

Today's Prelims Topics

Centre announces hike in MSP

Context

The Cabinet Committee on Economic Affairs (CCEA) has fixed the minimum support price (MSP) of raw jute for the 2025-26 marketing season at ₹5,650 a quintal, an increase of ₹315 from last year.

About Jute & its Production

- Jute is a natural fibre with a golden, soft, long, and silky shine.
- It is known as **Golden Fibre** because of its colours and high cash value.
 - The **Golden Fibre Revolution** in India is related to jute production.
- **Conditions Required:** Grows best in a hot and humid climate
 - **Temperature:** 25-35°C
 - **Rainfall:** 150-250 cm
 - **Soil Type:** Well-drained alluvial soil
- **Production in India:**
 - Primarily concentrated in 3 states - **West Bengal, Bihar & Assam. They produce around 99% of India's jute.**
 - **Other states:** Odisha, Andhra Pradesh, Tripura, Meghalaya, Nagaland.
- **Worldwide:** India is the largest producer of jute followed by Bangladesh and China.
- To promote jute industry, the government has **mandated 100 % of food grains and 20 % sugar to be packed in jute bags.**

National Jute Board (NJB)

- It was **established in 2008 under the National Jute Board Act, 2008. (HQ- Kolkata, West Bengal)**
- **Nodal Ministry:** Ministry of Textiles.
- **Objective:** To promote the development of the jute sector by supporting modernization, productivity enhancement, and domestic as well as international marketing of jute products.

UPSC PYQ

Q. The crop is subtropical. A hard frost is injurious to it. It requires at least 210 frost-free days and 50 to 100 centimetres of rainfall for its growth. A light well-drained soil capable of retaining moisture is ideally suited for the cultivation of the crop.

Which one of the following is that crop? (2020)

- (a) Cotton
- (b) Jute
- (c) Sugarcane
- (d) Tea

Answer: A

Source:

- [The Hindu - MSP for Jute](#)

A tribal king from Kerala to attend Republic Day parade in Delhi

Context

Raman Rajamannan, the head of the Mannan community and the only tribal king in Kerala, will participate in the Republic Day parade in Delhi.

About Mannan Community

- Mannan community is a **recognized Scheduled Tribes (ST) in Kerala**, known for its unique traditions, culture and socio-political practices.
- It is mainly settled in **Idukki district**.
- **Population:** According to the Census 2011, the Mannan community has a population of approximately **9,000 people**.

Cultural Practices

- **Traditional Leadership:**
 - The Mannans have a **hereditary king (Mannan Raja)** who acts as the head of their community and presides over tribal rituals and disputes.
 - The king resides in **Kovilmala**, often referred to as the "tribal capital" of the Mannans. Kovilmala is located near **Kattappana in Idukki**.
 - The king is not only a symbolic figure but also holds decision-making powers in tribal matters.
 - Each settlement within the community is headed by a '**Kanikaran**,' who oversees the local affairs.
- **Matrilineal System:** It follows a **matrilineal inheritance system**, where property is passed down through the female lineage.
- **Traditional Attire:** Men wear **mundu (traditional white dhoti)**, and women wear **sari** or traditional tribal garments.

Source:

- [The Hindu - Tribal king from Kerala](#)

U.S.'s New Rule for Exporting AI Chips

Context

The U.S. Bureau of Industry and Security (BIS) has introduced new regulations to control the export and transfer of **Artificial Intelligence (AI) chips**.

What Technology Do the Regulations Cover?

