

SHORTNEWS:

1.KULSI RIVER

NEWS: Assam and Meghalaya governments have decided to jointly set up a **hydro power** project on the **Kulsi river**, a key **Ganga river dolphin habitat**.

About the Kulsi River

- The Kulsi River is a small but significant south bank **tributary of the Brahmaputra River**.
- It is composed of three rivers, namely **Khri, Krishniya, and Umsiri**.
- **Origin and Course:** All three rivers, **Khri, Krishniya, and Umsiri** originate in the **West Khasi Hills** district in **Meghalaya plateau** to **Kamrup district of Assam**.
 - Kulsi river flows through the **Chandubi Lake** and the **Kulsi Reserved Forest**, before merging with the **Brahmaputra**.
- **Eco-sensitive Zone:** The Kulsi Reserved Forest along its banks is home to diverse flora and fauna, including rare orchids and birds.
- **Biodiversity Hotspot:** The river is known for its **rich aquatic biodiversity**, particularly as a habitat for the **Ganges River Dolphin**.
- **Ganges River Dolphin** relies on the river's depth (≥ 2 meters) for survival, but illegal **sand mining** and **infrastructure** have reduced water levels by 70% in some stretches.
- While the project promises multi-purpose benefits (power, irrigation, tourism), environmentalists highlight risks to the river's ecosystem.
- The project will cause Dolphin habitat destruction due to **altered water flow** and **noise pollution** from construction.

2.PRE-HARAPPAN HUMAN SETTLEMENT IN KUTCH

NEWS: A new study conducted by the researchers at the **Indian Institute of Technology Gandhinagar** has found evidence of **hunter-gatherer communities in Kutch** around 9,000 years ago, 5,000 years before the Harappans.

About the News

- Newly identified sites are **first of their kind to be documented in the region** with defined **cultural and chronological** context.
- The study challenges the commonly held view that urbanism in Kutch developed primarily under the influence of the Sindh region.
- The findings also show similarities with coastal archaeological sites in the **Las Bela** and **Makran** regions of **Pakistan and the Oman Peninsula**.

Key Techniques Used in the Kutch Hunter-Gatherer Study

- **Accelerator Mass Spectrometry (AMS) Dating:** Ultra-precise method to **measure Carbon-14 (C-14) isotopes** in ancient shells.
 - Counts **individual C-14 atoms for high accuracy**, even with tiny samples.

- **Carbon-14 (Radiocarbon) Dating:** Measures **decay of C-14 (half-life = 5,730 years) in organic remains.**
 - Determines when the organisms died, giving the age of human settlements.
- **Shell Midden Analysis:** Studied shell heaps (middens) as proof of ancient human consumption.
 - Helped reconstruct **diet, environment, and coastal adaptation** strategies.
- **Paleoclimate Reconstruction:** Used shell chemistry to study **past climate conditions** in Kutch.
 - Revealed how hunter-gatherers adapted to mangrove ecosystems.

Significance of the Discovery

- **Earliest Evidence of Human Settlement in Kutch:** The findings push back human presence in Kutch by at least **5,000 years before the Harappan civilization.**
- **First Documented Shell-Midden Sites in Kutch:** The study identifies and confirms **shell middens (heaps of discarded shells from human consumption)** with a clear cultural and chronological context, unlike earlier British survey records.
- **Insights into Palaeoclimate & Human Adaptation:** Shell middens can help **reconstruct past climate conditions**, aiding studies on **how early humans adapted to environmental changes.**
- **Challenges the Sindh-Centric Urbanization Theory:** Indicates that Kutch's urban development was a gradual, indigenous process rather than abrupt external influence from the Sindh region.

3.TWO NEW RAMSAR SITES IN RAJASTHAN

NEWS: Recently, two more wetlands—**Khichan in Phalodi** and **Menar in Udaipur**, both in Rajasthan, have been added to the prestigious list of **Ramsar Sites**.

What are Ramsar Sites?

- A Ramsar Site is a wetland **recognized as being of international importance which is recognized under the Ramsar Convention**, also called the “**Convention on Wetlands**”.
- The treaty was signed in 1971 in **Ramsar, Iran, and was launched by UNESCO.**
- **Purpose:** To identify and protect important wetlands, especially those that support waterbirds (around 180 species) and are critical for biodiversity.
- **Sundarbans** in West Bengal is **the largest Ramsar Site** in India.
- The first Ramsar sites in India were **Chilika Lake (Odisha) and Keoladeo National Park (Rajasthan), designated in 198.**
- **India now has a total of 91 Ramsar Sites.**
- **Khichan in Phalodi:** Khichan in Phalodi is located in the Thar Desert and **includes the Ratri Nadi and Vijaysagar Talab.**
- **Menar in Udaipur:** It is a freshwater wetland formed by **Braham Talab, Dhand Talab, and Kheroda Talab.**

- It is also known as the **“Bird Village”** because of its strong community efforts to protect birds.
- These wetlands are important homes for many species, including the critically endangered white-rumped and long-billed vultures.