

1. Red Sanders – Environment

Protection of red sanders – National Biodiversity Board releases ₹39.84 crore to Andhra Pradesh. The National Biodiversity Authority (NBA) has released funds to Andhra Pradesh under the Access and Benefit Sharing (ABS) mechanism to conserve Red Sanders, an endangered tree species endemic to the Eastern Ghats. This initiative integrates legal protection with community-based sapling cultivation to counter threats like illegal smuggling and habitat fragmentation.

1. Context – Funding for Conservation

Action Taken – The National Biodiversity Authority (NBA) has released a substantial fund of ₹39.84 crore to the state of Andhra Pradesh.

Objective – To support the conservation of the endangered Red Sanders species (*Pterocarpus santalinus*).

Funding Source – The funds are derived from India’s Access and Benefit Sharing (ABS) initiative.

2. Comprehensive Profile of Red Sanders

A. Botanical and Geographical Details

Scientific Name – *Pterocarpus santalinus*.

Common Names – Red Sandalwood or Red Sanders.

Family – Fabaceae (Legume family).

Native Range – It is an endemic tree species restricted to the Eastern Ghats of southern India.

Key Districts – Predominantly found in the Palakonda and Seshachalam hill ranges of Kadapa, Chittoor, Kurnool, and Anantapur districts in Andhra Pradesh.

Habitat – Thrives on rocky hillsides and steep slopes. Prefers dry deciduous forest zones with shallow soils.

B. Physical Characteristics and Uses

Wood Qualities – Known for its distinct deep reddish hue. The wood is dense, fine-grained, heavy, and highly durable.

Commercial Uses –

Furniture – Used for making luxury furniture and decorative veneers.

Music – utilized in crafting musical instruments (specifically woodwind and percussion) due to its acoustic properties.

Art – Highly valued for inlay work and intricate carvings.

Medicine – Used in traditional systems like Ayurveda and Siddha for its therapeutic properties.

C. Ecological Significance

Soil Conservation – plays a critical role in stabilizing rocky hill slopes and preventing soil erosion.

Ecosystem Balance – Essential for maintaining the specific balance of the dry deciduous forest ecosystem.

Biodiversity Support – Provides essential microhabitats for local insects, birds, and small fauna.

D. Conservation Status and Threats

Regulatory Body / List	Status / Schedule
IUCN Red List	Endangered
Wildlife (Protection) Act, 1972	Schedule II (High protection within India)
CITES	Appendix IV (Trade is allowed but under strict regulation to prevent over-exploitation)

Major Threats –

Illegal Activity – rampant illegal logging and smuggling due to its high commercial value internationally.

Habitat Issues – Habitat loss and fragmentation.

Regeneration Challenges – The species suffers from low natural regeneration, seed predation, and cattle grazing.

3. Initiatives to Expand Red Sanders Cultivation

To counter the threats, specific initiatives have been launched involving community and state participation.

Sapling Expansion Programme

Goal - To raise one lakh Red Sanders saplings.

Agency - Executed under the Andhra Pradesh Biodiversity Board.

Cost - Total project cost estimated at ₹2 crore.

Trees Outside Forests Programme

The saplings will be distributed under this specific programme.

Aim - To promote sustainable cultivation outside traditional forest areas, thereby reducing pressure on wild populations.

Community Involvement

Role - Local and tribal communities are directly involved in nursery development, plantation, and care.

Benefit - This ensures community ownership and economic incentives for conservation.

4. Access and Benefit Sharing (ABS) Mechanism

Definition - ABS is a framework derived from the Convention on Biological Diversity (CBD), 1992 and the Nagoya Protocol, 2010.

Core Principle - It ensures that benefits (monetary or non-monetary) arising from the use of biological resources are shared fairly and equitably with the providers (local/indigenous communities).

Implementation in India - Enforced through the Biological Diversity Act, 2002 (amended in 2023).

Overseen by the NBA, State Biodiversity Boards (SBBs), and Biodiversity Management Committees (BMCs).

Working Mechanism

1. **Access** - Users (industries, researchers) must obtain approval to access biological resources.
2. **Sharing** - They must share benefits (royalties, technology transfer, etc.) with the custodians.
3. **Reinvestment** - These funds are reinvested into conservation (as seen in the ₹39.84 crore release).

5. About National Biodiversity Authority (NBA)

Establishment

Status - A Statutory Body.

Act - Established under the Biological Diversity Act, 2002.

Year - Formally constituted in 2003.

Headquarters - Chennai, Tamil Nadu.

Key Functions

Regulatory - Oversight on conservation and sustainable use of resources.

Advisory - Advises the Central Government on biodiversity policy.

Implementation - Executes provisions regarding Access and Benefit Sharing (ABS).

Composition -

Chairperson - An eminent person with expertise in conservation and equitable benefit sharing.

Ex-Officio Members - Ten representatives from the Government of India.

Non-Official Members - Five domain experts in biodiversity management.

Institutional Framework - The Act is implemented through a three-tier structure -

1. **National Level** - National Biodiversity Authority (NBA).
2. **State Level** - State Biodiversity Boards (SBBs).
3. **Local Level** - Biodiversity Management Committees (BMCs) at the village/local body level.

Source - <https://www.thehindu.com/news/national/andhra-pradesh/protection-of-red-sanders-national-biodiversity-board-releases-3984-crore-to-andhra-pradesh/article70306913.ece>