

Semeru Volcano of Indonesia

Why in News

Recently, **Semeru volcano** erupted in **Indonesia's East Java province.** Other volcanoes, such as the **Merapi volcano** (**Java**) and **Sinabung volcano** (**Sumatra**), also erupted recently.

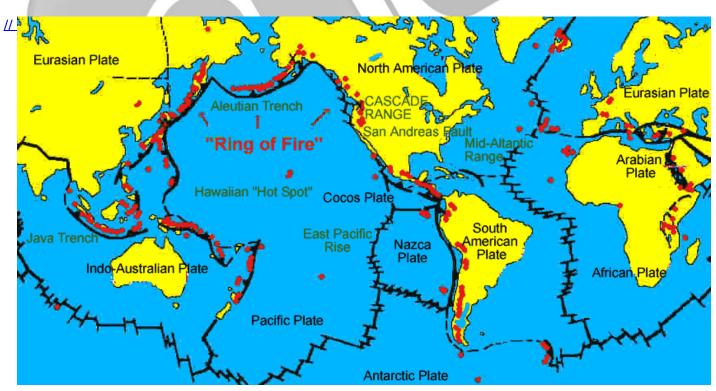
Key Points

Semeru Volcano:

- Semeru also known as "The Great Mountain" is the highest volcano in Java and one of the most active.
- It previously erupted in December, 2019.
- Indonesia, with the maximum number of active volcanoes in the world, is prone to seismic upheaval due to its location on the Pacific's Ring of Fire.
- Semeru volcano is also the part of the Island arcs formed by the subduction of the Indo-Australian plate below Sunda Plate (part of Eurasian Plate). The trench formed here is called Sunda trench whose major section is the Java Trench.

Pacific Ring of Fire:

- The Ring of Fire, also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterized by active volcanoes and frequent earthquakes.
- It traces boundaries between several tectonic plates—including the Pacific, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.



Island Arcs:

- They are long, curved chains of oceanic islands associated with intense volcanic and seismic activity and orogenic (mountain-building) processes.
 - An island arc typically has a land mass or a partially enclosed, unusually shallow sea on its concave side.
 - Along the convex side there almost invariably exists a long, **narrow deep-sea trench.**
 - The greatest ocean depths are found in these depressions of the seafloor, as in the case of the Mariana (deepest trench in the world) and Tonga trenches.
- Prime examples of this form of geologic feature include the **Aleutian-Alaska Arc** and the **Kuril-Kamchatka Arc**.

Source: IE

