# La Soufrière volcanic eruptions

# UNEP/OCHA Joint Environment Mission to SVG & Barbados























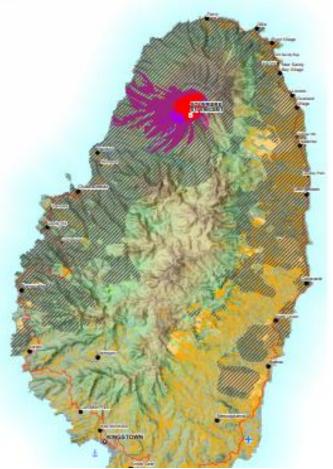




#### Situation

- On 8 April, seismic activity at La Soufrière volcano changed significantly.
- The volcano entered a period of heightened activity.
- On the same day, the PM issued an evacuation order for those living in the red zone and raised the alert level to red.
- On 9 April, the first of a series of explosive eruptions began, with an activity pattern similar to that of the 1902 eruption.
- There has not been any significant seismic activity nor deformation since 22 April.
- On 6 May, the alert level was lowered to orange, further to which people living in the orange and yellow zones could return to their homes.
- Eruptions could resume with less than 24-hour notice. Lahars continue to pose a problem.









#### Humanitarian impact

As of 6 May:

- 4,429 Number of people in public shelters
- 85 Public shelters
- 0 Casualties

### Environmental response

- A UNEP/OCHA Joint Environment Mission was deployed to SVG and Barbados to support national authorities in dealing with the environmental dimensions of the emergency.
- A team of 14 people was dispatched, of which 12 to Kingstown (SVG) and two to Bridgetown (Barbados).
  - ✓ Core environmental expertise in the following areas:
    - ☐ Geology (volcanology, lahar/mudflows, etc.)
    - □ Ash management (cleanup and disposal)
    - ☐ Environmental pollution (air, water, soil) / Ecology
    - ☐ Green response
  - ✓ OCHA HAT embedded in the team
  - ✓ UNDAC support on team management/security/reporting
  - ✓ AST logistic support
- The mission lasted three weeks, from 21 April to 12 May.

# Key findings and recommendations

- Lahars have taken place in all the valleys that drain from La Soufrière and caused considerable erosion and damage. They represent a major problem with the hurricane season approaching and will continue for several years even if the volcano stops erupting, blocking roads and hampering access.
- The risk landscape will continue to evolve with every rainfall. Until the hazard situation stabilises, it will be difficult for some communities to return to normal life.
- There seems to be a good volcano monitoring network but some of the stations have been damaged by the explosive eruptions. Some of the stations and personnel are only temporary. It is paramount to have a system in place to ensure monitoring at all times and not only during emergencies, with adequate equipment, human and financial resources.
- There is a **good level of awareness of volcanic risks** among the population, thanks to outreach activities conducted over the past years as part of the Volcano Ready programme.

# Key findings and recommendations

- There is no specific network for lahar monitoring. Wood and other
  natural materials interact with debris flow; this may result in the
  retention of ash and other materials upstream, resulting in flash floods
  occurring even days after the last rainfall. Cleanup activities should not
  contribute to the accumulation of waste that worsen lahar risks.
- Ash toxicity is a concern for ground-level flora and fauna. Crystalline silica content in respirable ash raises may affect asthmatic people and smokers and raises concerns about adverse health effects of long-term human exposure to ash. There is no air quality monitoring station on the island.
- It is anticipated that adverse impacts on marine ecosystems leading to fish death and consequent effects on livelihoods from fishing may occur due to increased seawater turbidity, lack of oxygen in the presence of large quantities of natural waste and local pH reduction.
- Increased amount of waste (cf. plastics, etc.) from relief items, including unsolicited aid, is a concern. Opportunity for cash for work programmes.



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