Water: A Geopolitical Weapon

Mains Syllabus: GS II - India and its neighborhood- relations.

Why in the News?

After the recent Pahalgam attack, India has temporarily suspended Indus water treaty.

What are the transboundary waters of India?

- **Transboundary Waters** – They are the aquifers , lake and river basins shared by two or more countries.
- Transboundary waters account for 60 per cent of the world's freshwater flows.

Transboundary Rivers of India		
Neighboring Country	**Major Shared Rivers**	**Notable Features/Agreements**
Pakistan	Indus, Jhelum, Chenab, Ravi, Beas, Sutlej	Indus Waters Treaty (1960)
Bangladesh	Ganges, Brahmaputra, Teesta, Barak, Feni, etc.	Ganga Water Treaty (1996), Teesta negotiations
Nepal	Kosi, Gandak, Mahakali (Sharda), Ghaghara	Sarada Agreement (1920) Kosi Agreement (1954), Gandak Agreement (1959) Mahakali Treaty (1996)
China	Indus, Sutlej, Brahmaputra (Yarlung Tsangpo)	Hydrological data-sharing agreements for the Sutlej and Brahmaputra rivers, signed between 2002 and 2018. There is no formal water-sharing treaty between the two nations
Bhutan	Manas, Sankosh, Torsa, Amo Chu	Hydropower cooperation
Myanmar	Barak	Limited cooperation, mainly regional. There is no formal "water treaty" specifically between India and Myanmar.

What is China's capability to influence India's water?

- **Tibet Factor** - China's control over Tibet, where key rivers like the Indus and Sutlej originate.

Indus • **Origin** - It originates from the Seng Khabab glacier near Mansarovar Lake and Mount Kailash in Tibet, at an altitude of around 5,500 metres. • **Flow Route** - It flows through Tibet into Ladakh, where it meets tributaries like the Zanskar and Shyok, before entering Pakistan and eventually emptying into the Arabian Sea. • **Significance** - Spanning approximately 3,180 kilometres, the Indus was the lifeline of the ancient Indus Valley Civilization and remains vital for agriculture and hydroelectric power in both India and Pakistan.
Sutlej • **Origin** – It originates from the Longchen Khabab glacier near Rakshas Tal in Tibet, at an altitude of approximately 4,600 to 5,000 metres. • **Flow Route** - In Tibet, the Sutlej merges with streams like the Spiti River before entering India's Himachal Pradesh near the Shipki La pass. • It then flows through the Kinnar Kailash region and continues into Punjab, where it supports the crucial Bhakra Dam hydroelectric and irrigation project. • **Significance** - Finally, the Sutlej joins the Indus River in Pakistan. Stretching about 1,450 kilometres, the Sutlej is vital for Punjab's agriculture and India's hydroelectric power generation.

- **Indus Water Treaty** - Signed in 1960 to manage shared water resources, the Indus Water Treaty lets India use the eastern rivers (Sutlej, Beas, Ravi) and Pakistan the western rivers (Indus, Jhelum, Chenab).
- **China's Capability** - Technically, China has the capability to stop the water flow of these rivers since they originate in Tibet.
- **Hydroelectric Plants** - China has built hydroelectric plants like Senge Tsangpo and Ngari Shiquanhe near the Indus' source, and a barrage at Zada Gorge on the Sutlej.
- In 2016, China halted the flow of the Shiyaku, a Brahmaputra tributary, for a hydroelectric project, sending a geopolitical message to India.
- These structures can control water flow, potentially reducing, stopping, or altering it.
- **Dams** - These dams have the potential to regulate water flow, impacting India and Pakistan, especially during dry and rainy seasons.
- After the Galwan Valley conflict in 2020, China blocked the Galwan River, an Indus tributary, causing water shortages in India.
- **Water Diversion** - Additionally, China could divert water for its own use, similar to its South-North Water Transfer Project, though this has not been implemented on the Indus or Sutlej rivers.
- **Data Blockage** - If China withholds water-flow data—as it did for the Brahmaputra in 2017—it could hinder India's ability to predict floods or droughts, complicating water management and disaster preparedness.
- **Water Bomb** - In 2004, China created an artificial lake on the Parechu River, a tributary of the Sutlej, raising fears in India of a potential 'water bomb'.

