



INDONESIA

East Asia and the Pacific

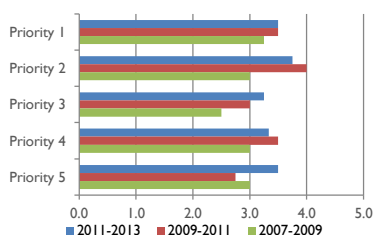


Indicator	Year	Value	Indicator	Year	Value
Population (million people) ¹	(2013)	250	GFCF - Gross Fixed Capital Formation (million US\$) ¹	(2013)	274.944
Population density (People/km ²) ¹	(2013)	137,9	Social expenditure (million US\$) ³		53.742
GDP-Gross Domestic Product (million US\$) ¹	(2013)	868.346	Gross savings (million US\$) ¹	(2012)	269.037
GDP per capita (US\$) ¹	(2013)	3.475	Total reserves (million US\$) ¹	(2013)	96.364
Capital stock (million US\$) ²	(2014)	2.827.835			

Risk drivers

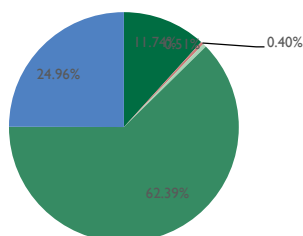
Hazard Exposure			Urbanization		
Population growth (annual %) ¹	(2013)	1,21	Urban population growth (%) ¹	(2013)	2,7
GFCF (% GDP) ¹	(2013)	31,7	Pop living in slums (% of urban pop) ⁵	(2007)	23
Poverty and inequality			Environment		
GINI Index (0 - 100) ¹	(2011)	38,1	Urban population (%) ¹	(2013)	52,3
Life expectancy at birth (years) ¹	(2012)	70,6	Ecological footprint (global hectares per capita) ⁶	(2007)	1,21
Pov gap at national poverty lines (%) ¹	(2013)	1,80	Environmental performance index (0 - 100) ⁷	(2014)	44,4
Social expenditure (% GDP) ³		6,19	Forest change (% - 2000-2012) ⁷	(2012)	-5,5
Governance indicators			Climate change		
Rule of law (-2.5 - 2.5) ⁴	(2013)	-0,55	Freshwater withdrawals (% of internal resources) ¹	(2002)	5,6
Government effectiveness (-2.5 - 2.5) ⁴	(2013)	-0,24	Electricity production from renewable energy (% total) ¹	(2011)	5,25
Voice and accountability (-2.5 - 2.5) ⁴	(2013)	0,00	CO2 emissions (metric tons per capita) ¹	(2010)	1,80
Control of corruption (-2.5 - 2.5) ⁴	(2013)	-0,62			

HFA progress



DISASTER RISK^a

Average Annual Loss (AAL)^b by hazard



Hazard	Value [million US\$]	AAL/Capital stock [%]	AAL/GFCF [%]	AAL/Social expenditure [%]	AAL/Total reserves [%]	AAL/Gross savings [%]
Earthquake	1.116,01	0,04	0,41	2,08	1,16	0,41
Cyclonic Wind	0,49	0,00	0,00	0,00	0,00	0,00
Storm Surge	37,86	0,00	0,01	0,07	0,04	0,01
Tsunami	48,15	0,00	0,02	0,09	0,05	0,02
Volcano	5.929,30	0,21	2,16	11,03	6,15	2,20
Flood ¹⁰	2.372,47	0,08	0,86	4,41	2,46	0,88
TOTAL	9.504	0,1	1,3	6,7	3,7	1,3

Risk and Development

Implications¹¹

Economic implications (Capital stock - savings) **46,9**

Growth and financial implications (GFCF - Reserves) **52,2**

Social Implications (Social expenditure) **58,4**

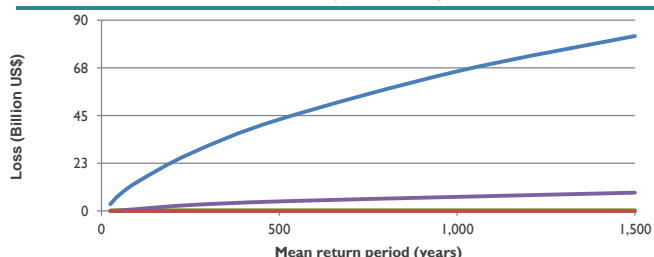


52,5
Ranking
81
out of 213

Multihazard AAL results by sector (Earthquake and cyclonic wind)

Sector	Sub Sector	Capital stock [million US\$]	Average Annual Loss (AAL) [million US\$]	Distribution by sector
Residential (income) ¹²	Low	725.055	752,73	
	Middle low	1.081.117	1.185,22	
	Middle high	0	0,00	
Services	Commercial	1.382.413	1.766,23	
	Industrial	1.813.619	2.361,34	
Education	Private	239.256	205,06	
	Public	639.336	737,03	
Health	Private	2.827	0,12	
	Public	1.218	0,02	
Public buildings		0	0,00	
National		5.884.841	7.007,73	
Fiscal ¹³		1.365.609	1.489,77	

