

Glossary

Adaptation

Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects. Adaptation can be carried out in response to (post-disaster) or in anticipation of (pre-disaster) changes in weather risks. It entails a process by which measures and behaviours to prevent, moderate, cope with and take advantage of the consequences of climate events are planned, enhanced, developed and implemented (The World Bank, 2012).

Bathymetry

The study of the depths and shapes of the underwater terrain of oceans, seas and lakes.

Benefit-cost ratio

A benefit-cost ratio (BCR) is an indicator that attempts to summarise the overall value for money of a project or proposal. A BCR is the ratio of the benefits of a project or proposal, expressed in monetary terms, relative to its costs, also expressed in monetary terms. All benefits and costs should be expressed in discounted present values.

Disaster risk reduction

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 (United Nations, 2009).

Emergency management

Emergency management has four areas of focus: prevention, preparedness, response and recovery (Attorney-General's Department, 2011).

Foundational data

Base layers of locational information used for assessment of natural disaster risks, as well as a range of other broader purposes. This encompasses exposure data (assets at risk, population and community demographics), as well as fundamental geographic data (geological, topography and weather information).

Geocoding

The process of assigning geographic co-ordinates to sites or regions of interest.

Hazard data

Hazard specific information on the risks of different disaster types, providing contextual data about the history of events and the risk profile for Australian locations.

Impact data

Data on the potential and actual impacts associated with natural disasters, including information on historical costs and damage, and the current and predicted future value at risk.

LiDAR (light detection and ranging)

A high quality form of elevation data which uses high speed laser pulses to generate three-dimensional structural data for terrain and landscape features (CSIRO, 2013).

Mitigation

Measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and environment (Council of Australian Governments, 2011).

In climate change terminology, mitigation refers to actions to address the causes of climate change. This generally involves actions to reduce anthropogenic emissions of greenhouse gases that may contribute to the warming of the atmosphere. This is not the definition of mitigation used in this report.

Natural disasters

A natural disaster is a naturally occurring rapid onset event that causes a serious disruption to a community or region (Productivity Commission, 2014).

For the purpose of this report we define natural disasters as bushfires, cyclones, earthquakes, floods or storm surges.

Preparedness

To protect our people, assets, infrastructure and institutions from disaster events and to establish, train and exercise arrangements to respond to, and recover from a disaster event (Prosser & Peters, 2010).

Prevention

To hinder, deter and mitigate disasters, while maintaining readiness to deal with disaster events (Prosser & Peters, 2010).

Recovery

To return national and community life to normal as quickly as possible after a disaster event, through the restoration of social, economic, physical and environmental wellbeing (Prosser & Peters, 2010).

Resilience

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions (United Nations, 2009).

Response

To respond rapidly and decisively to a disaster event and manage its immediate consequences (Prosser & Peters, 2010).



Flooded Bruce Highway bordered by banana plantations devastated when Cyclone Yasi tore through Tully on February 3, 2011.

Acronyms

ABCB	Australian Building Codes Board
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANDS	Australian National Data Service
ANHMRC	Australian National Health and Medical Research Council
ANZLIC	Australian and New Zealand Land Information Council
APEC	Asia-Pacific Economic Co-operation
ARC	Australian Research Council
ARCom	Australian Research Committee
ASBEC	Australian Sustainable Built Environment Council
BCR	Benefit-cost ratio
BITRE	Bureau of Infrastructure, Transport and Regional Economics
BNHCRC	Bushfire and Natural Hazards Cooperative Research Centre
BoM	Bureau of Meteorology
BTE	Bureau of Transport Economics
CAWRC	Centre for Australian Weather and Climate Research
CDEM	Civil Defence Emergency Management
CIPMA	Critical Infrastructure Program for Modelling and Analysis
COAG	Council of Australian Governments
CRC	Cooperative Research Centre
CSIRO	Commonwealth Science and Industrial Research Organisation
CTS	Cyclone Testing Station
DHS	Department of Human Services
DIISRTE	Department of Industry, Innovation, Science, Research and Tertiary Education
EMA	Emergency Management Australia
EM-DAT	Emergency Events Database
FEMA	Federal Emergency Management Agency
FMA	Floodplain Management Authority
GFDRR	Global Facility for Disaster Reduction and Recovery
GRID	Global Resource Information Database
GRIP	Global Risk Information Platform
IAG	Insurance Australian Group
ICA	Insurance Council of Australia
IP	Intellectual property
LA RED	Network of Social Studies on Disaster Prevention
LiDAR	Light detection and ranging
MCDEM	Ministry of Civil Defence and Emergency Management
NCCARF	National Climate Change Adaptation Research Facility

NDRP	Natural Disaster Resilience Program
NEHRP	National Earthquake Hazards Reduction Program
NEMP	National Emergency Management Projects
NFID	National Flood Information Database
NGO	Non-Government Organisation
NHRP	Natural Hazards Research Platform
NIWA	National Institute of Water and Atmospheric Research
NSDR	National Strategy for Disaster Resilience
NSW	New South Wales
NZ	New Zealand
OAIC	Office of the Australian Information Commissioner
OECD	Organisation for Economic Co-operation and Development
ONRN	National Observatory for Natural Hazards
OpenDRI	Open Data for Resilience Initiative
PC	Productivity Commission
PDF	Portable Document Format
PPD	Presidential Policy Directive
PREP	Property Resilience and Exposure Program
PSI	Principles for Sustainable Insurance
PSMA	Public Sector Mapping Agencies
QLD	Queensland
QRA	Queensland Reconstruction Authority
SA	South Australia
SCCC	Select Council on Climate Change
SRTM	Shuttle Radar Topography Mission
TERN	Terrestrial Ecosystem Research Network
TISN	Trusted Information Sharing Network
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environment Programme
UNEP FI	UNEP Financing Initiative
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISDR	United Nations Office for Disaster Risk Reduction
UNU	United Nations University
US	United States
VIC	Victoria
WHO	World Health Organisation