

THE GLOSSARY



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Accounting value	Refers to the cost of replacing a damaged stock with another stock that offers similar operating characteristics.
Adaptation planning	Planning associated with options available to communities in adapting to risks and impacts from natural disasters (including those resulting from climate change)
Affected population:	The affected population refers to those persons suffering as a result of the natural disaster.
Assessment	A valuation of property. In the ECLAC methodology it refers additionally to the compilation of quantitative information and additional background information that permits an appraisal of the conditions prevailing before the disaster and of the scope and magnitude of the damage and its secondary effects.
Audit trail	Complete documentation of the input data and the methodology used in arriving at a estimate. This facilitates an examination of the derivation of the estimate.
Balance of payments	The balance of payments is an accounting record of all transactions (goods, services, capital flows) between the residents of a country and the non-residents of country during a period of time which is normally taken to be a year. The criterion for inclusion is that a transaction be between the residents of different countries and not that these include the sale or purchase of foreign exchange. The balance of payments is composed of the current account and the capital (now termed financial) account. The characteristic feature of the current account is that the transactions that are recorded do not involve acquiring or surrendering claims in relation to the residents of another country. The current account includes imports and exports of goods and services, remittances, and income transfers. Changes in ownership of claims are presented in the capital account (financial). A basic distinction in the capital account (financial account) is the division between direct and portfolio investment. Direct investment occurs when the investor acquires an ownership claim involving the control of the asset. Portfolio investment includes equity investment (acquisition of a share) and loans, which are subdivided into short term and long term loans.
Baseline Surveys	Surveys that seek to determine the quantitative or qualitative status of environmental or socio-economic conditions prior to changes resulting from a hazard event.



Baseline Data	Data from surveys or other sources that can be used to determine the status of environmental or socio-economic conditions existing prior to a hazard event.
Breakwater	A structure built offshore of a coastline, to protect the shore from waves. Breakwaters are often also used to provide protection to harbours and marinas, from damaging wave conditions.
Cash basis and accrual basis	Cash basis refers to the actual payment of a commitment or collection of revenue. Accrual basis refers to a 'promise' to pay or collect revenue. Government revenues should be computed on a cash-flow basis and its expenditures on an accrual basis.
Direct damage	Direct damage refers to damage to property that occurs as a direct result of the natural disaster. The property may be plant and machinery, buildings and all immovable assets, stocks of raw materials, other materials, spare parts, semi-finished and finished products. In some cases of damage, the damaged asset must be demolished before re-construction work can commence. The cost of demolition is also considered to be a part of direct damage.
Disaster	The serious disruption of the functioning of a society, causing widespread human, material or environmental losses which exceed the ability of the affected society to cope using only its own resources.
Earthquake	Sudden ground motion produced by abrupt displacement of rock masses, usually within the upper 5 to 30 km of the earth's crust.
Economic growth	It is generally computed as the rate of growth of GDP $((GDP_t - GDP_{t-1}) / GDP_{t-1}) * 100$.
Economic valuation	<p>The general principles of economic valuation are that transactions are valued at the actual price and that market prices are the basic reference for valuation in the system. When market transactions are not available valuation is carried out by the costs incurred or by reference to market prices for analogous goods or services.</p> <p>The preferred method of valuation for output is basic prices, which are defined as prices before taxes on products are added, and subsidies on products subtracted.</p> <p>Goods or assets can be measured using the historic cost accounting method which requires goods or assets used in production to be valued by the expenditures actually incurred to acquire those costs of assets, however far back in the past those expenditures took place.</p> <p>Another way to measure is to use the opportunity cost. This is used in generally in systems of national accounting. According to this criterion the cost of using or using up some existing asset or good in one particular process of production is measured by the amount of the benefits that could have been secured by using the asset or good in alternative ways. Opportunity cost is calculated with reference to the opportunities foregone at the time the asset or resource is used as distinct from the costs incurred at some time in the past when the asset that was bought. Current cost accounting is an approximation to opportunity cost accounting. Current cost accounting values the assets or goods used in production at their actual or</p>



estimated current market prices when production takes place.

Environmental assets are valued by measuring the willingness to pay. This in turn is broken into a series of component parts. These are the direct cost (obtained from market and survey data); the indirect cost (this is a subjective valuation concept) and corresponds to the concept of ‘ecological functions’ of an environmental asset; option value which related the amount that individuals would be willing to pay to conserve a tropical forest for future use; and the existence value which relates to valuation of the environmental asset that is unrelated to either current or optional use.

