Wetlands

Published On: 17-10-2023

Why is in new? Plea seeks stay on Jewar Airport until wetland protected, UP govt to inform about status in 4 weeks

Following a petition **seeking a stay on the construction of Jewar Airport until Dhanauri Wetland is granted protection,** the National Green Tribunal (NGT) granted the state government four weeks' time to inform about the status of notifying the wetland in Greater Noida as Ramsar Wetland site. The proposal for the same is pending before the Uttar Pradesh Wetland authority.

Dhanauri Wetlands:

The Dhanauri Wetlands is a **birdwatching area** located in Dhanauri village near Dankaur in Uttar Pradesh, India.

The Dhanauri Wetlands is home to over 120 Sarus cranes.

Sarus Cranes is the **state bird of Uttar Pradesh**.

The Dhanauri Wetlands is located among the villages of Dhanauri, Thasrana, and Aminpur Bangar in Dankaur Tehsil, Greater Noida, Gautam Budha Nagar.

Yamuna Expressway Industrial Development Authority (YEIDA), the land-owning agency, gave a **no-objection certificate on June 9, 2022 to declare it as a Ramsar Site and Sanctuary**.

The Ramsar Convention on Wetlands is an intergovernmental treaty that provides the framework for the conservation of wetlands and their resources.

Conservation Status of Sarus crane:-

IUCN : Vulnerable

CITES :Appendix II

Wildlife (Protection) Act of 1972: Schedule IV. It receives legal protection in India.

Wetland:

A wetland is an area of land that is **either covered by water or saturated with water**.

The water is often groundwater, seeping up from an aquifer or spring. A wetland's water can also come from a nearby river or lake.

Seawater can also create wetlands, especially in coastal areas that experience strong tides

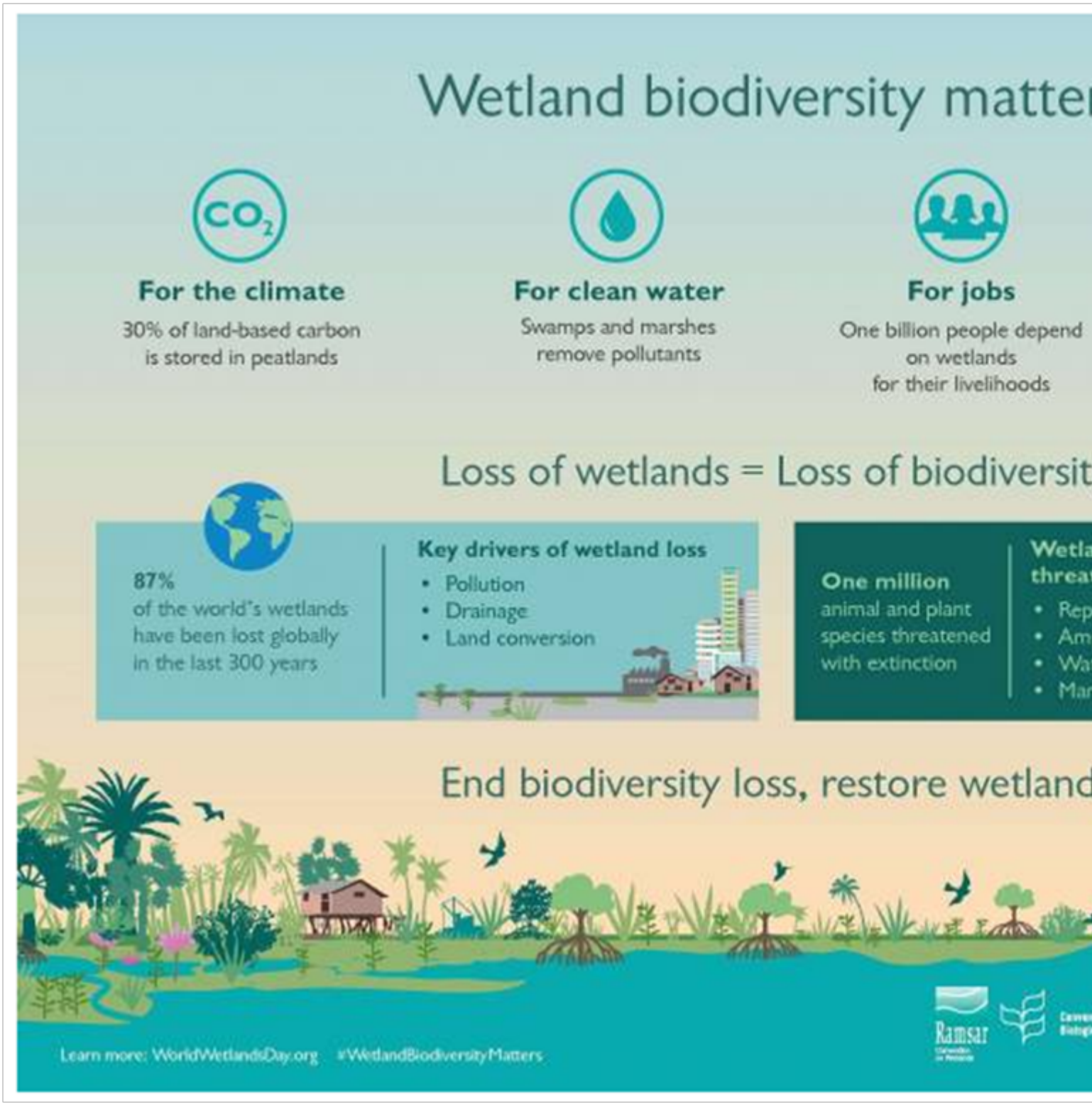
The **Ramsar Convention on Wetlands defines wetlands** as "areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including

areas of marine water the depth of which at low tide does not exceed six meters."

