



## Mains Practice Question

**Q.** Discuss how India can mainstream biodiversity conservation in all relevant sectors of development to achieve long term sustainability. **(250 words)**

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### Approach

- Introduce by highlighting the the need for balancing biodiversity conservation and development
- Delve into key sectors and mention how biodiversity conservation can be mainstreamed
- Conclude positively.

### Introduction

The intricate balance between **economic progress and environmental preservation** lies at the heart of India's future. While development is crucial for societal well-being, neglecting the **natural world jeopardizes long-term sustainability**.

- Mainstreaming biodiversity conservation into development sectors is crucial for India to achieve a sustainable future.

### Body

- **Agriculture Sector**
  - **Promoting agrobiodiversity:** Incentivizing cultivation of indigenous crop varieties Supporting traditional farming practices that enhance biodiversity
    - **Example:** The **Protection of Plant Varieties and Farmers' Rights Act, 2001**, which safeguards farmers' rights to save, use, and share seeds of diverse varieties
  - **Sustainable agriculture practices:** Encouraging organic farming and integrated pest management
    - **Example:** The **Paramparagat Krishi Vikas Yojana (PKVY)** promoting organic farming clusters across India.
- **Forestry Sector**
  - **Sustainable forest management:** Implementing ecosystem-based approaches. Promoting community-based forest management.
    - **Example:** The **National Mission for a Green India**, aiming to increase forest cover and improve ecosystem services
  - **Restoration of degraded forests:** Implementing large-scale afforestation programs. Promoting native species in reforestation efforts.
    - **Example:** India aims to restore 26 Million hectares of degraded land by 2030.
  - **Enhancing forest connectivity:** Creating wildlife corridors. Implementing landscape-level conservation approaches.
    - **Example:** The recent efforts to create **elephant corridors** across multiple states
- **Fisheries Sector:**

- **Sustainable fishing practices:** Implementing catch quotas and size limits. Promoting responsible aquaculture
  - **Example:** The **Marine Fishing Regulation Acts** of coastal states implementing mesh size regulations and seasonal fishing bans
- **Marine protected areas:** Expanding and effectively managing marine protected areas.
  - **Example:** The recent expansion of marine protected areas in the **Lakshadweep archipelago.**
- **Infrastructure and Urban Development**
  - **Green infrastructure:** Integrating biodiversity considerations into urban planning Promoting green spaces and urban forests.
    - **Example:** The development of **biodiversity parks in Delhi** and other major cities
  - **Wildlife-friendly linear infrastructure:** Implementing wildlife passages in roads and railways.
    - Promoting underground power transmission lines in sensitive areas.
    - **Example:** The wildlife underpasses and overpasses constructed on **NH7 near Pench Tiger Reserve**
- **Energy Sector**
  - **Renewable energy with biodiversity safeguards:** Implementing stringent Environmental Impact Assessments for renewable projects. Promoting wildlife-friendly wind and solar farm designs
    - **Example:** The Ministry of Environment, Forest and Climate Change (MoEFCC) guidelines for **wind power projects in forest areas.**
  - **Sustainable hydropower:** Implementing environmental flow regulations Ensuring fish passages in dam designs.
    - **Example:** The **e-flow notifications for the Ganga river system** issued by the National Mission for Clean Ganga
- **Tourism Sector**
  - **Ecotourism promotion:** Developing community-based ecotourism models. Implementing carrying capacity limits in sensitive areas.
    - **Example:** The **eco-sensitive zone notifications** around protected areas regulating tourism activities.

## Conclusion

Mainstreaming biodiversity conservation to promote **SDG 14 and 15** across development sectors is essential for India to achieve long-term sustainability. As India strives to balance its development aspirations with its rich biological heritage, **spotlighting biodiversity conservation** offers a pathway to a sustainable and resilient future.