India's Integrated Approach to Wetland Sustainability

Mains: GS III – *Environment Conservation, Environmental pollution and degradation.*

Why in News?

Recently, India introduced a resolution on 'Promoting Sustainable Lifestyles for the Wise Use of Wetlands' at Ramsar CoP15.

What is the Ramsar convention for wetlands?

- **Ramsar convention (1971)** – It is the only global environmental treaty dedicated to wetlands.
- Initially focused on migratory waterfowl habitats, it now covers all wetland types, recognizing their role in biodiversity, climate regulation, and human well-being.
- **Adopted in** – It was adopted in 1971 in the city of Ramsar in Iran and came into force in 1975.
- It was the first intergovernmental agreement focused exclusively on a specific ecosystem, i.e. wetlands.
- **Provides definition** – The convention provides a comprehensive definition of 'wetland' encompassing marshes, fens, peatlands and water bodies and includes natural, artificial, permanent and temporary wetlands.
- **3 main pillars** – It rests on the three main pillars:
    - Conservation of wetlands of international importance,
    - Promotion of the wise use of all wetlands within a country's territory and
    - International co-operation on shared wetland systems and migratory species.
- **The central principle of the convention** – It is "wise use" of the wetlands, which means "the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development".
- **Signatories** – The convention has 172 parties.
- **Duties of the parties** – They need to designate wetlands having ecological, botanical, zoological, limnological or hydrological significance for inclusion in 'the list of wetlands of International importance'.
- The convention also requires contracting parties to consult and co-operate in managing transboundary wetlands and shared water systems.
- It further calls for the coordination of policies and regulations to conserve wetlands and their dependent biodiversity.
- **Designated wetlands** – There are 2,544 wetlands designated under the list.

What is Ramsar 15th Cop?

- **Ramsar 15th Conference of Parties (CoP15)** – It is the 15th meeting of the Conference of the Contracting Parties to the Convention on Wetlands of International Importance.
- **Held at** – Victoria Falls, Zimbabwe.
- **India's role** – It introduced and secured the adoption of a resolution on Promoting Sustainable lifestyles for the wise use of wetlands.
- The resolution highlights the need for integrating behavioural change and sustainable consumption patterns into wetland conservation strategies.
- It also aligns with Mission Life (Lifestyle for Environment), launched by India at UNFCCC COP 26, which encourages India to adopt pro-planet practices.
- **Wetlands** – They are the transitional ecosystems between terrestrial and aquatic environments, characterised by the presence of water-either permanently or seasonally, that supports diverse plant and animal life.

What are the renewed commitments under Ramsar CoP15?

- **Periodical meetings** – The representatives of the government of each of the contracting parties meet every three years (CoP).
- **Theme** – The theme of the CoP 15 was "Protecting Wetlands for Our Common Future",
- It emphasises the important role wetlands play in sustaining ecological health, biodiversity, and climate resilience.
- **Main objectives** – To develop closer co-operation with other international environmental agreements, stronger institutions, wider partnership and adequate financial support.
- **5th strategic plan** – It adopted the 5th Strategic Plan of the Convention on Wetlands with a timeline of 2025-2034.
- **The vision of the plan** – A world living in harmony with nature where wetlands are valued, conserved, restored and wisely used, supporting a healthy planet and delivering benefits for all people.
- **Role of India** – It introduced a resolution on 'Promoting Sustainable Lifestyles for the Wise Use of Wetlands' which was formally adopted on July 30, 2025.
- The resolution focuses on the role of Individual and societal choices in conserving wetlands and aligns with global frameworks.
- It calls for voluntary integration of sustainable lifestyle practices into wetland management through education, awareness, collaboration and investment.

What are the significance of wetlands?

