



# NATURAL DISASTERS



# 12 NATURAL DISASTERS



**CYCLONE**



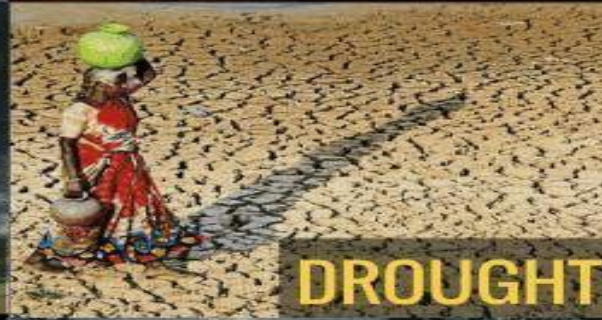
**WILDFIRE**



**HAILSTORM**



**TORNADO**



**DROUGHT**



**BLIZZARD**



**EARTHQUAKE**



**AVALANCHE**



**VOLCANO ERUPTION**



**TSUNAMI**



**FLOOD**



**LANDSLIDE**

**In the past 20 years, 4.4 billion people – nearly two-thirds of the world's population – have been caught up in natural disasters.**

Causing \$2 trillion in damage, the equivalent of the world's annual aid budget twenty-five times over.

**It's far cheaper to prepare well for disasters than to try to pick up the pieces afterwards. More importantly, it can save a lot of lives.**




# Recent news




*Oct. 8, 2021 Friday.* A powerful magnitude 5.9 earthquake shook the Tokyo area on Thursday night, injuring more than 30 people, damaging underground water pipes and halting trains and subways.



*Sept. 12, 2021, Peshawar.* At least 14 people were killed and another three injured when lightning struck two houses in north-west Pakistan, officials said on Sunday



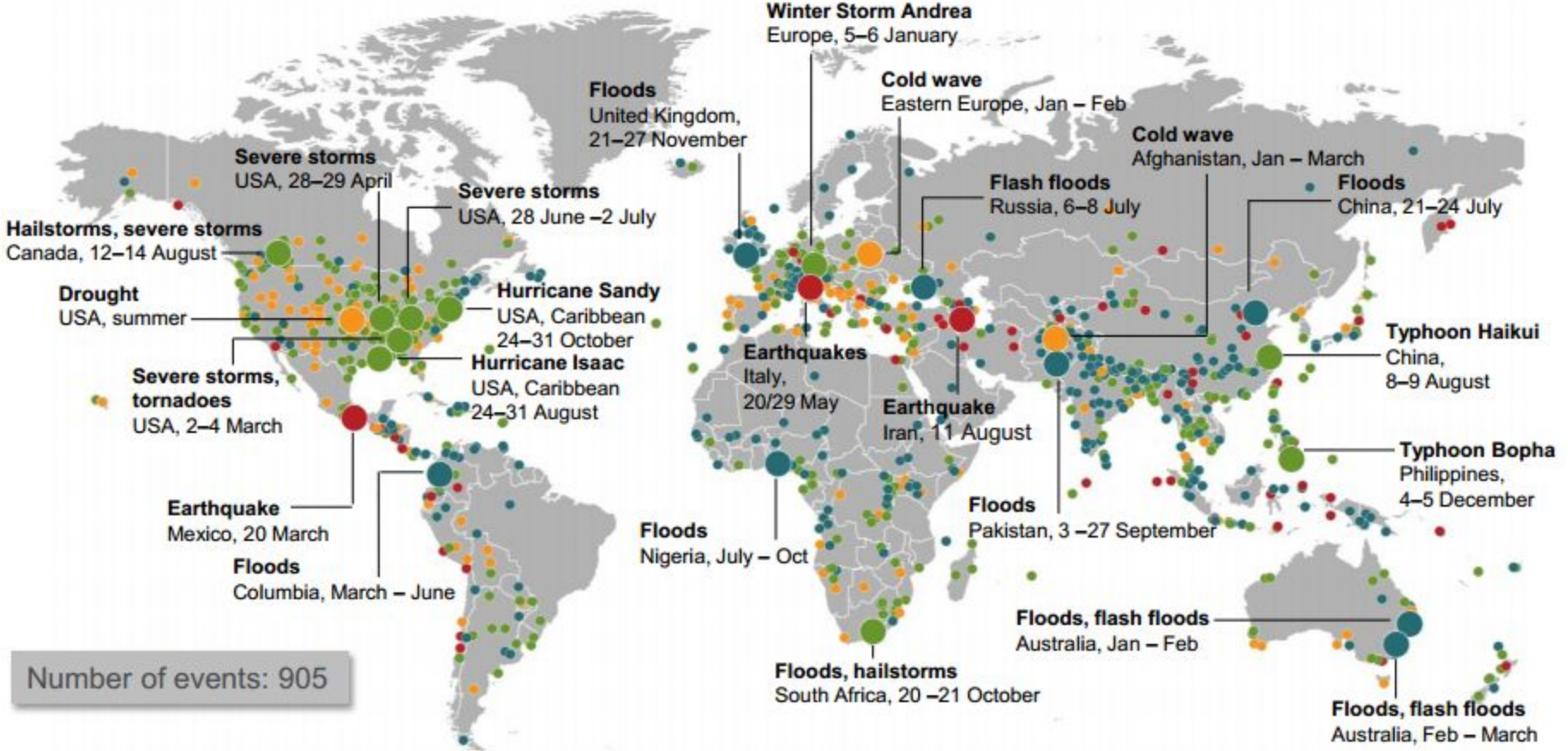
It was in October 1998 when one of the strongest hurricanes reached Honduras, causing landslides and deadly floods along the way.



