

Natural Disasters: Origins, Impacts, Management

Subjects: Engineering, Geological

Contributor: Awais Piracha

Natural hazards are processes that serve as triggers for natural disasters. Natural hazards can be classified into six categories. Geophysical or geological hazards relate to movement in solid earth. Their examples include earthquakes and volcanic activity. Hydrological hazards relate to the movement of water and include floods, landslides, and wave action. Meteorological hazards are storms, extreme temperatures, and fog. Climatological hazards are increasingly related to climate change and include droughts and wildfires. Biological hazards are caused by exposure to living organisms and/or their toxic substances. The COVID-19 virus is an example of a biological hazard. Extraterrestrial hazards are caused by asteroids, meteoroids, and comets as they pass near earth or strike earth. In addition to local damage, they can change earth inter planetary conditions that can affect the Earth's magnetosphere, ionosphere, and thermosphere. This entry presents an overview of origins, impacts, and management of natural disasters. It describes processes that have potential to cause natural disasters. It outlines a brief history of impacts of natural hazards on the human built environment and the common techniques adopted for natural disaster preparedness. It also lays out challenges in dealing with disasters caused by natural hazards and points to new directions in warding off the adverse impact of such disasters.

Keywords: natural hazards ; disasters ; global impacts ; disaster management ; built environment

Earthquakes, floods, cyclones, storms, wildfires, volcanic eruptions, and landslides are natural processes that have sculptured the landscape of the earth for millennia. These natural processes can cause natural disasters on interaction with human-made features such as settlements, agriculture, and infrastructure. This article begins with an overview of the various natural processes that have potential to cause natural disasters. After that, a brief history of impacts of natural hazards on the human built environment is provided, followed by a description of the common techniques adopted for natural disaster management. The chapter concludes with a review of challenges in dealing with disasters caused by natural hazards and points to new directions in building the capacity to ward off the adverse impact of natural disasters on vulnerable sections of society.

Retrieved from <https://encyclopedia.pub/entry/history/show/52098>