Probable Maximum Loss - PML¹⁴ (million US\$)

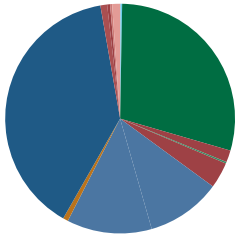


Hazard	Mean return period (years) ¹⁵				
	100	250	500	1000	1500
Earthquake	13.638	27.130	43.215	65.894	82.556
Cyclonic Wind	20	31	35	42	44
Storm Surge	481	481	481	481	481
Tsunami	924	2836	4550	6683	8666

DISASTER LOSSES¹⁷

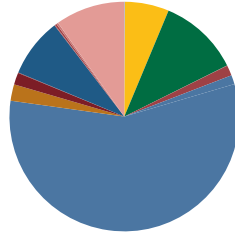
NATIONALLY REPORTED LOSSES

Mortality



- Alluvion
- Electric Storm
- Flash Flood
- Avalanche
- Eruption
- Flood
- Earthquake
- Fire
- Forest Fire

Combined economic losses



- Avalanche
- Drought
- Erosion
- Coastal erosion
- Earthquake
- Eruption
- Cyclone
- Electric Storm
- Fire

10-year moving average

2005 - 2013

DataCards	1.672
Deaths	1.760
Houses destroyed	284
Houses damaged	106.554
Combined economic losses	2.058.687.174

Volcano exposure

Number of volcanoes	142
Population living within 30km in country (Pop30)	68.995.038
% of pop living within 30km	28

- 1 World Bank Development indicators. <http://data.worldbank.org/> More information can be found in "Indicators definitions and sources".
- 2 Global Exposure Database 2014. Di Bono (2014)
- 3 International Labour Organisation, ILO: Total Social Protection expenditure (2010), Public Health Care expenditure (2010), World Bank Development indicators, Public Education expenditure (2012)
- 4 World Bank Governance indicators. <http://data.worldbank.org/>
- 5 [Indicadores de los Objetivos del Desarrollo del Milenio <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=710>](http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=710)
- 6 Global Footprint Network www.footprintnetwork.org
- 7 Environmental Performance Index, Yale Center for Environmental Law and Policy, Yale University and Center for International Earth Science Information Network (CIESIN), Columbia University <http://epi.yale.edu>
- 8 UNISDR Global Risk Assessment 2015. This section is based on technical countries risk profiles : World summarized catastrophe risk profiles: summary by country on the results from the Global Risk Model, CIMNE&INGENIAR (2015).
- 9 AAL: The Average Annual Loss is the expected loss per annum associated to the occurrence of future perils assuming a very long observation timeframe. It considers the damage caused on the exposed elements by small, moderate and extreme events and results a useful and robust metric for risk ranking and comparisons.
- 10 AAL Flood results are provisional. These results give an overview of the risk associated with river flooding. Factors other than the depth of the water also have a considerable influence on loss, which means that there is greater uncertainty compared with other hazards.
- 11 Risk and development implications index. This index is useful to provide a ranking of the countries based on the ratio of the expected Average Annual Loss (AAL) with relation to a set of relevant macroeconomic, financial, and social development variables. It attempts to reveal the weight of the AAL with respect to the social expenditure, the capital formation (domestic investment) and reserves (financial capacity), and the produced capital or capital stock (assets at risk) and savings (treasury) of each country. It reflects, in adverse conditions, growth and social constraints for the country as a result of potential future disasters.
- 12 The fiscal portfolio is composed by the government buildings, public education and health buildings, and low income residential private buildings.
- 13 PML: The Probable Maximum Loss (PML) is a risk metric that represents the maximum loss that could be expected, on average, within a given number of years. PML is widely used to establish limits related to the size of reserves that, for example, insurance companies or a government should have available to buffer losses: the higher the return period, the higher the expected loss. PML always have associated a mean return period.
- 14 Mean return period of 100, 250, 500, 1000 and 1500 years means the 5%, 2%, 1%, 0.5% and 0.3% probability respectively of exceeding those losses in 5 years.
- 15 Residential buildings are classified according to the population by income level, using the GINI curve for income distribution and the countries classification limits from the World Bank. See CIMNE et al. 2013a
- 16 [Source: OCHA/ReliefWeb. ochavisual@un.org](mailto:ochavisual@un.org)
- 17 National Disaster Loss databases. Credits correspond to the institution in charge of updating/developing the database on each country. See Acknowledgements pages in the GAR 2015, and <http://www.desinventar.net>