

Mains Practice Question

Q. Comment on the resource potentials of the long coastline of India and highlight the status of natural hazard preparedness in these areas. (Answer in 250 words, UPSC Mains 2023)

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Approach

- Briefly introduce the significance of India's long coastline.
- Discuss the resource potentials of India's coastline and status of natural hazard preparedness.
- Conclude by emphasizing the need of ongoing efforts in disaster management and infrastructure development for sustainable coastal development.

Introduction

India's long coastline, stretching over 7,500 kilometers along the Arabian Sea and the Bay of Bengal, presents a wealth of resource potentials as well as significant challenges related to natural hazard preparedness.

Body

- Resource Potentials of India's Coastline:
 - Fisheries: India's coastline is abundant in marine life, making it a crucial hub for fisheries.
 It supports a thriving fishing industry, contributing significantly to the country's food security.
 - Ports and Shipping: The coastline hosts several major ports, such as Mumbai, Chennai, and Kolkata, facilitating trade and commerce.
 - **Tourism:** Coastal regions, including Goa, Kerala, and Andaman and Nicobar Islands, are popular tourist destinations due to their scenic beauty and cultural attractions.
 - Mineral Resources: Coastal areas are often rich in mineral resources, including sand, salt, and minerals like ilmenite, garnet, and monazite.
 - Renewable Energy: India's coastline has immense potential for renewable energy generation, particularly through offshore wind and tidal energy projects.
- Status of Natural Hazard Preparedness:
 - While India's coastline offers significant opportunities, it is also highly vulnerable to natural hazards, including cyclones, tsunamis, and sea-level rise:
 - India has been actively monitoring sea-level changes, bolstering coastal infrastructure resilience, conserving mangroves, and engaging in urban planning.
 - This includes establishing the **National Disaster Management Authority** (NDMA) and **State Disaster Management Authorities** (SDMAs) to coordinate disaster response and preparedness at national and state levels.
 - Early warning systems, particularly for cyclones, have been improved, saving countless lives.
 - India has established an advanced Indian Tsunami Early Warning Centre (ITEWC), which is operated by the Indian National Centre for Ocean Information Services (INCOIS).

• The INCOIS and National Institute of Ocean Technology (NIOT) are key agencies for monitoring and understanding trends and variations in sea levels.

Conclusion

India's vulnerable coastal regions require ongoing efforts in disaster preparedness, infrastructure development, and climate adaptation for sustainable growth.