Emergency phase	The period immediately following the disaster when the priority is on saving lives. This phase includes search and rescue operations, evacuation, first aid, the establishment of shelters, temporary restoration of transport and communication lines, repairs to critical public utilities and a count of casualties and fatalities.
Environmental Audit	A procedure used to evaluate a facility (hotel, manufacturing plant and other) to determine strengths and weaknesses in the application of environmental standards and practices, including disaster preparedness.
Essential Services	Services whose disruption or loss could have grave consequences for health, security, access to records, water supply and other critical needs of a community. These may be referred to as “lifelines.
Fiscal deficit	It is the difference between the government’s expenditure and its revenue. It is often expressed as a percentage of GDP.
Gender differentials	Gender refers to the socially constructed roles of men and women (girls and boys) while sex refers to the biologically determined roles. Gender differentials speaks to the observed differences between men and women due to socially constructed roles and relations.
Geo-referenced data	Spatial information represented on a grid.
Government budget	The budget presents the plans to spend government revenue following a given set of priorities.
Government purchases	In the national accounts government expenditure is limited to purchases of goods and services. They exclude transfer payments (grants, subsidies, and interest on debt).
Gross domestic product	The gross domestic product is a statistic aiming to measure the total value of goods and services produced in the geographic boundaries of an economy within a given period of time. Total output of the system is computed in gross terms because it does not make a deduction for the exhaustion of capital in producing the output. GDP is calculated by adding together the market value of all different outputs (not simply tangible goods but also the creation of new construction and output of services) of an economy.



Economists distinguish between nominal and real GDP. Nominal GDP measures the value of goods and services according to their market price. Real GDP attempts to measure the physical volume of production. If all prices double nominal GDP doubles but real GDP remains the same.

Gross domestic product and gross national expenditure	The gross domestic product can be referred to as gross national expenditure. In turn gross national expenditure can be decomposed by sector and subdivided into kind of product bought. By sector gross national expenditure is divided in personal consumption expenditure, gross private domestic investment, government purchases and net exports.
Gross private domestic investment	Includes those parts of the economy that are of a private-investment nature. The investment activities are measured are gross in the sense that they are computed before any deduction for depreciation. They are of a private nature because the government is not included. They are domestic because they incorporate investment outlays only within the country in question. Investment can be classified into different categories: residential construction, non-residential construction, change in business inventories. Residential construction represents the value of on-site construction activity, multiple dwellings and single-family homes. The purchase of a home by a consumer is treated as a business investment because the buyer is considered being in the business of owning a home. Another category of investment is plant and equipment. The plant portion of the total is non-residential construction and machinery purchases are classified under producer durables. Finally, the change in business inventories is meant to reflect the physical increase or decrease in inventories valued at prevailing prices.
Groyne	Low barrier built out into the sea perpendicular to the shoreline. Groynes are intended primarily to facilitate the accretion of sand at a particular point along the shoreline, which may be moving in an alongshore direction.
Hazard	An activity or situation that is an actual or potential source of harm or injury. It may arise or be caused within a defined area.
Hazard Mapping	The use of scientific methodologies to define varying levels of risk to areas from natural hazards, such as floods, storm surge and seismic activities
Hurricane	Tropical cyclone (low pressure system) with winds that exceed 74 mph (118 km/hr).
Impact	Adverse or beneficial effects resulting from human actions or natural hazards
Indirect damage	The loss of production flows of goods or services and income that results from a natural disaster. For example, if a factory is damaged and such damage results in a shutdown of operations, the loss of production and loss of business and income are considered to be indirect damage. Indirect damage goes beyond the loss of income and production. It includes the increased cost of provision of goods and services that result from the disaster. To use the Montserrat case, re-location of the operations that



formerly took place in the capital involved movement to relatively hilly terrain. The added cost of operation is reflected in higher fuel bills for automobiles, greater transportation and maintenance costs and the loss of rental incomes accruing to landowners who suffered loss. Indirect effects should be easily quantifiable and should be additive to the valuation of direct damage. Indirect damage may be measurable for two to five years after the disaster.

Inflation	Inflation refers to the rate of increase in the price level. It is more accurate to define inflation as a steady or continuous increase in the price level. The price level refers to the consumer price level. Inflation is computed as $(CPI_t - CPI_{t-1}) / (CPI_{t-1}) * 100$, where CPI_t is the consumer price index in time period t .
Jetty	A structure (typically permeable) projecting into the sea for the purpose of mooring boats; also solid structure projecting into the sea for the purpose of protecting a navigational channel. May also be referred to as a pier.
Landslide	Gravity-induced movements of a soil or rock mass along a slope.
Macroeconomics	Macroeconomics refers to the study of aggregate behaviour in the economy. It focuses on the overall consequences of individual decisions. The basic approach consists in looking at the overall trends in the economy rather than at the trends, which affect particular business firms, workers, or regions. Examples of main overall measures of economic activity are the gross domestic product, investment, savings, and consumer price index. Data on aggregate economic behaviour is collected in the national income accounts. Macroeconomic data can be classified into stocks and flows.
Mitigation	Minimizing or avoiding adverse impacts from human actions or reducing vulnerability to natural hazards.
Mitigation Costs	Costs associated with impact or vulnerability reduction that can be applied to buildings, communities, populations or economic activities prior to or after a disaster event.
National Accounts	National accounts are a double-entry bookkeeping system recording the total economic output of the economy on the one hand and the resulting income flows on the other. Total income flows are equal to the value of the total output. The output side of the account is restricted to counting the output of finished products and thus avoids double counting. This method of counting is equivalent to summing up the value added at each level of production. The accounts value physical outputs at their sales or market price. It should be noted that national accounts exclude changes in the value of real or financial assets.



