Sakurajima Volcano

Prelims: *Current events of national and international importance | Geography*

Why in News?

Recently, Japan's Sakurajima volcano erupted at Minamidake summit crater, spewing a 3.4 km ash plume in its first major event since December 2025.

- It is one of ***Japan's most active volcanoes.***
- **Location –** Kagoshima Prefecture, Kyushu Island, Southern Japan.
- **Type –** Stratovolcano (composite cone with steep sides and explosive eruptions)
- **Geological Setting –** Part of the *Pacific Ring of Fire*, formed by subduction of the Philippine Sea Plate beneath the Eurasian Plate.
- **Nearby City –** Kagoshima (4 km away), making it one of the world's most closely monitored volcanoes.
- **History**
  - Continuous activity since 1955, with frequent eruptions.
  - Major eruption in 1914 buried villages and connected the island to the mainland.
  - Known for pyroclastic flows, lava flows, and heavy ash fall affecting Kagoshima city.
- **Hazards**
  - **Local –** Ash deposition, respiratory health risks, crop damage.
  - **Toxic gas emissions –** Carbon Dioxide, Sulfur Dioxide.
  - **Regional –** Aviation hazards due to ash clouds.
  - **Global –** Potential climate impact if sulfur dioxide emissions are significant.
- **Monitoring**
  - **Japan Meteorological Agency (JMA) –** Seismic, deformation, and gas emission monitoring.
  - **Preparedness –** Conducting evacuation drills and creating hazard maps for Kagoshima residents.

- **Mitigation –** Ash dispersal forecasts for aviation safety.

Global Rankings by Volcanic Activity – Indonesia (55), Japan (40), United States (39), Russia (27) and Chile (19).

Reference

The Hindu | Sakurajima Volcano

