Keralam's Orchids Endure: From Highway Trees to Salt-Sprayed Shores



Original symbolic graphic: pcsmantra.com

Why in News

The Hindu (16 November 2026) highlights Keralam's **orchid diversity and conservation efforts**. According to associated reports (Mongabay/ToI), **27,324 orchids** rescued from trees felled for road development were **translocated** to suitable habitats, with about **71% survival after two years** - the Malabar Botanical Garden (Kozhikode) led the effort. The underlying rescue-translocation model is described in a peer-reviewed paper in the journal *Plants*.

Key Facts

- **Rescue and translocation:** 27,324 orchids living on trees cleared for highway widening were moved to suitable habitats; around 71% were alive two years on, some flowering.
- **Habitat range:** from hill epiphytes to species tolerating salt spray on the coast - a wide ecological amplitude.
- **Institution:** the Malabar Botanical Garden and Institute of Plant Sciences (Kozhikode) leads conservation, research and propagation.
- **Diversity:** India has roughly 1,200+ orchid species; the Western Ghats are a major hotspot with many endemics.

Ecological and Legal Context

- **Family:** Orchidaceae - among the largest flowering-plant families; most Indian orchids are epiphytes (growing on trees without parasitising them).
- **Protection status:** orchids are listed in CITES Appendices I/II - international trade is regulated; several protected plants figure in **Schedule III** of the Wildlife (Protection) Act, 1972; access and benefit-sharing fall under the Biological Diversity Act, 2002.
- **Threats:** habitat loss, illegal collection and smuggling, and climate-driven micro-climate shifts.
- **Indicator role:** epiphytic orchids are sensitive indicators of air quality and forest health.

Why It Matters

- **Conservation science (GS-3):** a translocation-based model shows how green mitigation can be built into development projects.
- **Environmental compliance:** making flora translocation part of the EIA process alongside compensatory afforestation.
- **Bio-economy:** orchids link to horticulture, tourism and bio-resource-based livelihoods.

Prelims Practice Questions

Q1. Orchids belong to which family?

(a) Asteraceae

(b) Orchidaceae

(c) Poaceae

(d) Fabaceae

Answer and Explanation

Answer: (b) Orchidaceae is among the largest flowering-plant families; India has 1,200+ species, most of them epiphytes.

Q2. The Malabar Botanical Garden is located in:

(a) Kochi

(b) Thiruvananthapuram

(c) Kozhikode

(d) Thrissur

Answer and Explanation

Answer: (c) The Malabar Botanical Garden and Institute of Plant Sciences is in Kozhikode, Keralam - a leading centre for orchid conservation and translocation.

Mains Practice Question

Q: "Species translocation can be a practical middle path amid the twin challenge of development and conservation." Comment in the context of Keralam's orchid translocation initiative, noting the limits of such efforts. (250 words)

Outline: Introduction - 27,324 orchids translocated, ~71% survival; benefits - species rescue, green mitigation, research; limits - micro-climate dependence, long-term monitoring, cost; way forward - translocation protocols in EIA, community participation, CITES compliance; conclusion - build conservation into the development process itself.

FAQ

Short answer: 27,324 orchids rescued from road development in Keralam were translocated, with ~71% survival after two years; the Malabar Botanical Garden (Kozhikode) led the effort. International orchid trade is regulated under CITES; plants listed in Schedule III of the Wildlife (Protection) Act, 1972 also receive protection.

Q: What is the orchid translocation initiative?

27,324 orchids growing on trees felled for highway widening were rescued and moved to suitable habitats; ~71% survived after two years - led by the Malabar Botanical Garden.

Q: What legal protection do orchids have?

Listing in CITES Appendices I/II (regulated international trade); several plants in Schedule III of the Wildlife (Protection) Act, 1972; access and benefit-sharing under the Biological Diversity Act, 2002.

Q: Why are orchids environmental indicators?

Epiphytic orchids are highly sensitive to changes in air quality and forest health, so their presence or absence is a living signal of ecosystem condition.

Sources

- The Hindu (16 November 2026): Keralam's orchids endure - from highway trees to salt-sprayed shores
- Primary research paper (Plants journal): When Roads Remove Trees, Conservation Must Move Fast - a rescue-translocation model for Keralam's native epiphytic orchids
- Mongabay (November 2026): tens of thousands of orchids saved from road development