- **Advanced Computing Chips:** These are high-performance processors essential for training AI models.
- **Closed AI Model Weights:** AI models consist of mathematical operations applied to input data to generate output.
 - **Model Weights:** These are specific parameters that dictate how AI models function.
 - **Model Architecture:** Determines the quality and nature of AI outputs.
- **Total Processing Performance (TPP):**
 - The regulation sets caps on **compute power**, a key metric for GPU performance.
 - Countries subject to the restriction will have a TPP cap of **790 million** through 2027, equivalent to about **50,000 H100 GPUs**.
- **Exceptions and Exemptions:**
 - **Verified End User (VEU) Status:** Companies with special VEU status, like **Amazon Web Services** and **Microsoft Azure**, are exempt from caps. They can access large numbers of GPUs, such as **320,000 advanced GPUs** over the next two years.
 - **Small Orders:** Purchases of GPUs up to **1,700 H100 chips** do not count toward the cap, simplifying the process for universities, research organizations and medical institutions.
 - **Gaming GPUs:** Purchases of GPUs for gaming purposes are exempt from the restrictions.
- **Impact on India:**
 - **VEU Authorisation:** Indian data centers aiming to deploy advanced AI chips now need to apply for **VEU authorisation** to expedite processes.
 - The policy may **redirect investments towards India, boosting its role in the global AI and tech ecosystem**.

Classification of countries

- The new rules update export, re-export, and transfer controls by segregating **countries into three tiers**:
- **Tier 1:** Includes **18 trusted allies and partners** (Australia, Belgium, Britain, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, South Korea, Spain, Sweden, Taiwan)
 - **No restrictions** on the export, re-export or transfer of advanced computing chips.
- **Tier 2:** Includes countries like **China and India**.
 - **Restrictions include:**
 - **Caps on volume** of exported chips.
 - **VEU (Validated End User) Authorisation** for transactions contributing to the development of advanced AI models.
 - Exemptions for chips not contributing to advanced AI models (e.g., clusters with a collective computation power of **~1,700 advanced GPUs** do not need authorisation).
- **Tier 3:** Arms-embargoed countries like **North Korea, Iraq, Iran, and Russia** - **No access** to the technology.

Source:

- [The Hindu - New rule for exporting AI chips](#)

PM Fasal Bima Yojna

Context

At least 4.14 lakh crop insurance claims submitted under the Pradhan Mantri Fasal Bima Yojana (PMFBY) were identified as bogus by the Maharashtra Agriculture Department.

About PM Fasal Bima Yojna (PMFBY)

- **PMFBY** is the **government sponsored crop insurance scheme** that integrates multiple stakeholders on a single platform.
- **Objective:** It aims at supporting sustainable production in agriculture sector by:
 - **Providing financial support to farmers** suffering crop loss/damage arising out of unforeseen events.
 - **Stabilizing the income of farmers** to ensure their continuance in farming.
 - Encouraging farmers to **adopt innovative and modern agricultural practices**.
- **Nodal Ministry:** Ministry of Agriculture & Farmers Welfare
- **Coverage of Crops:** Food crops (Cereals, Millets and Pulses), Oilseeds, Annual Commercial / Annual Horticultural crops.
- **Eligibility:** All farmers including **sharecroppers and tenant farmers**.
- **Premium:** **2% for Kharif, 1.5% for Rabi food and oilseed crops and 5% for commercial/horticultural crops.**
 - The balance of premium is shared by the **Central and State Government on a 50 : 50 basis**.
- **Risks Covered & Exclusions:**
 - **Basic Cover:** Risk of sowing, planting and germination failure, Risk of standing crop failure, Risk of post-harvest losses, Protection against calamities.
 - **Exclusions:** Loss or damage to notified insured crops due to **war, nuclear risks, malicious damage** and other preventable risks is excluded from the scope of coverage.

Source:

- [Indian Express - Bogus crop insurance claims](#)

Achievements of National Health Mission

Context

Recently, an assessment report of the National Health Mission from 2021-2024, was presented to the Union Cabinet.

About National Health Mission (NHM)

- It was launched in **2005** as the **National Rural Health Mission (NRHM)**.
- It was expanded in **2012** with the addition of the **National Urban Health Mission (NUHM)** under the unified NHM umbrella.
- **Objective:** To improve healthcare delivery in rural and urban areas, particularly focusing on maternal and child health, and communicable diseases.
- **Implementation:** NHM provides financial and technical assistance to States/UTs for healthcare service delivery.

