

INDUS WATERS TREATY IN ABEYANCE

- The IWT is a water-sharing agreement signed between India and Pakistan on September 19, 1960, with the World Bank acting as a facilitator.
- The Treaty was signed by Prime Minister Jawaharlal Nehru and Pakistani President Mohammed Ayub Khan, after nearly nine years of negotiations brokered by the World Bank.
- The Treaty governs the sharing of the waters of six major transboundary rivers of the Indus river system flowing through both countries:
 - Eastern Rivers: Ravi, Beas, and Sutlej, allocated to India for unrestricted use.
 - Western Rivers: Indus, Jhelum, and Chenab, allocated to Pakistan, with India allowed limited, non-consumptive use for irrigation, hydropower, navigation, and domestic purposes.
- The Treaty established the **Permanent Indus Commission**, consisting of one commissioner from each country, to facilitate cooperation and information exchange.
- It also provided a three-tier dispute resolution mechanism:
 - Permanent Indus Commission for routine matters.
 - Neutral Expert appointed by the World Bank for technical differences.
 - Court of Arbitration for legal disputes.

Significance of the Treaty

- The Indus River system is crucial for both countries:
 - For India: It supports agriculture, hydropower generation, and meets the development needs of Jammu and Kashmir, Punjab, Haryana, and Rajasthan.
 - For Pakistan: It is the lifeline of agriculture, fulfilling over 70% of its irrigation requirements.
- The Treaty has historically ensured predictability in water flows, reduced the scope for water-related conflicts, and provided a framework for cooperation despite political tensions.

India's Decision to Hold the Treaty in Abeyance

- Following the Pahalgam terror attack in April 2025 and the subsequent **Operation Sindoor**, India decided to keep the Indus Waters Treaty "in abeyance".
- This means India no longer considers itself bound by the Treaty's provisions for the time being.
- India's decision has disrupted normal flows reaching Pakistan, affected data-sharing mechanisms, and halted regular meetings of the Indus Waters Commissioners, creating uncertainty for Pakistan's water planning, flood preparedness, and drought management.

Pakistan's Response: Internationalising the Issue

- Being the downstream state, Pakistan has been severely affected by India's decision. With limited unilateral options, Pakistan has pursued a strategy of internationalising the dispute:
- **Approaches to International Bodies**
 - **United Nations Security Council (UNSC):** As a non-permanent member since January 2025, Pakistan has repeatedly raised the issue at the UNSC, even during unrelated discussions on energy and critical minerals.
 - **International Court of Justice (ICJ):** Pakistan has sought ICJ intervention, although such a referral remains unlikely.
 - **World Bank:** As a Treaty facilitator, Pakistan has approached the World Bank seeking mediation.
 - **UN Human Rights Council (UNHRC):** Pakistan has framed the issue as a human rights concern, leading UN Special Rapporteurs to send communications to India seeking clarification, which India has ignored.

Challenges and Way Forward

- **Diplomatic Escalation:** The issue could lead to major legal or diplomatic confrontation.
- **Risk of Conflict:** Pakistan has even threatened armed conflict over the matter.
- **Regional Stability:** Water scarcity in Pakistan could destabilise the region.

MEASURES NEEDED TO TACKLE DELHI'S HEAT CRISIS

Delhi and the National Capital Region are witnessing increasingly severe and prolonged heatwaves, with temperatures remaining high even during the night.

Rapid urbanisation, extensive concrete infrastructure, rising use of air conditioners, and declining green cover have intensified the **Urban Heat Island Effect**, creating a “heat re-trap” phenomenon where absorbed heat is continuously retained and re-emitted within the city environment.

Why Delhi is Retaining More Heat?

- **Heat-Absorbing Urban Infrastructure** - Delhi's rapid expansion is dominated by concrete, asphalt, steel, and glass, materials that absorb heat quickly and release it slowly. Roads, buildings, and rooftops store solar heat during the day and continue radiating it at night.
- **Rising Surface Temperatures** - In densely built areas, surface temperatures can reach 50–60°C during peak afternoons. These heated surfaces act like thermal reservoirs, preventing the city from cooling efficiently after sunset.
- **Impact of Glass-Dominated Architecture** - Modern glass-heavy buildings in regions such as Gurgaon and Noida intensify indoor heating by allowing more solar radiation inside, increasing dependence on air conditioning instead of naturally reducing heat.
- **Vehicular Heat and Thermal Corridors** - Heavy traffic and vehicle emissions contribute additional heat. Major transport corridors like NH-48 function as continuous heat sources, gradually forming “thermal corridors” that alter local microclimates.
- **Restricted Airflow and Poor Urban Design** - High-density construction and narrow streets limit natural ventilation. Traditional cooling features such as courtyards, shaded pathways, and ventilation corridors have largely disappeared, causing heat and stagnant air to accumulate within the urban landscape.