Net exports	Net export equals exports less imports. Imports have to be deducted from exports because they are not part of the country's output (that is of GDP). Thus a negative adjustment is required. Imports find their way into the actual markets of a country and thus into the national accounts but then must be removed from the total in net exports. Net exports must reflect not only merchandise trade but also trade in invisibles. The principal invisibles are investment income and tourism. The income and tourism accounts must also be netted of imports.
Permanent Mooring	A heavy device of concrete or metal or a bolt embedded in coral rock to which a rope is attached (and marked by a floating buoy) for mooring of boats.
Personal consumption expenditure	Represents the spending of individuals and households. It includes durable goods non-durable goods and services. All outlays of this sector are treated as consumption and none as investment. An automobile whose average life qualifies as a depreciable investment if it is bought by a business but it is defined as consumption if it is bought by an individual (the exception is the purchase of a home, see gross private domestic investment below). This is a definitional matter and the national accounts restrict the term investment to productive facilities.
Pier	See Jetty.
Realised room rate	Advertised room rate less discounts.
Reconstruction	Setting social and economic priorities and the allocation of resources to realize development objectives.
Rehabilitation	The phase, also called the transitional phase, covers all activities aimed at restoring the situation in affected areas to normal.
Relief response	This is the response to the disaster on the part of organizations, most often international organizations, through the supply of items of immediate need in the areas of first aid, medication, food, shelter and clothing to assist victims of the disaster.
Replacement cost	Refers to the amount actually paid for the replacement of the destroyed assets.
Resilience	The ability of an individual, household or community or ecosystem to withstand external shocks.
Revetement	A sea defense structure, built along the shore to prevent erosion and damage from wave action, usually constructed from quarried armour stones.
Risk	Risk refers to potential hazard or danger, exposure to mischance or peril;



Risk Indicators	Biophysical, meteorological and related evidence or features that can be used to gauge an area's level of risk in association with the occurrence of hazards.
Risk Management	Refers to a set of ordered actions that inform decision-making as a result of insights into risks and their impacts. The management of risk identifies opportunities as well as minimizes loss. Risk management implementation can lead to increased safety, quality and generally improved environmental conditions.
Sea Wall	Typically a concrete structure built along the shore to prevent erosion and damage by wave action.
Secondary effects	Secondary effects are a consideration of the impact of the event on the behaviour of the main macroeconomic variables.
Social capital	Networks together with shared norms, values and understandings that facilitate co-operation within or among groups.
Social policy	A collection of interventions, undertaken by governments, directly affecting transformation in social welfare, social institutions and social relations.
Social Vulnerability	The risk, brought about by social conditions, that an individual, household, community or nation will not be able to buffer against external threats or shocks.
Stocks and flows	A stock is an economic magnitude measured at a point in time (money supply or international on December 31 1999). A flow is an economic magnitude measured as a rate per unit of time (gross domestic product, investment, savings are flow magnitudes). The difference between stocks and flows is often explained by the analogy of a water flowing in a bathtub or rivers flowing into and out of a lake. As put by Godley and Cripps in their textbook <i>Macroeconomics</i> (New York: Oxford University Press, 1983) p.36: "The difference between stocks and flows and the relationship between them is illustrated by the analogy of rivers flowing into and out of a lake. The movement of water in the rivers can be measured as flows – i.e., quantities of water moving past a given point per designated period of time. The quantity of water in the lake is a stock which can be measured at any point in time, There may be a precise relationship between flows into and out of the lake and changes in the stock of water it contains. If we could be certain that there were no net movements of water into and out of the ground and air the difference between the inflow and the outflow in any period would be exactly equal to the change in the stock between the beginning and end of that period".
Storm Surge	Increase in water surface elevation produced by the action of cyclonic winds during a hurricane, in which the sea level can be up to five metres higher than normal. Storm surge components are due to the hurricane winds and the low pressure area in the 'eye' of the hurricane. Closer to shoreline areas, the phenomenon of wave set-up becomes a significant contributor to storm surge.



Threat	Threat refers to immediate events, activities or functioning that press, urge, force or induce behaviour change;
Tsunami	A long-period (usually 15 – 60 minutes) wave caused by a large-scale movement of the sea floor, from a volcanic eruption, submarine earthquake, or landslide.
Volcano	A vent in the surface of the earth through which magma and associated gases and ash erupt; also the form or structure, usually conical, that is produced by the ejected material.
Vulnerability	Proneness to damage
Vulnerability Indicators	Physical, socio-economic and cultural characteristics, conditions or trends that can be used to rank and in some cases measure the proneness to damage of a community or population to a hazard event.
Vulnerable zones	Areas that have been designated (or known to be) at risk to natural hazards and where policies, programs, projects, land uses, agricultural, industrial or cultural practices and lifestyles increase the vulnerability of the population to disasters.
Wave Set Up	An increase in the mean sea level caused by a transfer of wave energy from a kinetic to a potential state, which occurs once the wave breaking process starts.