Key Achievements of NHM (2021-24)

- **Expansion of Human Resources:** FY 2021-22: 2.69 lakh workers, including 90,740 CHOs (community health officers).
- **Reduction in Maternal and Child Mortality Rates:**
 - **Maternal Mortality Ratio (MMR):** Declined by 83% since 1990 (higher than the global decline of 45%).
 - **Under-5 Mortality Rate (U5MR):** Reduced from 45 (2014) to 32 (2020).
 - **Infant Mortality Rate (IMR):** Decreased from 39 (2014) to 28 (2020).
 - **Total Fertility Rate (TFR):** Dropped from 2.3 (2015) to 2.0 (2020).
- **Disease Control and Elimination**
 - **Tuberculosis (TB):** Incidence reduced from 237 per 1,00,000 population (2015) to 195 (2023). Mortality rate decreased from 28 to 22 (2015-2023).
 - **Malaria:** Cases and deaths declined by 13.28% and 3.22%, respectively, in 2021 compared to 2020.
 - **Sickle Cell Anemia:** Screened over **2.61 crore individuals** under the National Sickle Cell Anemia Elimination Mission launched in 2023.
 - **Pradhan Mantri TB Mukt Bharat Abhiyaan:** Supported by **1.56 lakh Ni-kshay Mitra volunteers**, benefiting **9.4 lakh TB patients**.

Source:

- [The Hindu - NHM](#)

New Norms for Tax Avoidance Treaties

Context

The Central Board of Direct Taxes (CBDT) has issued new guidelines regarding the Principal Purpose Test (PPT) under Double Tax Avoidance Agreements (DTAAs).

About the New Norms

- **Applicability of PPT:** The **Principal Purpose Test (PPT)** provisions will apply **prospectively** (i.e., for future transactions).
 - **Treaty-specific grandfathering provisions** under the DTAAs are excluded from PPT application.
- **Grandfathering Provisions:** It refers to protecting pre-existing agreements from being affected by new rules.
 - These provisions in DTAAs with **Cyprus, Mauritius, and Singapore** will continue to operate independently of the PPT provisions.
- **Guidance for Interpretation:** The circular emphasizes the use of **BEPS Action Plan 6** and the **UN Model Tax Convention** as reference frameworks for interpreting PPT provisions.

What is PPT (Principal Purpose Test) ?

- It was introduced under **BEPS Action Plan 6** by the **OECD** to prevent treaty abuse.
- If the **principal purpose** of a transaction is to exploit a tax treaty benefit, the PPT can deny such benefits.
 - **E.g.** Setting up a shell company in Mauritius purely to benefit from the India-Mauritius DTAA could trigger PPT provisions.

Double Tax Avoidance Agreements (DTAA)

- **DTAA** is an international treaty between two or more countries designed to **prevent the same Income from being taxed twice**.
- India has signed such agreements with around 90 countries, benefiting individuals who reside in one country but earn Income in another.

BEPS Action Plan 6

- BEPS stands for **Base Erosion and Profit Shifting**, an initiative by the OECD to tackle tax avoidance by multinational corporations.
- **Action Plan 6** addresses **treaty shopping** (use of tax treaties to reduce tax liability by routing investments through countries with favorable tax agreements).
- It deals with preventing the misuse of tax treaties through PPT and other measures.

UN Model Tax Convention

- A framework created by the United Nations to guide developing countries in negotiating tax treaties.
- It focuses on balancing the taxing rights of source and residence countries.

Source:

- [The Hindu - Tax avoidance treaties](#)

Space telescopes stumble on rule-breaking black hole

Context

An international team of researchers using **NASA's James Webb Space Telescope (JWST)** and the **Chandra X-ray Observatory** has discovered an unusual supermassive black hole, designated **LID-568**, which challenges existing theories of black hole formation and growth.