How Cooling Systems Intensify Urban Warming?

- **Air Conditioning and Outdoor Heat** - While air conditioners cool indoor spaces, they expel heat outdoors. In densely populated urban areas, this can increase surrounding temperatures by around 1–2°C.
- **The Urban Heat Feedback Loop** - Rising temperatures increase the use of cooling systems, which then release even more heat into the environment. This creates a cycle where cities become cooler indoors but hotter outdoors.
- **Future Energy Challenges** - National cooling demand is expected to rise sharply by 2050, potentially increasing strain on power grids and heightening the risk of electricity shortages during extreme heatwaves.

Measures Needed to Address the Heat Crisis

- **Adopting Heat-Resilient Building Materials** - Cities need to shift towards high-albedo surfaces, reflective coatings, and cool roofs that absorb less heat and reduce urban temperatures.
- **Promoting Passive Cooling Design** - Buildings should incorporate insulation, shading, natural ventilation, and cross-ventilation techniques to reduce dependence on energy-intensive cooling systems.
- **Improving Urban Planning** - Urban planning must restore ventilation corridors, improve street orientation, and reduce dense heat-trapping construction to enhance natural airflow across cities.
- **Expanding Green and Blue Infrastructure** - Urban forests, parks, wetlands, and water bodies should be expanded and protected as essential natural cooling systems that lower surrounding temperatures.
- **Reducing Human-Generated Heat** - Measures such as sustainable public transport, electric mobility, and energy-efficient appliances can help reduce vehicular emissions and excess heat generation.

PM MITRA PARK



- **Pradhan Mantri Mega Integrated Textile Region and Apparel (PM MITRA)** is a mega textile hub that brings every step of textile production, like spinning, weaving, dyeing, printing, and garment-making, into one single place.
- MITRA parks can be **either Greenfield or Brownfield**.
 - The seven approved **PM Mitra Parks are being set up in:** Tamil Nadu (Virudhunagar), Telangana, Gujarat, Karnataka, Madhya Pradesh, Uttar Pradesh (Lucknow district) and Maharashtra.
- **Nodal Ministry:** Ministry of Textiles.

PM MITRA Park Features:

- **Integrated Value Chain:** Each park brings spinning, garmenting, dyeing, and processing into a single zone, cutting transport time and costs.
- **World-Class Infrastructure:** PM MITRA will develop 50% area for pure Manufacturing Activity, 20% area for utilities, and 10% of area for commercial development.
- **Public-Private Partnership:** PM MITRA park will be developed by a **Special Purpose Vehicle (SPV)** which will be owned by the **State Government and the Government of India** in a Public-Private Partnership (PPP) Mode.
- **Capital and Incentives:**
 - The Ministry of Textiles will provide financial assistance up to **Rs 800 crores per park** for **Greenfield projects** and up to **Rs 500 crores per park** for **Brownfield projects**.
 - The **State Governments will provide land** and augmented utility infrastructure for the proposed mega textile parks.



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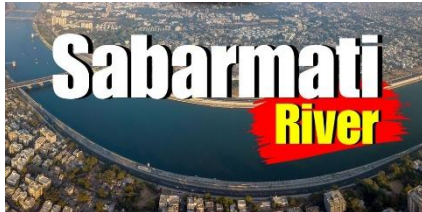
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KEY FACTS ABOUT SABARMATI RIVER



- It is a **monsoon-fed, west-flowing river** flowing through **Rajasthan and Gujarat**.
- **Course:**
 - It **originates** from the **Dhebar Lake**, situated in the southeast of the **Aravalli Range in Rajasthan's** Udaipur district.
 - From its source, the river **flows in a southwest direction**.
 - As it flows through the plains, the river **enters** the state of **Gujarat**.
 - It finally **empties** into the **Gulf of Khambhat** of the **Arabian Sea**.
- The **basin is bounded** by **Aravalli Hills** on the north and northeast, by the **Rann of Kutch** on the west, and by the **Gulf of Khambhat** on the south.
- The banks of the Sabarmati River have cities like **Ahmedabad and Gandhinagar**.
- It **flows north-south** through **Ahmedabad**, bisecting the city into its western and eastern halves.
- **Major Tributaries:** **Wakal River, Harnav River, Hathmati River, Watrak River, and Madhumati River.**

PSYCHE SPACECRAFT



- It was launched in **2023** by **NASA**.
- It is on a mission to reach the **metal-rich asteroid** also named **Psyche**.
- **Features of Psyche Spacecraft:**
 - The body of the Psyche spacecraft is about the size of a small van.
 - It uses a **solar-electric propulsion system** powered by xenon gas, slowly gaining speed over time as it travels through space.

