STUDY NOTES · BASIC CONCEPT

What is a UNESCO Biosphere Reserve?

Environment & Ecology

26 Jan 2005

A UNESCO Biosphere Reserve (BR) is a protected area recognised by UNESCO to promote a balance between biodiversity conservation and sustainable human use. These areas protect ecosystems, encourage scientific research, and support local communities. They are designated under Man and the Biosphere Programme (MAB Programme), launched in 1971.

Objectives (3 Core Functions)

1. Conservation – Protect landscapes, ecosystems, species, and genetic diversity
2. Development – Promote sustainable economic and human development
3. Logistic Support – Facilitate research, education, monitoring, and knowledge-sharing

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Zonation System (Key Feature)

Each Biosphere Reserve has three zones:

Core Zone

Strictly protected

No human activity allowed (except research)

Focus: biodiversity conservation

Buffer Zone

Limited human activities allowed

Research, eco-tourism, education permitted

Acts as a cushion for the core

Transition Zone

Human settlements, agriculture, forestry

Sustainable development practices encouraged

Global Facts & Figures

- Total Biosphere Reserves worldwide: ~740
- Countries involved: 130+
- Transboundary Biosphere Reserves: ~23
- First Biosphere Reserves designated: 1976
- Review cycle: Every 10 years (can be withdrawn if standards not met)

Biosphere Reserves in India

- Total Biosphere Reserves in India: 18
- Under UNESCO network: 12
- First in India: Nilgiri Biosphere Reserve (1986)
- Largest: Great Nicobar Biosphere Reserve
- Oldest continuously monitored: Nilgiri

List of UNESCO-recognised Biosphere Reserves in India

1. Nilgiri
2. Sundarbans
3. Nanda Devi
4. Gulf of Mannar
5. Similipal
6. Pachmarhi
7. Achanakmar–Amarkantak
8. Great Nicobar
9. Agasthyamalai
10. Khangchendzonga
11. Panna
12. Nokrek

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