About Supermassive Black Holes

- They are the **largest type of black hole, found at the center of most galaxies.**
- They contain millions to billions of times more mass than the Sun.
 - **E.g. - Sagittarius A**, located at the center of the Milky Way. It has a mass of approximately **4.3 million solar masses.**

Discovery of LID-568

- LID-568 is a **low-mass supermassive black hole that existed 1.5 billion years** after the Big Bang, a time when the universe was just **8 years old.**
- **Observational Highlights:**
 - It was discovered using **Chandra X-ray Observatory** due to its **exceptional brightness in X-rays.**
 - **JWST's sensitivity** in the infrared spectrum enabled researchers to study its properties further.
- LID-568's **accretion rate exceeds the Eddington limit** by a factor of 40, making it an extreme example of **super-Eddington behavior.**
 - **Accretion rate:** It refers to the rate at which matter is falling onto a black hole, measuring how much mass is being added to the black hole per unit time. It is expressed in **units of solar masses per year.**

Eddington Limit

- It is the **maximum rate at which a black hole can pull in matter.**
- It occurs when the outward pressure from the radiation emitted by the matter equals the black hole's gravitational pull.
- If this limit is exceeded, the black hole can start emitting powerful radiation.

Source:

- [The Hindu - rule-breaking black hole](#)

News in Shorts

User development fee (UDF) charged by airports

- The **Public Accounts Committee (PAC)** has directed the **Airport Economic Regulatory Authority (AERA)** to give a detailed reply on the criteria used to calculate UDF, the total revenue earned and the corresponding amenities and infrastructure made for the passengers using this revenue.

User Development Fee (UDF)

- UDF is a fee collected from departing and, in some cases, arriving passengers at an airport.
- **Purpose:**
 - To fund infrastructure development and modernization projects.
 - To recover costs incurred by airport operators in building or expanding facilities like terminals, runways, and other services.
 - To maintain the quality of services and meet international aviation standards.
- The **Airports Economic Regulatory Authority of India (AERA)** regulates UDF at major airports.

Airports Economic Regulatory Authority (AERA)

- AERA is a statutory body constituted under the **Airports Economic Regulatory Authority of India Act, 2008**.
- AERA regulates tariffs and other charges (development fee and passenger service fee) for aeronautical services (air traffic management, landing, and parking of aircraft, ground handling services) at major airports.
 - **Major airports:** Airports with annual passenger traffic of at least **35 lakhs**.

For more information on Public Account Committee visit - [Study IQ](#)

Source:

- [The Hindu - User development fee](#)

Diamond Imprest Authorisation (DIA) Scheme

- It allows **duty-free import** of natural cut and polished diamonds under **¼ carat (25 cents) with an export obligation of 10% value addition**.
- **Objective:** To promote value addition, export growth and enhance the competitiveness of Indian diamond exporters, particularly MSMEs.
- **Eligibility:** All Diamond exporters holding Two Star Export House status and above and having US \$15 Million exports per year.
- The scheme does not apply to **Lab-Grown Diamonds (LGDs)**.

Facts

- India is the world's largest exporter of polished diamonds,
- India processes ~90% of world's rough diamonds by volume
- India accounts for 33% of global diamond exports by value.

Source:

- [PIB - Scheme to boost global competitiveness of diamond sector](#)

India's oil demand likely to hit yet another record in 2025-26

- India's consumption of refined petroleum fuels and products is projected to reach new highs in FY26.
- **Consumption Projections for FY26:**
 - **Total Petroleum Products Consumption:** Expected to grow by **4.7%** over the revised

estimate for FY25, reaching **252.93 million tonnes**.

