

## Topic:

Impacts and human responses as evidenced by a recent volcanic event.

In March 2010, rising magma broke through the crust under the **Eyjafjallajökull** glacier and lava eruptions began. On 14 April, the lava eruptions became more intense and more explosive; water mixed with the silica to form **fine glassy ash**, which rose high into the atmosphere and blew south over the European continent. The glacier continued to melt and a **huge amount of meltwater** flowed down to the sea, **destroying sections of the main highway** on the south coast of Iceland.

The eruption of Eyjafjallajökull in March 2010 had both local and international impacts.

### Icelandic impacts [LOCAL]

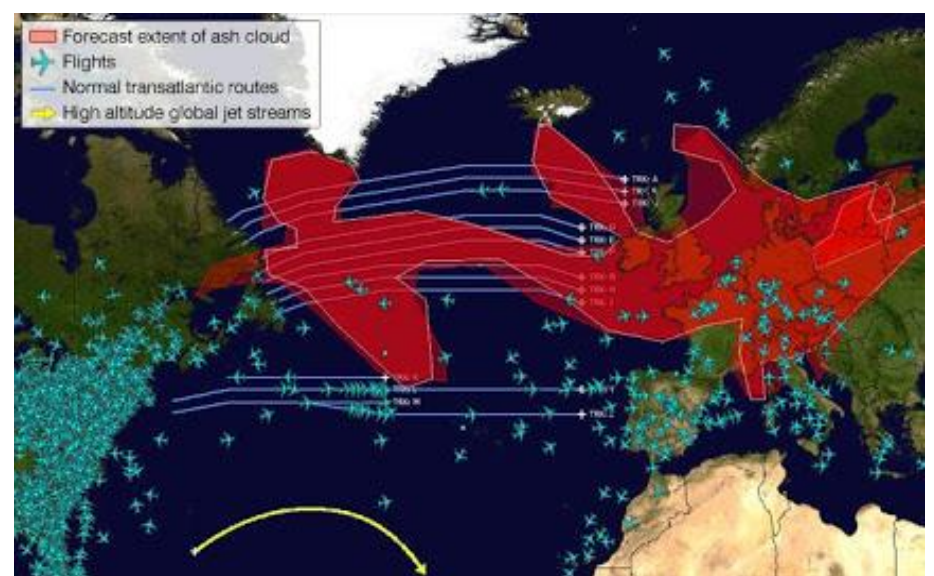
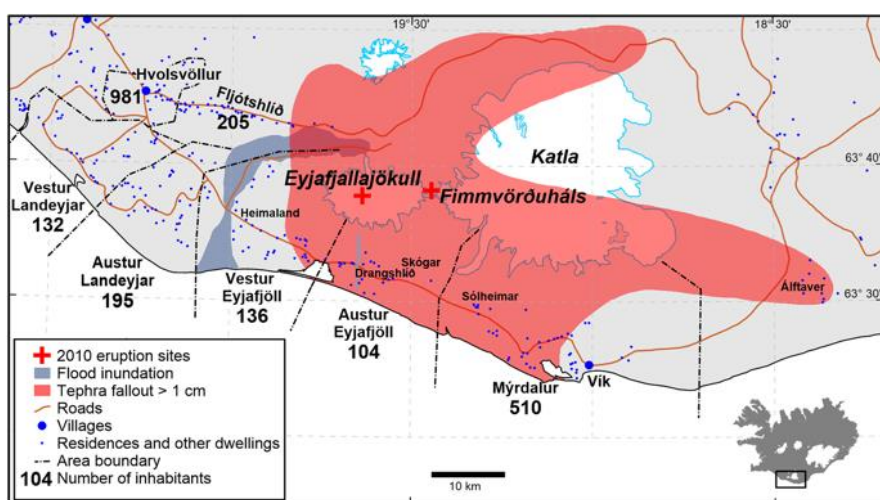
- Just over 700 local people were evacuated out of the danger zone.
- Communication and transport infrastructure was disrupted which limited access for local people travelling to the capital Reykjavik and cost the country £12 million to reconstruct.
- Tourism was affected, as planes could not fly.
- The growing season in Iceland is short, so a whole year's worth of crops were damaged resulting in food shortages, particularly of fodder crops to feed animals through the long winter.
- Homes & farmland directly to the south of the volcano were destroyed.

### International impacts

- 48% of all air traffic was grounded for eight days across Europe, as the ash cloud was judged to be unsafe for the aircraft.
- Following just-in-time inventory strategy, many industries were affected by a lack of imported parts and raw materials, this included Nissan in the UK and Apple in Japan. Nissan halted production of 2 000 vehicles in the UK.
- Fresh produce could not be imported to northern Europe, this affected supermarkets and producers worldwide. Cut flower, fruit and vegetable producers from Kenya and other African nations were particularly affected as their economy relies on international trade. Kenya is reported to have destroyed 3,000 tonnes of flowers that could not be transported to the UK.
- Residents living under the airport flight paths enjoyed the peace!*
- People stranded across the world as a result of the airspace closure struggled to make their way back home.
- Schools were particularly hard hit as the eruption occurred at the end of the Easter holidays; teachers and students were stranded in locations worldwide.
- Total losses for airline companies and airport operators were around £1.1 billion due to grounded flights.

### Responses:

- Hour by hour updated information was sent from the Icelandic Meteorological Centre to affected locals, airlines, persons of influence, governments etc. to continue information flow and coordinate responses in the most efficient way.
- Government rebuilt destroyed roads and infrastructure in under 2 months to reconnect many remote settlements which prior had to rely on boat or helicopter imported supplies
- Red Cross offered supplies and resources to those displaced and evacuated.
- Destroyed houses and property has since entirely been rebuilt and locals prior rehomed in temporary accommodation.
- Icelandic tourism industry has in the long term grown incredibly since 2010, partly due to increased awareness of its natural beauty and attraction due to coverage of volcanic event.
- Environment has since grown back more fertile than ever due to ash deposits.
- GDP & social recovery in Iceland beyond Stage 5 of the Park Model.



GRB Volcanic Hazards Resource Package (highly relevant)

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'SEEP INFLUENCE' Key:

■ Social 
 ■ Economic 
 ■ Environmental 
 ■ Political