These comprise areas that transition between terrestrial (land) areas and aquatic (water) areas.

The **West Siberian Lowland, Amazon River Basin, and Hudson Bay Lowland** are among the largest wetlands in the world.

The **world's largest protected wetland is Llanos de Moxos, located in Bolivia**. It is more than 17 million acres.



Types of wetland:

Marine and coastal: open coasts, coral reefs, estuaries, tidal flats, mangroves, and coastal lagoons.

Inland: permanent and seasonal rivers, inland deltas and floodplains, permanent and seasonal lakes and ponds, marshes, freshwater swamps, and peatlands

Human-made: reservoirs, barrages and dams, aquaculture ponds, wastewater treatment ponds, irrigation canals, irrigation ponds, and rice fields.

Ramsar convention:

It is an **international treaty** for the conservation and wise use of wetlands.

It is named after the **Iranian city of Ramsar**, on the Caspian Sea, where the treaty was **signed on 2 February 1971** .

Known officially as 'the Convention on Wetlands of International Importance especially as Waterfowl Habitat' (or, more recently, just 'the Convention on Wetlands'), it came into force in 1975.

Ramsar sites are wetlands of global significance recognized under this treaty.

On **February 1, 1982**, **India ratified the "Convention on Wetlands**," commonly known as the "Ramsar Convention."

Since then, it has selected **75 Ramsar sites** totaling 13,26,677 hectares for inclusion on the List of Wetlands of International Importance. That makes India the top spot holder in South Asia and the third spot holder overall in Asia in terms of recognized sites.

Ramsar Site Designation Criteria:

Representing rare or unique natural wetland types.

Supporting endangered species or threatened ecological communities.

Maintaining biodiversity in specific biogeographic regions.

Offering refuge during adverse conditions.

Regularly accommodating 20,000 or more waterbirds.

Sustaining 1% of a population of a single water-bird species.

Serving as a critical source of food, spawning grounds, nurseries, and migration paths for fish.

Regularly supporting 1% of a population of non-avian wetland-dependent animal species.

Kamaraj IAS Academy
Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040
Phone: **044 4353 9988 / 98403 94477** / Whatsapp : **09710729833**

Montreux Record:

Montreux Record under the Convention is 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 as a result of technological developments, pollution or other human interference.

It is maintained as part of the Ramsar List.

The Montreux Record was established by Recommendation of the Conference of the Contracting Parties (1990).

Sites may be added to and removed from the Record only with the approval of the Contracting Parties in which they lie.

List of Indian wetlands of International importance included in the Montreux Record are – **Keoladeo National Park, Rajasthan and Loktak Lake, Manipur**.

Chilika Lake was removed from the register in 2002 in light of the improved conditions of the lake. In fact, Chilika lake is the first Ramsar site in Asia to be removed from the Montreux record

Significance of Wetlands:

Wetlands are a vital **part of the hydrological cycle**.

They are **rich in biodiversity** and enrich the ecosystem services.

Wetlands **provide ecosystem services** such as waste assimilation, flood mitigation , erosion control , groundwater recharge, micro climate regulations and water purification etc.

Wetlands are **part of cultural heritage** by supporting significant recreation and socio – cultural activities.

Threats to Wetland Ecosystem:

Changes in natural hydrological regimes. Water regimes influence wetlands' biodiversity and ecosystem functions.

Reduced water availability, changing hydro-period, loss of linkage with biodiversity areas, restricted nitrogen exchange, and other factors all contribute to the degradation of natural hydrological regimes.

Catchment degradation depletes the water holding capacity in wetlands thus affecting wetland ecosystem.

The majority of India's inland wetlands have been **overrun by exotic species**, which have grown to be a nuisance and have had a significant impact on the local biota and ecological conditions.

Example: Hyacinth (water hyacinth) is an invasive species introduced in India.

Other factors like Unsustainable harvest of wetland resources, over grazing, Unsustainable water abstraction, Mining (e.g. salt, sand or laterite) also affects the wetland Ecosystem in India.

Conclusion:

Global climate change has emerged as a major driver of wetlands loss and degradation, particularly at high altitudes and along coastlines. According to studies, a one-meter rise in sea level would put 84 percent of India's coastal wetlands at risk. Changing hydrological regimes, eutrophication, and algal blooms are all threats to inland wetlands as a result of rising temperatures.Hence it is important to conserve the Wetland ecosystem.