Approximately **11,000** people dead (and thousands more injured). The storm also caused more than **\$5 billion** dollars in damage.



# ...Distributions



○ Natural catastrophes	● Geophysical events (earthquake, tsunami, volcanic activity)	● Hydrological events (flood, mass movement)
○ Selection of significant Natural catastrophes	● Meteorological events (storm)	● Climatological events (extreme temperature, drought, wildfire)

# Are Catastrophe losses becoming more catastrophic?

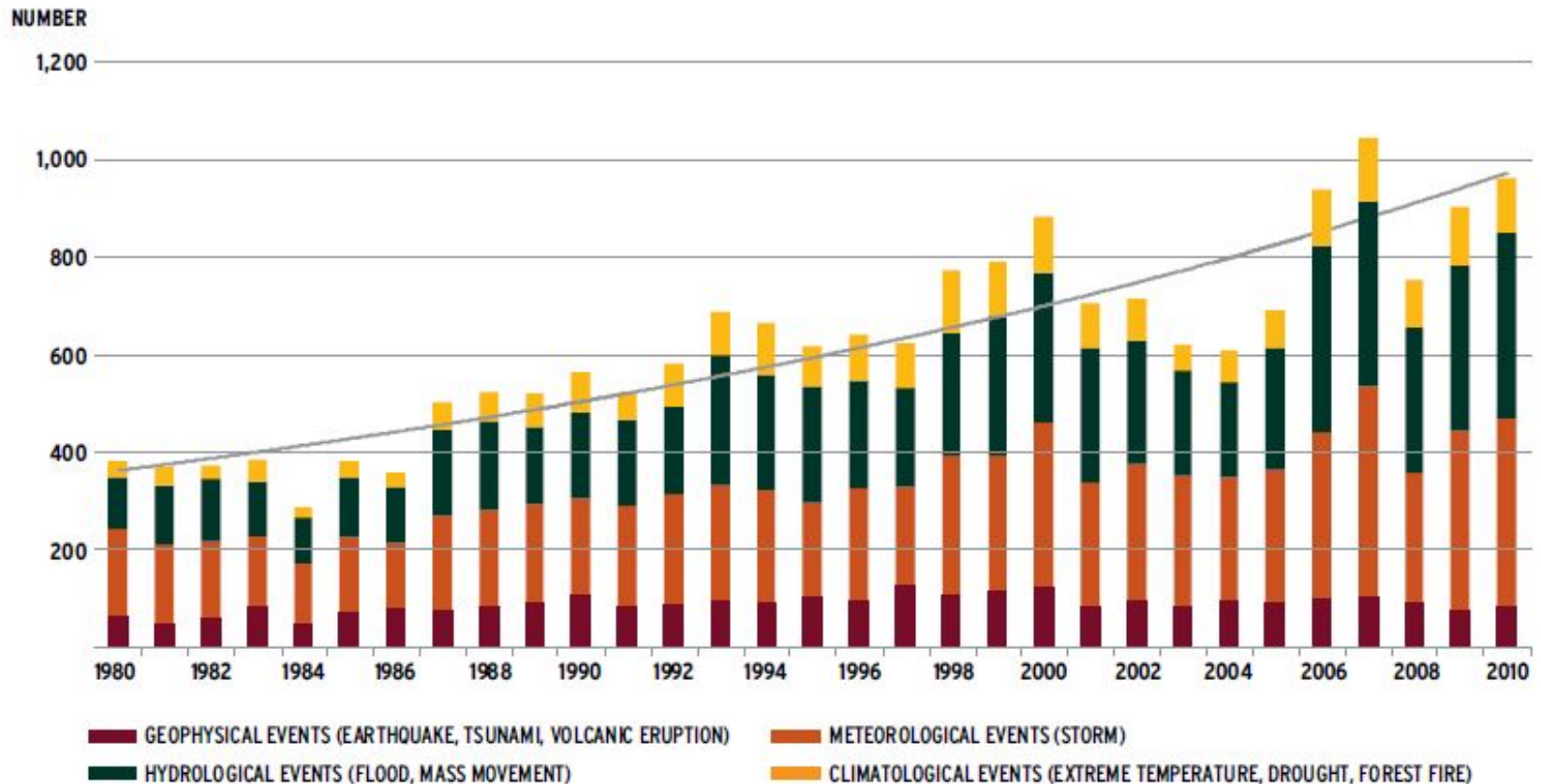
**Figure 1.5** Damage on the rise in the last two decades (global damage from hazards, 1970–2010)



