

UPSC Study Guide: Wetlands & Ramsar Sites

Official Ministry Announcement: India's Ramsar site tally reaches 103 sites with the addition of Sukhna Wetland (Chandigarh) and Sauj Jheel (Uttar Pradesh) .

Ministry of Environment, Forest and Climate Change



India's Ramsar Site tally reaches 103 with addition of Sukhna Wetland (Chandigarh) and Sauj Jheel (UP)

Union Minister for Environment, Forest and Climate Change, Shri Bhupender Yadav, today announced that India's Ramsar site tally has reached 103, with the designation of Sukhna Wetland in Chandigarh and Sauj Jheel in Uttar Pradesh as the latest additions to the list.

India's Ramsar site tally reaches 103 🇮🇳🌿 India continues to strengthen its commitment to wetland conservation, with Sukhna Lake in Chandigarh and Sauj Jheel in Uttar Pradesh becoming the latest additions to the list of

Syllabus Mapping

GS Paper III: Environment, Conservation, Biodiversity & Wetlands Management. Key facts highlighted in Green for Prelims and Orange for Mains .

Detailed Notes on Ramsar Sites & Wetland Ecology

1. The Ramsar Convention Overview

- **Establishment:** Signed on **February 2, 1971**, in the Iranian city of Ramsar; came into force in 1975.
- **World Wetlands Day:** Observed annually on **February 2**.
- **Definition of Wetlands:** Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt.
- **Montreux Record:** Maintained as part of the Ramsar List, a register of wetland sites on the List of Wetlands of International Importance where changes in ecological character have occurred, are occurring, or are likely to occur. (E.g., Loktak Lake, Keoladeo National Park).

2. Ecological Significance & Ecosystem Services

- **Natural Sponges & Flood Mitigation:** Absorb and store excess floodwaters during heavy monsoon rainfalls, safeguarding downstream settlements.
- **Water Purification:** Act as biological filters, trapping suspended solids, nutrient runoff, and heavy metals.
- **Climate Change Mitigation:** Peatlands and coastal mangroves sequester substantial quantities of atmospheric carbon (Blue Carbon).
- **Biodiversity & Migratory Corridors:** Vital staging and breeding grounds for endangered waterbirds traversing the Central Asian Flyway.

3. India Specific Milestones

- India acceded on **February 1, 1982**.
- First sites designated: **Chilika Lake (Odisha)** and **Keoladeo National Park (Rajasthan)**.
- State with maximum sites: **Tamil Nadu**. Largest site: **Sundarban Wetland (West Bengal)**. Smallest site: **Renuka Wetland (Himachal Pradesh)**.

State-wise Distribution of India's 103 Ramsar Sites

State / UT	Count	Designated Ramsar Wetlands
Andhra Pradesh	1	Kolleru Lake
Arunachal Pradesh	1	Glaw Lake
Assam	1	Deepor Beel
Bihar	6	Gogabeel Lake, Gokul Reservoir, Kanwar Lake (Kabar Taal), Nagi Bird Sanctuary, Nakti Lake, Udaypur Lake
Chhattisgarh	1	Kopra Reservoir
Goa	1	Nanda Lake
Gujarat	5	Chhari-Dhand, Khijadiya, Nalsarovar, Thol Lake, Wadhvana Wetland
Haryana	2	Sultanpur National Park, Bhindawas Wildlife Sanctuary
Himachal Pradesh	3	Chandra Taal, Pong Dam Lake Wildlife Sanctuary, Renuka Lake
Jammu & Kashmir	5	Hokersar Wetland, Hygam Wetland, Shallabugh Wetland, Mansar-Surinsar, Wular Lake
Jharkhand	1	Udhwa Lake
Karnataka	4	Ranganathittu, Ankasamudra, Aghanashini Estuary, Magadi Kere
Kerala	3	Ashtamudi Wetland, Sasthamkotta Lake, Vembanad-Kol Wetland
Ladakh	2	Tso Kar, Tsomoriri Lake
Madhya Pradesh	5	Bhoj Wetland, Sakhya Sagar, Sirpur Lake, Yashwant Sagar, Tawa Reservoir

State / UT	Count	Designated Ramsar Wetlands (Contd.)
Maharashtra	3	Lonar Lake, Nandur Madhameshwar, Thane Creek
Manipur	1	Loktak Lake
Mizoram	1	Pala Wetland
Odisha	6	Ansupa Lake, Bhitarkanika, Chilika Lake, Hirakud Reservoir, Satkosia Gorge, Tampara Lake
Punjab	6	Beas Reserve, Harike Wetland, Kanjli, Keshopur-Miani, Nangal Sanctuary, Ropar Wetland
Rajasthan	5	Keoladeo National Park, Sambhar Lake, Khichan Wetland, Menar Wetland, Silisereh Lake
Sikkim	1	Khecheopalri Wetland
Tamil Nadu	20	Chitrangudi, Gulf of Mannar, Kanjirankulam, Karaivetti, Karikili, Koonthankulam, Longwood Shola, Pallikarnai, Pichavaram, Point Calimere, and 10 others (Vellode, Vaduvor, Udayamarthandapuram, Suchindram, Siruvallur, Nanjarayan, Kazhuveli, etc.)
Tripura / Uttarakhand	2	Rudrasagar Lake (Tripura), Asan Barrage (Uttarakhand)
Uttar Pradesh	14	Patna, Bakhira, Haiderpur, Nawabganj, Parvati Arga, Saman, Samaspur, Sandi, Sarsai Nawar, Sur Sarovar, Upper Ganga, Shekha Jheel, Surha Tal, Sauj Jheel (Latest)
Chandigarh / WB	3	Sukhna Wetland (Latest) (Chandigarh), East Kolkata Wetlands, Sundarban Wetland (WB)

UPSC Previous Years' Questions (PYQs)

- **Q (Prelims 2022):** Consider the following wetlands: 1. Khijadiya Bird Sanctuary 2. Bakhira Wildlife Sanctuary 3. Sultanpur National Park 4. Wular Lake. How many of the above are Ramsar Sites? (All four are designated Ramsar sites)
- **Q (Prelims 2019):** Which one of the following is an artificial lake? Code: Kodaikanal / Kolleru / Nainital / Renuka. Ans: Kodaikanal (Tamil Nadu)
- **Q (Mains 2018):** Wetland ecosystems play a vital role in maintaining ecological security. Discuss the major causes of degradation of wetlands in India and suggest measures for their sustainable management. GS Paper III