- **Maintain ecological balance** – They are rich in biodiversity and play a crucial role in maintaining the ecological balance.
- **Provide habitat** – They provide habitat and breeding grounds for nearly 40%of all plant and animal species.
- They are one of the most productive ecosystems on the planet.
- **Provide natural protection** – It protects nearly 60% of the global population living along coastlines by mitigating the impact of storm surges, hurricanes and tsunamis.

- **Provides provisions to human beings** – such as food and fodder, mainly rice and fish, and it also supports livelihoods through fisheries, agriculture and eco-tourism.
- **Delivers environmental and climate services** – It Acts as natural sponges, and absorb excess rainfall, thereby reducing the risk of floods.
- **Effective carbon sinks** – They store carbon in both soil and biomass.
- **Serves as 'kidney of the landscape'** – Due to their ability to filter pollutants, purify water and maintain water quality.

What is the status of wetland conservation in India?

- India is one of the countries with the highest number of wetlands.
- **Number of wetlands** – It has 1309 wetlands covering 16.9 million hectares of area.
- **Wetlands under Ramsar convention** – 91 are listed under the Ramsar Convention.
- **Significance** – At least 6% of the Indian population is directly dependent upon wetlands for its livelihood.
- **Measures taken** – Recognising the significance of wetlands, India has undertaken several initiatives for their conservation and management.
- Wetland rules, 2017 (which replaced the Wetland rules, 2010) – These are notified under the Environment Protection Act.
- The rules restrict activities such as conversion of wetlands for non-wetland purposes, industrial encroachment, dumping and discharge of waste, construction and poaching.
- **Wetland committees** – To ensure the implementation of the rules, the National Wetland Committee and the State Wetland Authorities were established.
- **Policy measure –** On the policy front, the National Plan for Conservation of Aquatic Ecosystems has been implemented by the government for the conservation and management of wetlands and lakes.
- **National campaign** – In in 2023, the Save Wetland campaign was launched under the Mission Sahbhagita to make wetland conservation a people's movement.
- **Four pillars of the mission** – It considers the wetland as 'Amrit Darohar' and works on four pillars
    - Communication
    - Education
    - Participation
    - Awareness

What are the concerns?

- **Threatened landscape** – Wetlands are also one of the earth's most threatened ecosystems.
- They are facing severe threats due to issues like urban encroachment, pollution and climate change.
- From 1970-2020, more than 35% of the world's wetlands have vanished due to various reasons.
- **Conversion of wetland** – Land conversion for agriculture, urbanization and Infrastructure development .
- ***For instance,*** *in states like Punjab and Kerala, conversion of wetlands for agriculture and urban construction.*

- **Pollution** – Industrial and domestic waste pollute water bodies, and unsustainable farming practices disrupt hydrology.
    - ***For example**, It has severely affected wetlands such as Bellandur Lake in Bengaluru and Loktak Lake in Manipur.*
- **Climate change** – It exacerbates these challenges by altering rainfall patterns and increasing the frequency of extreme events.
- **Urbanization and industries** – The wetlands in the Himalayan states are under threat due to unregulated urbanisation, unsustainable tourism, and climate change.
- **Effect of aquaculture** – In coastal states, unsustainable aquaculture, particularly shrimp farming, and overfishing have degraded many wetlands.

What are the measures to be taken?

- **Removal of encroachments** – To secure these ecosystems, the issue of encroachment and waste dumping in wetlands needs to be dealt with sternly.
- For this, strict enforcement of Wetland Rules, 2017 would help.
- **Effective implementation** – Policies and law should be implemented with full-fledged motive to conserve the ecology.
- **Public awareness and community participation** – They are indispensable, since local populations are both beneficiaries and guardians of wetlands.
- **Adequate funding** – Sustained and sufficient funding is necessary to support the restoration and management of wetlands.

What lies ahead?

By integrating legal enforcement with behavioural change and waste governance, India can move closer to achieving its commitment to ‘wise use of wetland’ and set a model for sustainable ecological stewardship.

Reference

The Indian Express| India’s approach to conserve wetland

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