Reasons for Growth in Petroleum Consumption

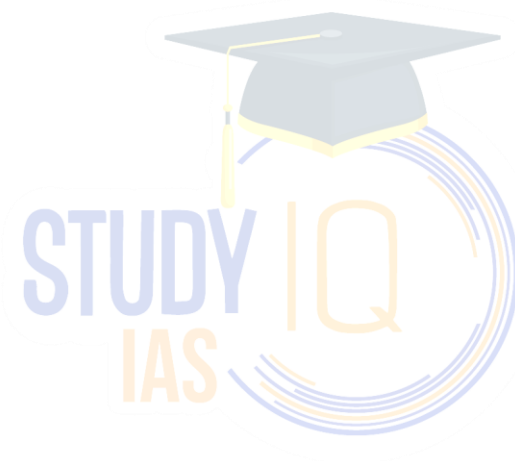
- **Economic Growth:** Rapid industrialization and energy-intensive industries drive demand.
- **Transportation Sector:** Increase in vehicle sales (both personal and commercial).
- **Expanding Aviation Market:** India is the **third-largest domestic aviation market**, leading to higher demand for aviation turbine fuel (ATF).

Petroleum Planning & Analysis Cell (PPAC)

- It is an attached office under the **Ministry of Petroleum and Natural Gas (MoPNG)**.
- It is the **most authentic official source** for data and policy analysis on the **Hydrocarbon sector in India**.
- It was established in **2002**. (HQ- New Delhi)

Source:

- [Indian Express - India's oil demand](#)



Editorial Summary

US Withdrawal From Paris Agreement, 2015

Context

Recently the U.S. withdrew from the Paris Agreement 2015.

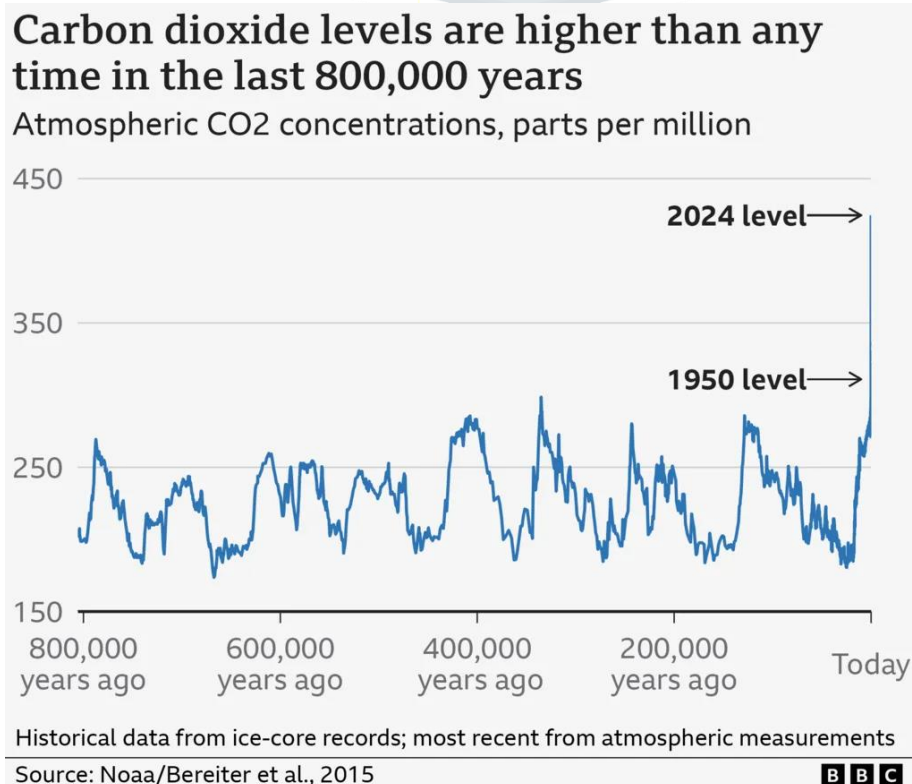
More in News

- It is the only country to have withdrawn thrice from a climate agreement:
 - George W. Bush's withdrawal from the Kyoto Protocol in 2001,.
 - Donald Trump withdrew from a climate agreement twice (2020 and 2025).

