

# **Environmental Clearance for Neutrino Observatory**

#### What is the issue?

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- India-based Neutrino Observatory (INO) is proposed to be established in the Tamil Nadu section of the Western Ghats for furthering research.
- As the site is being mapped in an eco-sensitive, environmental clearances and other compliances are to be strictly adhered to.

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### What is the INO project?

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- India-based Neutrino Observatory (INO) is a particle physics research project to primarily study the elusive sub-atomic particles called neutrinos.
- A neutrino ( $\nu$ ) interacts only via weak short range subatomic forces and gravity, which makes it very hard to detection it.
- Neutrinos typically pass through normal matter unimpeded and undetected, and its rest mass is almost zero (1 millionth of an electron).
- $\bullet$  Its detection needs high-end instruments and an environment that is effectively shielded from other radiant interference. \n
- Hence, a cavern is being carved out at the depth of 1,300 meters (4,300 ft) below the Western Ghats stretch near Theni for establishing the research site.

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• The site will underlie more than 1000 meters of overhead rock that will effectively shield it from natural cosmic radiation from outside.

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• The observatory is said to symbolise India's quest for research in particle physics and demonstrate intent to nurture centres of excellence.

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### Has environmental clearance been secured?

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- The project has become controversial as the proposed site lies close to the Mathikettan Shola National Park, which is a biodiversity hotspot.
- About a year ago, the National Green Tribunal (NGT) had suspended the environmental clearance granted to the INO.
- But recently, the NGT verdict on the Rs. 1500 crore project was overturned and has been cleared by the Union Environment Ministry as a special case.
- $\bullet$  The approval is only conditional and it needs the consent of the Tamil Nadu Pollution Control Board and the National Board for Wildlife.  $\$
- $\bullet$  The Expert Committee had laid down 17 conditions for granting approval, but the clearance process was shabby and needs to be bettered. \n

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# What are the problems with the environmental clearance?

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- The approval was done under category B of the Schedule to the "Environmental Impact Assessment" (EIA) Notification, 2006.
- But it should have been ideally been treated as category A as the project lies just 4.9 km from an eco-sensitive national park.
- Additionally, EIA was done by the Salim Ali Centre for Ornithology and Natural History, which is an "unaccredited agency".
- $\bullet$  While the project is indeed important, treating it as a special case to bypass the environmental clearance protocol sets a wrong precedent. \n

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**Source: The Hindu** 

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