GREATER FLAMINGO SANCTUARY AT TAMIL NADU: ENVIRONMENT

NEWS: Tamil Nadu notifies Greater Flamingo Sanctuary at Dhanushkodi

WHAT'S IN THE NEWS?

Tamil Nadu established the Greater Flamingo Sanctuary at Dhanushkodi on World Environment Day 2025 to protect vital migratory bird habitats along the Central Asian Flyway. The sanctuary enhances wetland conservation while promoting ecotourism and community-based sustainable development.

Flamingo Sanctuary at Dhanushkodi

Context

- On **World Environment Day 2025**, the Tamil Nadu government launched multiple biodiversity and conservation initiatives.
- One key initiative was the establishment of the Greater Flamingo Sanctuary at Dhanushkodi.
- The goal is to:
 - Protect migratory bird habitats.
 - Promote ecotourism.
 - Restore native ecosystems.
 - Enhance overall environmental standards across Tamil Nadu.

Greater Flamingo Sanctuary at Dhanushkodi

- Established by Tamil Nadu government in June 2025.
- Area: 7 hectares.
- Part of the Gulf of Mannar Biosphere Reserve.
- Contains diverse ecosystems:
 - Mangroves.
 - Mudflats.
 - Important marine life zones.
 - Nesting habitats for migratory and resident birds.
- Main objectives:
 - **Protect habitats** for migratory birds.
 - Enhance regional biodiversity.



Ecological Importance of Dhanushkodi

- Situated along the **Central Asian Flyway**, a major migratory bird route connecting Eurasia with the Indian subcontinent.
- Recent bird surveys recorded over 10,700 wetland birds representing 128 species.
- Key bird species found:
 - Greater Flamingo.
 - Lesser Flamingo.
 - Herons.
 - Sandpipers.
- Role of Mangroves:
 - Natural barriers against **coastal erosion**.
 - Serve as **breeding grounds** and habitats for diverse wildlife.

Government Initiatives for Biodiversity Conservation

• Issued a **Government Order (GO)** recognizing the ecological significance of the Dhanushkodi Sanctuary.

- Launched the **Raptors Research Foundation**:
 - Dedicated to the conservation of **birds of prey** (e.g., eagles, vultures).
 - Activities include:
 - Conservation programs.
 - Community awareness and education campaigns.

Promotion of Ecotourism and Employment

- The sanctuary will foster responsible ecotourism.
- Benefits of ecotourism:
 - Generates local employment opportunities.
 - Enhances **public awareness** about the importance of wetland and bird conservation.
- Aim: Achieve a balance between ecological preservation and community development.

Greater Flamingo (Phoenicopterus roseus)

Taxonomy and Conservation Status

- Scientific Name: Phoenicopterus roseus.
- IUCN Red List: Least Concern (LC).
- **CITES:** Appendix II (trade controlled to prevent unsustainable exploitation).
- State Bird: Gujarat.

Habitat and Geographic Distribution

- Global range:
 - Africa (including the Great Rift Valley Lakes).
 - Southern Europe (Spain, France, Italy).
 - South and Southwest Asia (India, Pakistan, Iran).
- Preferred habitats:
 - Saltwater lagoons.
 - Estuaries.
 - Saline and alkaline lakes.
 - Coastal mudflats and mangrove wetlands.

Presence in India

- Found along **coastal belts** of:
 - Gujarat.
 - Maharashtra.
 - Tamil Nadu.
 - Andhra Pradesh.
- Important flamingo sites in India:
 - Rann of Kutch and Bhavnagar (Gujarat).
 - Thane Creek Flamingo Sanctuary (Maharashtra).
 - Pulicat Lake (Tamil Nadu–Andhra Pradesh border).
 - **Point Calimere** (Tamil Nadu).
 - Gulf of Mannar Biosphere Reserve, including Dhanushkodi.

Migration and Breeding

- Migratory behavior:
 - Seasonal migrants within Asia.
 - Travel from Gujarat to Mumbai and Tamil Nadu coasts during winter (November to May).
 - Migration driven by:
 - Food availability.
 - Water level changes.
 - Intra-species competition.
- Breeding colonies:
 - The Rann of Kutch is one of the largest breeding grounds in India.

Biological and Ecological Characteristics

- Social behavior:
 - Highly social; live and migrate in large flocks.
- Monogamous pairs: Form life-long pair bonds; both parents care for young.
- Coloration:

- Pink color results from dietary intake of **carotenoids** (from **brine shrimp** and **al-gae**).
- Ecological indicator:
 - Presence indicates a healthy wetland ecosystem.
 - Sensitive to pollution, habitat degradation, and hydrological changes.

Feeding Habits

- **Diet:** Omnivorous.
- Animal sources: Brine shrimp, molluscs, crustaceans, insects, crabs, worms, small fish.
- Plant sources: Algae, grass, decaying organic matter, shoots.
- Feeding mechanism:
 - Specialized filter feeders.
 - Use beak and tongue movements to trap food particles.

Conservation Concerns

- Threats:
 - Habitat loss due to urbanization and industrial development near wetlands.
 - **Pollution** and **eutrophication** of water bodies.
 - Disturbances from **unregulated tourism** and **reclamation activities**.
- Protection measures in India:
 - Establishment of the **Greater Flamingo Sanctuary** (2025) at Dhanushkodi, Tamil Nadu.
 - Conducting Flamingo Festivals (e.g., Pulicat Flamingo Festival) to raise public awareness.
 - Designation of key flamingo habitats as:
 - Protected areas.
 - Ramsar Sites.
 - Biosphere Reserves.