VOLCANOES IN MOON: SCIENCE & TECHNOLOGY

NEWS: Beads on the moon suggest it had volcanoes more recently than thought

WHAT'S IN THE NEWS?

A recent study reveals that the moon may have had volcanic activity as recently as 120 million years ago, challenging previous beliefs that it ceased around a billion years ago. Researchers analysed lunar glass beads from the Chang'e-5 mission, indicating ongoing volcanic processes despite the moon's cooling interior.

Lunar Glass Beads Study:

- Chinese researchers studied glass beads collected by the Chang'e-5 mission.
- These beads were formed from volcanic eruptions and impacts on the moon.

Key Discoveries:

- Volcanic origin of the beads identified through their chemical composition.
- Three volcanic samples were dated to be 116–135 million years old using uranium-lead dating.
- Minerals like potassium and rare earth elements were found, showing they helped cause volcanic heat.



Importance:

- The study suggests volcanic activity continued even as the moon's interior cooled.
- Opens new research into the moon's volcanic past and geology.

Future Exploration:

• Upcoming Chandrayaan missions from India may study the moon's volcanic history further and search for ice that may contain gases from old eruptions.

 $Source: \underline{https://www.thehindu.com/sci-tech/science/glass-beads-on-the-moon-suggest-it-had-volcanoes-more-recently-than-thought/article68677222.ece}$