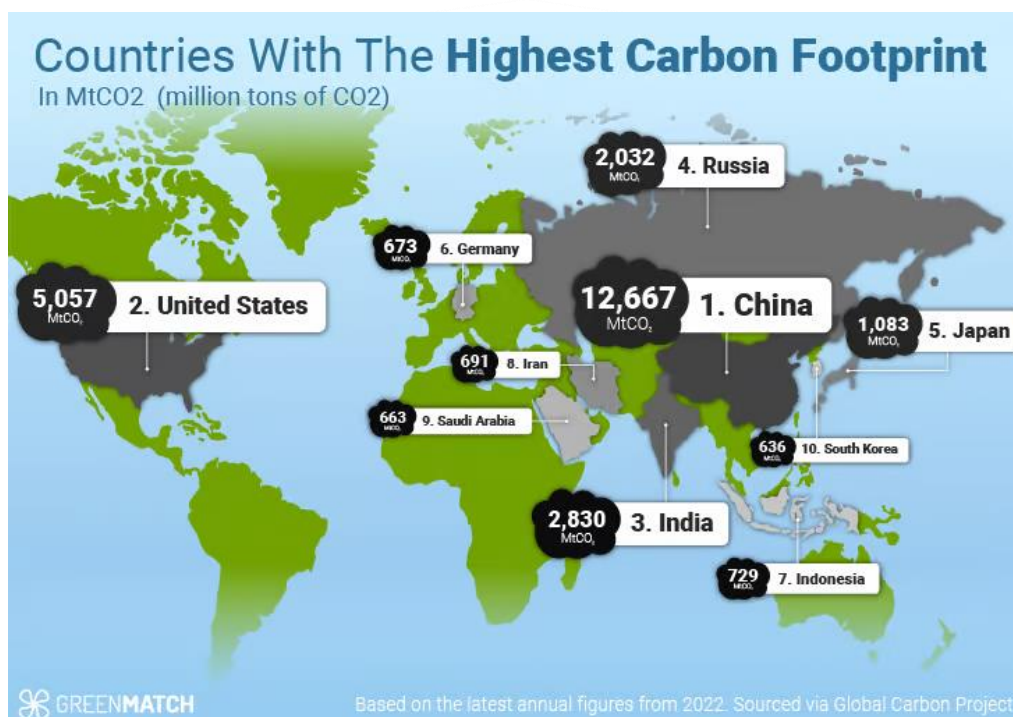
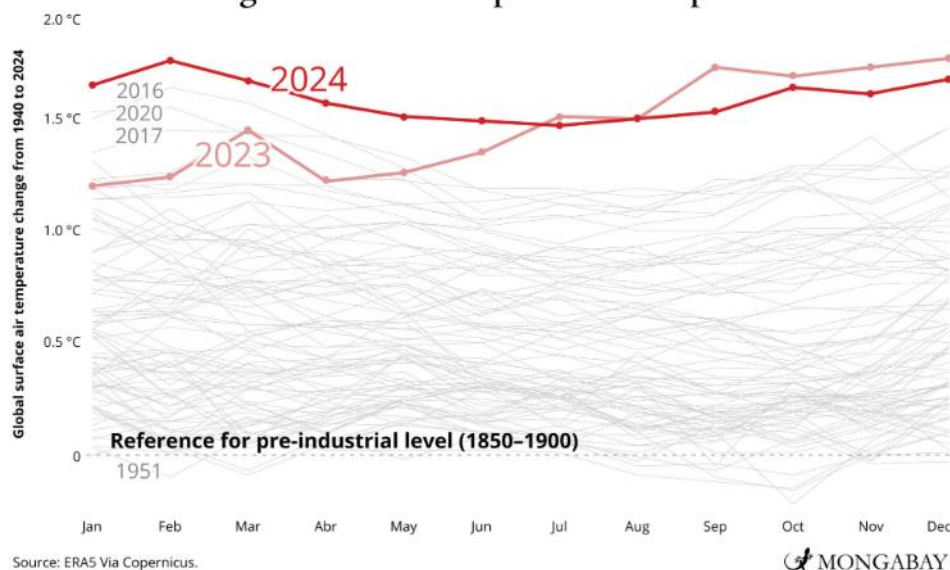
What Paris Agreement States?