Source: World Bank staff based on EM-DAT/CRED.

# NATURAL CATASTROPHES WORLDWIDE, 1980 - 2010

## NUMBER OF EVENTS WITH TREND



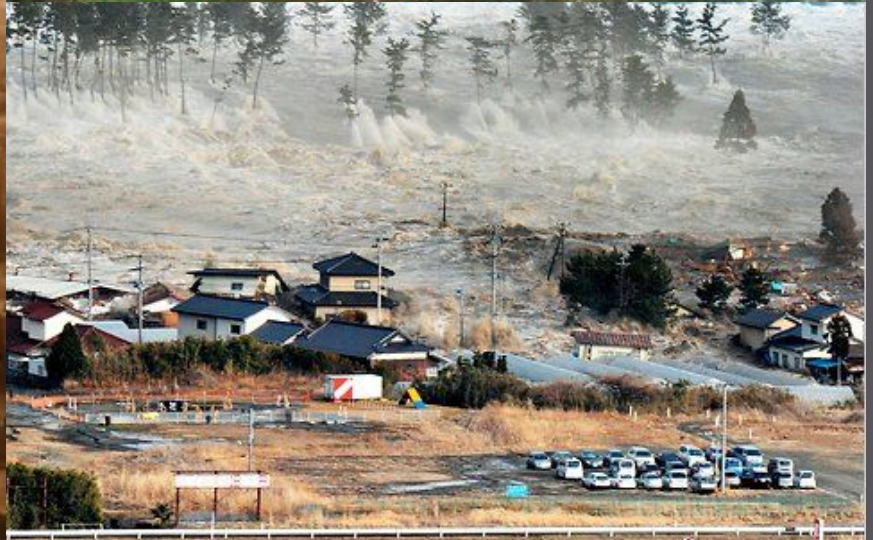
Graph taken from Munich Re Natural Catastrophe Year in Review 2010 – January 10, 2011  
 © 2011 Munich Re NatCatSERVICE



# Why do people choose to live in Hazardous areas?



More people and assets are being placed in harm's way.



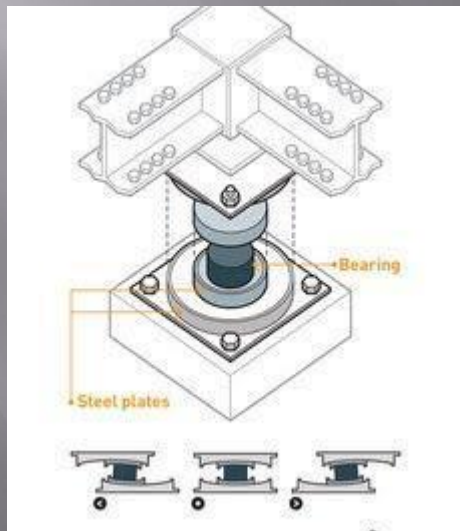
# Disaster risk

- Over the past 30 years, the world's population has grown by 87 per cent.
- The proportion of the population living in flood-prone river basins increased by 114 percent and on cyclone-exposed coastlines by 192 per cent.
- More than half of the world's large cities, with populations ranging from 2 to 15 million, are currently located in areas of high risk of seismic activity.



# Effective Prevention

- ▣ The best way of dealing with natural disasters is often before they occur: early warning systems, advance planning, encouraging natural protections like minimizing deforestation or protecting wetlands, building codes, flood control, and more.



The [Sabiha Gökçen International Airport terminal](#) in Istanbul opened on Halloween 2009 and is the largest "seismically-isolated" building in the world.



# Final Thoughts.....

