

EL SALVADOR Earthquakes and Hurricanes RISK PROFILE

What is a country disaster risk profile?

An estimation of the potential economic losses to property caused by adverse natural events.

Country Disaster Risk Profile

Applications

Develop key baseline data

> Evaluate impact of disasters

> Promote and inform risk reduction

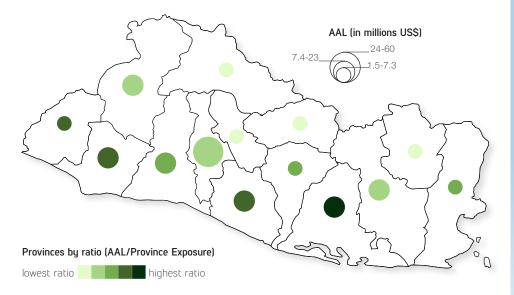
Inform disaster risk financing

Country At-A-Glance

GDP US\$ | Population | Total Building Exposure US\$ (Replacement Value) 25.2 billion | 37.1 billion



Two representations of earthquake risk



Absolute Risk: The larger the circle, the higher the Annual Average Losses that the province could potentially incur over the long term.

Relative Risk: The darker the color, the higher the ratio of AAL/Province Exposure. The darkest color represents the province of Usulutan which has a higher proportion of vulnerable structures due to construction types and/or potentially higher earthquake intensity.





The earthquake risk in El Salvador is more significant than the hurricane risk.

Annual Average Loss (AAL) from earthquakes is US\$ 175.93M (0.70% of GDP) and from hurricanes is US\$ 2.94M (0.01% of GDP).

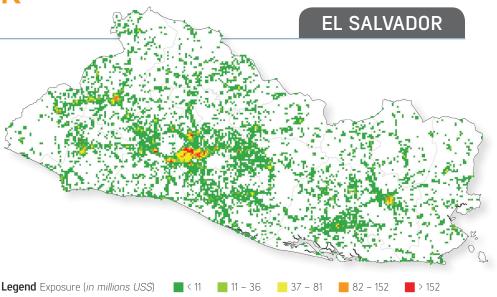
The Probable Maximum
Loss for earthquakes (250
year return period) is **US\$**3.9B (15.5% of GDP)
and for hurricanes (250
year return period) is **US\$**374M (1.5% of GDP).

Single-family, residential houses constructed with reinforced masonry bearing walls are the buildings most vulnerable to earthquakes accounting for over 31% of AAL.

What is at risk in El Salvador?

Economic assets such as residential and non-residential buildings are at risk. These assets that are exposed to natural disasters are referred to as a country's **Building Exposure**.

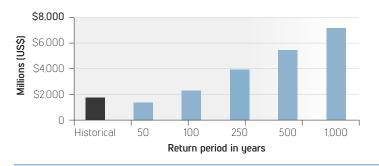
The map illustrates the value and distribution of residential and non-residential buildings in El Salvador at risk from earthquakes and hurricanes.



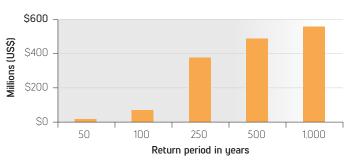
What are the potential losses in El Salvador?

These graphs show the estimated potential future losses to El Salvador that could be caused by earthquakes and hurricanes that occur within a given return period. In 2001, a magnitude 7.6 earthquake struck El Salvador. If this historical event were to happen in 2015, it would cause losses of US\$ 1.810M, amounting to 7% of GDP.

Estimated Losses Due to EARTHQUAKES



Estimated Losses Due to HURRICANES



How can earthquake risk be reduced?

Risk reduction interventions could be prioritized in the highest risk ranked province of Usulutan (see map on previous page). At an estimated additional cost of US\$ 130M, most single family adobe buildings in Usulutan could be retrofitted up to the standards of reinforced concrete buildings which would reduce their risk to earthquakes by approximately 80%. This would also reduce the country's AAL by 5%.



To learn more, visit: collaboration.worldbank.org/groups/cdrp or email cdrp@worldbank.org



















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