What are the limitations on China's ability to control Indian Waters?

- **Limited Source Control** - Only a small percentage of the water in the Indus (10-15%) and Sutlej (20%) originates from Tibet, making it difficult to stop entirely.
- **Vulnerable Himalayan Terrain** - Building large dams in the earthquake-prone region of Tibet is risky, and stopping water could affect the local ecology and communities.
- **International Water Laws** - Stopping water flow can be considered a violation of

international water laws, such as the Helsinki Rules, which could lead to global criticism of China.
- **Affects downstream** – Any move by China to stop Indian waters will also affect water to Pakistan and Bangladesh.
- This will create negative responses from these south east Asian countries against China.

What are the Helsinki Rules?

- **Helsinki Rule**s – These are international guidelines for the use of waters in international drainage basins, adopted by the International Law Association (ILA) in 1966.
- **Objective** - The rules aim to establish a legal framework for the equitable sharing and utilization of international water resources, ensuring that all riparian states (states sharing a watercourse) can benefit from their use without causing undue harm to others.
- **Core Principles** - The Helsinki Rules emphasize the principle of equitable utilization and the prohibition of causing significant harm to other riparian states.
- **Factors Considered** - The rules outline several factors that should be considered when assessing the fairness of a water usage plan, including:
    - The social and economic needs of each state.
    - The extent of the drainage area of the river.
    - The availability of other water resources.
    - The cost of alternative means of satisfying the needs of each state
- **Application** - The Helsinki Rules are not a legally binding treaty but rather a set of guidelines that are widely recognized and used in international water law.

What is the UN Watercourses Convention?

- **UN Watercourses Convention** - Officially named, the Convention on the Law of the Non-Navigational Uses of International Watercourses, is a treaty adopted by the United Nations in 1997.
- **Objective** - It aims to ensure equitable and reasonable use of shared water resources, prevent harm to other riparian states, and promote sustainable management for present and future generations.
- **Entry into Force** - The convention entered into force on August 17, 2014, after being ratified by 35 states.
- **Principles** – It outlines principles for managing and conserving international water resources, including both surface water and groundwater.
- **Non-Navigational Uses** - The convention focuses on the use of water for purposes other than navigation, such as irrigation, domestic use, industrial use, and hydropower.
- **Obligations of Watercourse States** - The convention obligates states sharing an international watercourse to:
    - Utilize the watercourse in an equitable and reasonable manner.
    - Exercise due diligence to prevent significant harm to other riparian states.
    - Protect and conserve the watercourse's ecosystem.

What is the UN Water Convention?

- **Water Convention** – It is the Convention on the Protection and Use of Transboundary Watercourses and International Lakes adopted in Helsinki in 1992 and entered into force in 1996.
- **About** – It is a unique international legal instrument and intergovernmental platform to ensure the sustainable use of transboundary water resources by facilitating cooperation.
- **Scope** - Initially negotiated as a regional instrument for European region, it has been opened up for accession to all UN Member States in 2016.
- **Objective** - The Convention is a unique ***legally binding*** instrument promoting
    - The sustainable management of shared water resources
    - The implementation of the Sustainable Development Goals
    - The prevention of conflicts
    - Promotion of peace and regional integration
- **Obligation of the Parties** - The Water Convention requires Parties to prevent, control and reduce transboundary impact, use transboundary waters in a reasonable and equitable way and ensure their sustainable management.
- **Co-operation** - Parties bordering the same transboundary waters have to cooperate by entering into specific agreements and establishing joint bodies.
- As a framework agreement, the Convention does not replace bilateral and multilateral agreements for specific basins or aquifers.

India is not a party to this convention.

References

News18 | Can China Block the Flow of Indus and Sutluj?