- Under the Paris Agreement, nearly every country in the world agreed to a goal of limiting global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.
- It is a pact that is part of the **United Nations Framework Convention on Climate Change (1992)** in the Rio Earth Summit.
- It is a **legally binding** international treaty on climate change.

Current State of Climate



2024 is the first year in history with an average global temperature rising 1.5°C above the pre-industrial period

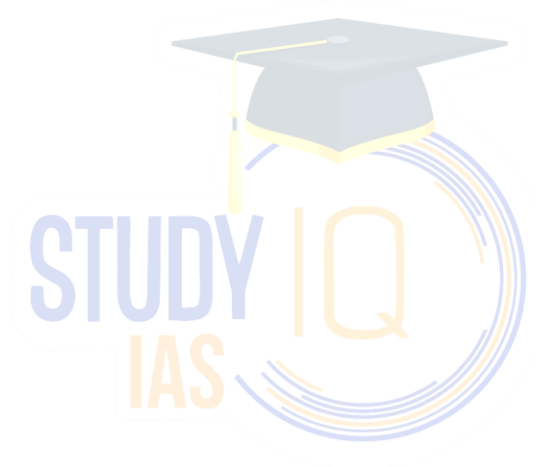


Impact of US Withdrawal

- The U.S. withdrawal poses a significant **setback to global climate mitigation efforts**.
- This will **hand China and the European Union a competitive edge** in the booming clean energy economy and lead to fewer opportunities for American workers.
- By exiting the Paris Agreement, the U.S. has **eroded its standing in global climate discussions**.
 - This decision undermines international efforts to combat climate change and diminishes the nation's influence in shaping future environmental policies.
- Despite federal rollbacks, **state-level initiatives and private sector leadership continue** to push for sustainability.

- E.g., California's climate laws and international fashion brands remain committed to environmental goals, highlighting the importance of subnational and private actions in driving climate commitments.

Source: [The Hindu: An Exit of Bluster](#)

