

Natural Hazards

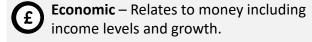
Management of Tectonic Hazards

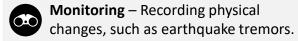


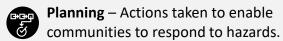




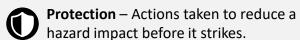
(All) Key Terms

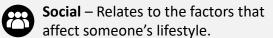












? Why live at risk of hazards?

E Economic reasons for living at risk

- Geothermal energy can be be used to generate electricity and heat people's homes.
- Nutrient rich soils are ideal for agriculture.
- Resources and income is provided from mining minerals.
- Tourism creates jobs and provides income.
- It may be cheaper to stay in a tectonically active zone rather than move.

Social reasons for living at risk

- People want to stay close to family and friends.
- People may not understand the risk or the threat may not be great enough.
- People are confident that the measures taken to monitor, predict, plan and protect from tectonic hazards will keep them safe.

(C) Monitoring

-- Earthquakes

- Foreshocks monitored using seismometers.
- Radon detection devices used to monitor the release of radon from cracks prior to earthquakes.

Volcanoes

- GPS is used to monitor changes in the shape of a volcano.
- Seismometers used to detect magma moving.

Prediction

 Predicting location, date and time of earthquakes is notoriously difficult, though foreshocks can give an indication of a potential event.



Volcanoes

 Advance warning signals, such as earthquakes swarms and the deformation of land can support predicting volcanic eruptions.

Protection

- Building and transport infrastructure design can include shock absorbers.
- Sea walls constructed to protect from tsunamis.



Volcanoes

- Buildings cannot be completely designed to protect from volcanic eruptions.
- Evacuation by the authorities is likely to be the most effective method of protection.

Planning

-- Earthquakes

- Practice drills can be help e.g. Japan, Sept 1st.
- Emergency supplies and evacuation centres.
- Securing objects/furniture.



Volcanoes

- Exclusion zones
- Evacuation
- · Educating people how to response