- **Scientific Instruments of Psyche Spacecraft**
 - **Magnetometer:** It will look for evidence of an ancient **magnetic field** at the asteroid Psyche.
 - **Gamma-ray and neutron spectrometer:** It will help scientists **determine the chemical elements** that make up the asteroid's surface material.
 - **Multispectral Imager:** It consists of a pair of identical cameras equipped with filters and telescopic lenses to photograph the surface of the asteroid in different wavelengths of light.

UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME (UN-HABITAT)



United Nations
Human
Settlements
Programme
(UN-Habitat)

- It is also commonly **known as UN-Habitat**, is the UN agency responsible for **promoting sustainable urban development** and adequate shelter for all.
- It was **established in 1977** after the **Habitat I Conference (1976)**.
- Its mandate is derived from several UN General Assembly resolutions and from the Habitat Agenda adopted during Habitat II (1996).
- **Purpose:** Its central mission is to **promote socially and environmentally sustainable towns** and cities.
- **Headquarters:** Nairobi, Kenya.
- **Governance of United Nations Human Settlements Programme**
 - **UN-Habitat Assembly**
 - It is composed of all **193 UN member states**.
 - It convenes **once every four years in Nairobi**.
 - It sets global priorities and approves the strategic plan.
 - **Executive Board**
 - It consists of **36 member** states elected by the Assembly.
 - It meets three times a year to oversee implementation of policies.

WHAT IS LUPUS DISEASE?



- It is a **chronic autoimmune disease** where the **immune system** mistakenly attacks healthy tissues and organs.
- It causes **widespread inflammation** and **damage to joints, skin, kidneys, blood cells, brain, heart, and lungs.**
- **Causes:** The **causes** of lupus are **not known**. But they may be **linked to a person's environment, family history (genetics), or hormonal factors.**
- Lupus is much **more common among women** than men.
- It **mostly affects people between 20 to 40 years old** but can also occur in newborns, children, and older adults.

Symptoms:

- Lupus causes symptoms throughout your body, depending on which organs or systems it affects.
- **Everyone** experiences a **different combination and severity of symptoms.**
- The symptoms of lupus **occur in times of flare-ups. Between flare-ups,** people usually experience **times of remission,** when there are **few or no symptoms.**
- The wide range of symptoms in the body includes **joint pain, headache, rashes, fever, fatigue, mouth sores, confusion, swollen glands,** and blood clots, among others.
- **Left untreated,** it can progress to **damage the kidneys, lungs, heart,** and even the brain.

Treatment: There is **no cure** for lupus, but **medicines** and lifestyle changes can **help control it.**

KEY FACTS ABOUT INDIAN VULTURE



- The Indian vulture, also called the **long-billed vulture**, is a **bird of prey native to Asia**.
- Scientific Name: *Gyps indicus*
- It is part of a group called “**Old World vultures**”.
- They belong to the Accipitridae family, which includes eagles and hawks.
- **Habitat and Distribution:**
 - These are **native to India, Pakistan, and Nepal**.
 - They are usually found in **savannas and other open habitats around villages**, cities, and near cultivated areas.
 - It has suffered a **97-99% population decrease** due to **poisoning caused by the veterinary drug diclofenac**.
 - It was given to working animals, as it reduced joint pain and so kept them working for longer.
 - **Vultures got poisoned when they ate the meat** of dead cattle that had been treated with diclofenac. This caused **kidney failure** in the vultures.
- **Features:**
 - It is a **bulky medium-sized** Females of this species are **smaller** than males.
 - They have a **small, mostly bald head** with **few feathers**.
 - It has a **long, featherless neck**, dark eyes, and a **long, yellowish beak**.
 - Its body and covert feathers are light brown.
 - Its wings are broad, and its tail feathers are short.
 - Its **large wingspan allows it to fly long distances** while using minimal energy.
- **Conservation Status:**
 - IUCN Red List: **Critically Endangered**.