquake or explosion. (OFDA)

Tropical cyclone

Generic term for a non-frontal synoptic scale cyclone originating over tropical or sub-tropical waters with organized convection and definite cyclonic surface wind circulation.

Tropical disturbance: light surface winds with indications of cyclonic circulation.

Tropical depression: wind speed up to 33 knots.

Tropical storm: maximum wind speed of 34 to 47 knots.

Severe tropical storm: maximum wind speed of 48 to 63 knots.

Hurricane: maximum wind speed of 64 knots or more.

Typhoon: maximum wind speed of 64 knots or more.

Tropical cyclone (South-West Indian Ocean): maximum wind speed 64 to 90 knots.

Tropical cyclone (Bay of Bengal, Arabian Sea, South-East Indian Ocean, South Pacific): maximum wind speed of 34 knots or more. (M)

Tsunami

A series of large waves generated by sudden displacement of seawater (caused by earthquake, volcanic eruption or submarine landslide); capable of propagation over large distances and causing a destructive surge on reaching land. The Japanese term for this phenomenon, which is observed mainly in the Pacific, has been adopted for general usage.

V

Vector control

Measures taken to decrease the number of disease carrying organisms (vectors) and to diminish the risk of their spreading infectious diseases.

Victim

A person directly affected by a disaster.

Victim-rescuer syndrome

In disasters where survivors are at the mercy of outside support for survival or their daily requirements, a strong dependence can develop between a victim and those who are providing the aid. This dependency may not be easily terminated when the necessity for relief has ended.

Volcanic eruption

The discharge (aerially explosive) of fragmentary ejecta, lava and gases from a volcanic vent.

Volcano

The mountain formed by local accumulation of volcanic materials around an erupting vent.

Voluntary agencies

Non-governmental agencies or organizations that exist in many countries throughout the world. Some possess personnel trained to assist when disaster strikes. Some volags have capabilities that extend from the local to national and international levels. (OFDA)

Volunteer emergency worker

A volunteer worker who engages in emergency activity at the request (whether directly or indirectly) or with the express or implied consent of the chief executive (however designated), or of a person acting with the authority of the chief executive, of an agency to which an emergency response or recovery plan applies.

Vulnerability

Degree of loss (from 0% to 100%) resulting from a potentially damaging phenomenon.

Vulnerable groups

Categories of displaced persons with special needs, variously defined to include: unaccompanied minors, the elderly, the mentally and physically disabled, victims of physical abuse or violence and pregnant, lactating or single women signalling imminent hazard which may include advice on protective measures.

W

Warning

Dissemination of message signalling imminent hazard which may include advice on protective measures. See also "alert".

Water management system (also water system)

Group of water engineering structures and related water bodies serving one or more purposes and managed as a unified whole.

Water management policy

Collection of legislation, legal interpretations, governmental decisions, agency rules and regulations, and cultural responses by which a country's actions concerning the quantity and

Watershed

All land within the confines of a drainage divide. This is also called a "catchment " or "drainage basin". All surface water has a common outlet.

Watershed divide (syn. drainage divide)

Boundary line separating adjacent drainage basins.

Weathering

The break up and/or transformation of rocks by mechanical, chemical and biological processes, mainly under the influence of the atmosphere.

Windbreak

A barrier used to decrease the wind speed.

Wind force

Number on a Beaufort scale corresponding to the effects produced by winds within a range of speeds.

Wind pressure (Wind load)

The total force exerted upon a structure by wind. For flat surface it is the sum of the dynamic pressure exerted on the windward side and the pressure decrease, or suction, produced on the sheltered side (M)

World Weather Watch (WWW)

The world-wide, co-ordinated, developing system of meteorological facilities and services provided by WMO Members for the purpose of ensuring that all Members obtain the meteorological information required both for operational work and research. The essential elements of the WWW are: The Global Observing System, The Global Data-processing System and the Global Telecommunication System (used also for transmission of seismic information in the Far East). (M)

Z

Zonation

In general it is the subdivision of a geographical entity (country, region, etc.) into homogenous sectors with respect to certain criteria (for example, intensity of the hazard, degree of risk, same overall protection against a given hazard, etc.)

Zoonosis

Any disease of animals that can be transmitted to man (e.g. rabies).

Zoonosis