# THE LA SOUFRIERE VOLCANO EXPERIENCE ST VINCENT AND THE GRENADINES

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## SITUATION OVERVIEW

- 1. On 29 December 2020: the alert level orange was given for the La Soufrière volcano (an effusive eruption, with visible gas and steam and the formation of a new volcanic dome). Eruptions may occur with less than 24 hours' notice).
- 2. On 8 April 2021, the alert level increased to Red, government authorities issuing immediate evacuation orders for nearby communities' volcanoes.
- 3. On 9 April 2021, La Soufrière erupted for the first time after 40 years, sending an ash plume of 10km into the sky.
- 4. The resulting ashfall was very heavy in the surrounding areas, reaching nearby islands and halting area air traffic. Subsequent eruptions, lava flows, earthquakes, ash plumes, and seismic activity continued throughout April.









# Satellite-based Damage Assessment of Explosive Eruption Impacts on Agriculture (Cropland damage assessment in total ):

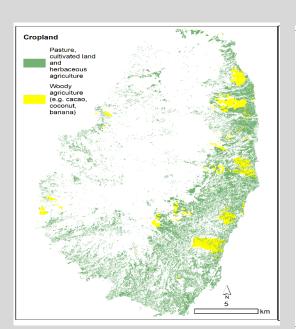
Pre-Explosive Eruption and post-Explosive Eruption Neutral Density Vegetation Index (NDVIs) calculation was prepared using Sentinel 2 Optical satellite data (Jan1-Apr9 and Apr10-Apr26). Initial estimated damages as a result of the ash: estimatedo be USD153, 100, 000

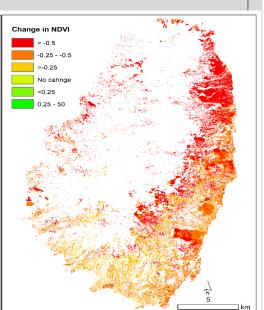
 43% (approx. 3200 hectares (7,900 acres): cultivated lands in the island severely impacted.

3000 hectares (7,400 acres): partially affected.

Cropland areas before Eruption

Post eruption Changes





# SITUATION OVERVIEW cont....(In early May)

- explosions subsided, but seismic activity and the risk of lahars persisted with the increased rainfall.
- An <u>estimated 23,400 people</u> displaced to the southern end of the Country, and some neighbouring countries.

- 4,417 persons: 85 government-run formal collective shelters
- 18,927 persons: informal collective shelters



# FORECASTED IMPACTS AND NEEDS

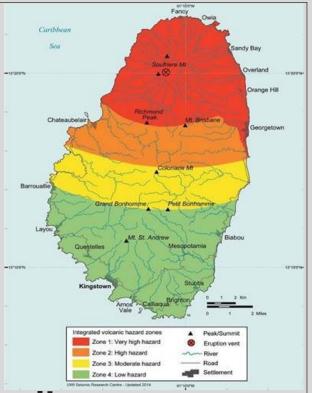
# **Health:**

- 1. Possible extensive disruptions
- 2. Respiratory irritations and Complications
- 3. COVID 19 management in Shelters:



- 1. Publication of the final list of 105 emergency shelters
- 2. Outreach for Volunteers private shelters were initiated.

<u>Food Security:</u> Extensive damage to that crop and livestock



FORECASTED IMPACTS AND NEEDS continued.....

• Food Distribution: To families given loss of income given limitations on movement of personnel.

# **Logistics:**

**Transport:** 10,943 people (danger zones) needed assistance during possible eruption.

**Security:** Protection of abandoned properties and other assets in severely affected areas.

# NATIONAL/REGIONAL COORDINATION EXERCISE

The National Emergency Management Office (NEMO) conducted an emergency preparedness Tabletop Simulation Exercise with national authorities and partners (Caribbean Disaster Emergency Management Agency (CDEMA)) to implement and manage all aspects of a potential emergency and evacuation as a result of the volcano.

# ANCILLARY ACTIONS IN AGRICULTURE

- With the help of the United Nations Food and Agriculture Organization:
- 1. Development of protocols to support AA, preparedness and response for livestock, crops, fisheries and rural transformation
- 2. Procurement and distribution of water tanks for use in the livestock emergency shelters
- 3. Identification of local suppliers of light construction materials for the emergency shelters, Silage bunkers and construction service providers
- 4. Design and cost estimates for the retrofitting of existing and construction of additional livestock emergency shelters for are small ruminants.

### ANCILLARY ACTIONS IN AGRICULTURE continued....

- 5. Updating of the inventory of animals in the red and orange zones.
  - Tagging (for identification) of animals in the red and orange zones. (90%)
  - Identification of private swine farmers in the green and yellow zones with the ability/capacity to accommodate swine and other animals from the orange and zones
- 6. Destocking plan for eligible poultry and swine for government to purchase and use as food in the human emergency centres.
- 7. Inventory of veterinary medicaments and other related supplies

# 8. Feed security for Livestock (Ruminants)

- Sileage Bunkers
- Inventory of locally available feeds and operational capacity assessment (1 Feed Mill)
- Identification of grass, hay and fodder sources from off island.
- Identification of other sources and suppliers of molasses and supplements identified
- Grass harvesting and stockpiling

# Recuperative actions post eruption

- Damage Assessments
- Food Security for all: Water and food distributions
- Production Incentives
- Welfare issues (Clean up and Home repairs)
- Rehabilitation/relocations of farm lands
- Population control and general maintenance of Pets



# Thank you for the attention!!!