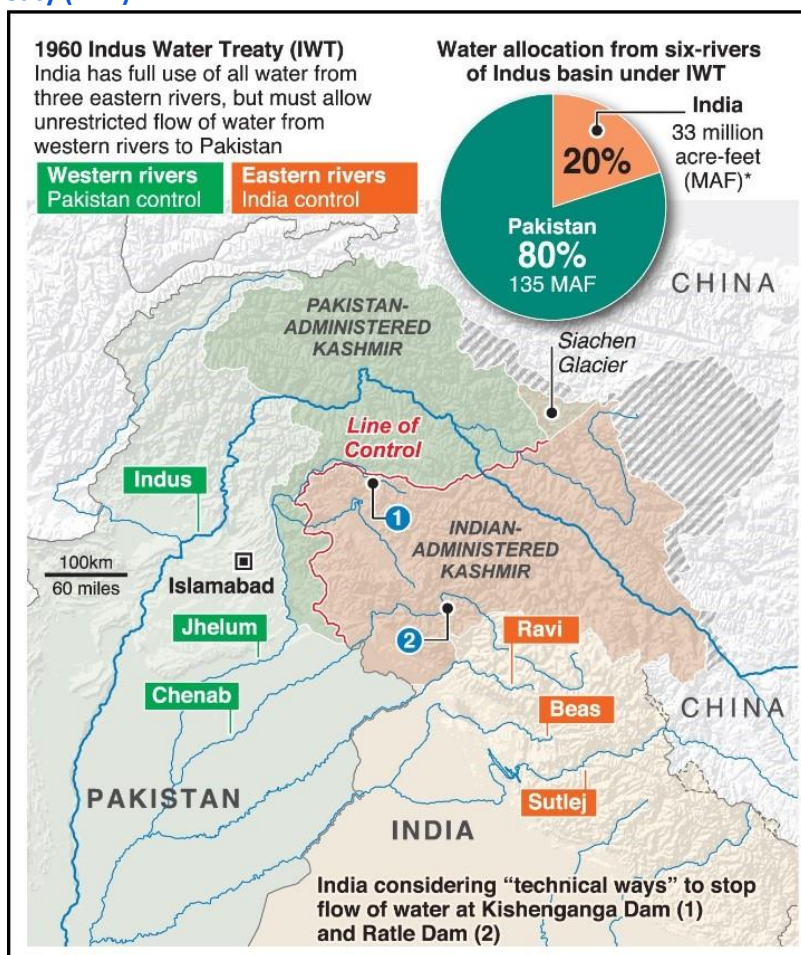


Indus Waters Treaty: Neutral Expert's Decision and Its Implications

Context

The recent decision by the Neutral Expert appointed by the World Bank under the Indus Waters Treaty (IWT) has significant implications for the ongoing water-sharing disputes between India and Pakistan.

Indus Waters Treaty (IWT)



- **Signed:** On September 19, 1960, by Indian Prime Minister Jawaharlal Nehru and Pakistani President Ayub Khan after nine years of negotiations facilitated by the World Bank.
- **Purpose:** To determine the distribution of waters from the Indus River and its tributaries between India and Pakistan.
- **Water Distribution Under the IWT:**
 - India has "unrestricted use" of **three Eastern Rivers:** Beas, Ravi, and Sutlej.
 - Pakistan controls **three Western Rivers:** Indus, Chenab, and Jhelum.
 - This distribution grants India only around 20% of the total water flow from the Indus River System, with the remaining 80% going to Pakistan.
 - Article III (1) mandates that India must allow the flow of Western River waters to Pakistan.

Current Dispute

- **Hydroelectric Projects:** The dispute centers on two hydroelectric projects in Jammu and Kashmir:

- **Kishenganga Hydroelectric Project (HEP)** on the Kishenganga River (a **tributary of Jhelum**).
- **Ratle HEP** on the **Chenab River**.
- **Pakistan's Objections:** Pakistan objects to these projects' design features, claiming they violate the IWT.
 - Despite being "run-of-the-river" projects that do not obstruct river flow significantly, Pakistan argues that they could affect water availability.
- **Neutral Expert Appointment:** In 2015, Pakistan requested a Neutral Expert to address its technical objections but later retracted this request in favor of adjudication by the Permanent Court of Arbitration (PCA).
 - India insisted on referring the matter to a Neutral Expert instead.

Implications for Future Relations

- **Ongoing Tensions:** The relationship between India and Pakistan remains strained, with minimal diplomatic engagement.
 - The Neutral Expert's decision may provide a framework for resolving technical disputes while avoiding escalation to arbitration.
- **India's Notice for Modification:** In January 2023, India issued a notice to Pakistan seeking "modification" of the IWT due to Islamabad's repeated objections.
 - This marked a significant development as it was the first notice of its kind in over six decades.
 - India's intent to review and potentially renegotiate aspects of the treaty reflects changing demographics, environmental concerns, and developmental needs.
- **Future Considerations:** Experts suggest that India's notification highlights "fundamental and unforeseen changes" necessitating a revisit of treaty terms. These include population growth, environmental issues, and cross-border terrorism impacts.

Source: [Indian Express: Why neutral expert's decision on IWT is a win for India](#)