

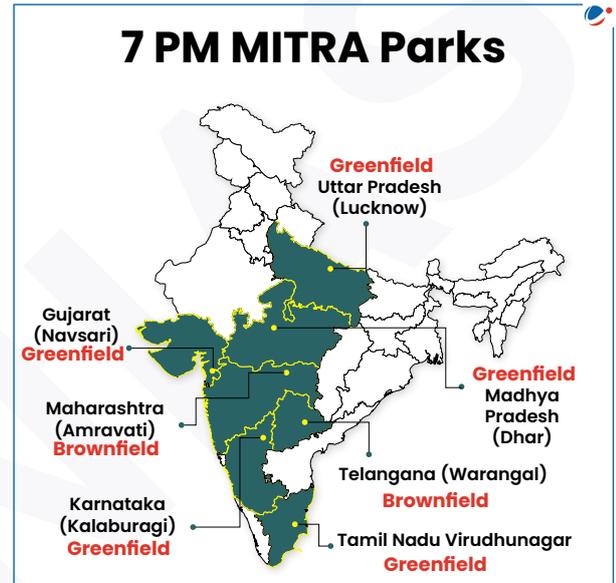
Madhya Pradesh Gets Approval for PM MITRA Textile Park Project

PM MITRA Park will be located in village Bhensola (Dhar district), Madhya Pradesh.

- It is one of the **seven PM MITRA Parks** approved for development under the PM MITRA (Mega Integrated Textile Region and Apparel) Scheme (Refer to map).

About PM MITRA Scheme

- Objective:** To strengthen the Indian textile industry by enabling **scale of operations, reduce logistics cost** by housing the entire value chain at one location, **attract investment, augment export potential** etc.
 - The scheme is inspired by the **5F vision (i.e. Farm to Fibre to Factory to Fashion to Foreign)** of the Prime Minister.
- Ministry:** Ministry of Textiles (MoT)
- Total Outlay:** ₹4,445 crore over a period of 7 years, up to 2027–28.
- Financial Assistance:** The MoT 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.
- Eligibility:** It will be set up on the basis of **proposals received from State Governments** having ready availability of **contiguous and encumbrance-free land parcel of minimum 1000 acres**.
- Implementation:** By **Special Purpose Vehicle (SPV)** which will be jointly owned by **State and Central government**.
- Project Monitoring:** MoT through a **Project Management Agency** providing technical & implementation support.



State of the World's Indigenous Peoples Report by UN Department of Economic and Social Affairs (UN-DESA)

The report highlights that **Indigenous People receive less than 1% percent** of international climate funding & are often **excluded from climate solutions**.

Climate Change Impact on Indigenous People

- Indigenous Economies:** Livelihoods dependent on agriculture, fishing, and forestry face growing uncertainty diminishing economic self-sufficiency and sustainability.
- Land and Natural Resources:** Disruption of ancestral lands and ecosystems affects traditional land-based practices, undermining environmental stewardship and sovereignty.
- Health and Well-being:** Increased vulnerability to climate-related health issues due to limited access to healthcare and traditional food sources.
- Linguistic & Cultural Heritage:** Climate change threatens preservation of Indigenous languages, traditions, & cultural identities.

Indigenous People's Role in Fighting Climate Change

- Biodiversity Conservation:** They are just **6% of the global population** but safeguard **80 % of the planet's remaining biodiversity**.
- Traditional Knowledge:** Source for traditional use & management of lands, territories and resources, with Indigenous agricultural practices that care for the earth without depleting resources.
 - E.g., **Comcaac people of Mexico** encode ecological & maritime knowledge in their language.
- Indigenous Culture:** In **Somalia**, cultural norms such as prohibitions on cutting certain trees passed through proverbs, stories, and taboos rather than policy papers.

State of the World's Indigenous Peoples (Volume VI)



Significant milestone achieved in Scramjet Engine Development

Defence Research & Development Laboratory (DRDL), a laboratory of DRDO, successfully completes 1000+ seconds Active Cooled Scramjet Subscale Combustor ground testing.

- This ground-test is in continuation of the earlier test reported for 120 seconds in January 2025.
- This marks crucial milestone in developing Hypersonic Weapon Technology.

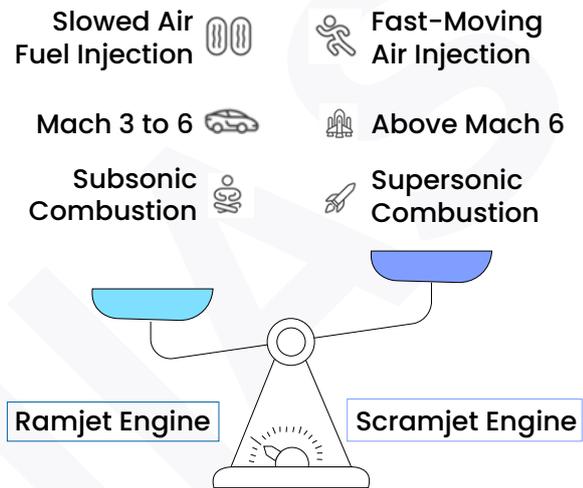
Scramjet (Supersonic Combustion Ramjet) Engine

- It is an advanced air-breathing jet engine, improving on ramjets by enabling efficient hypersonic speeds and allowing supersonic combustion.
 - ⊕ A ramjet uses the vehicle's forward motion to compress air without a compressor.
- India is the fourth country to demonstrate the flight testing of a Scramjet Engine.

Hypersonic Weapon

- It can travel at Mach-5 or faster, or at least five times the speed of sound and is powered by Air breathing engine.
- It can fly at lower altitudes than ballistic missiles, making them harder to track.
- Types:
 - ⊕ Hypersonic Glide Vehicles (HGV): Launched from a rocket, similar to regular ballistic missiles, before gliding to a target.
 - ⊕ Hypersonic Cruise Missiles (HCM): Powered throughout their flight via Scramjet engines.

Comparing Ramjet and Scramjet Engine Features



Annual master plan for the River Cities Alliance (RCA) approved

National Mission for Clean Ganga (NMCG) has approved the 2025 Action Plan under the RCA, aimed at mainstream river-sensitive urban planning in Indian cities.

- The plan encompasses a series of capacity-building programs, knowledge exchange platforms, development of technical tools, etc.

About River Cities Alliance (RCA)

- It is a joint initiative of the Ministry of Jal Shakti and Ministry of Housing and Urban Affairs, launched in 2021.
- Objective: strengthen institutional capacity, encourage inter-city collaboration, and support Urban River Management Plans (URMPs).
- RCA has 145 member cities.
 - ⊕ Any river city can join the Alliance at any time.

URMP Framework

- Launched in 2020 by National Institute of Urban Affairs (NIUA) and NMCG.
- Represents a first-of-its-kind approach to ensure that environmental, economic, and social dimensions are considered in the urban management of rivers.
- Five cities (Kanpur, Ayodhya, Chhatrapati Sambhaji Nagar, Moradabad, Bareilly) have already created URMPs.
 - ⊕ Chhatrapati Sambhaji Nagar's Kham River Restoration Mission was globally recognised by the World Resources Institute's Ross Center Prize for Cities.



About NMCG

- NMCG was registered as a society on August 12, 2011 under the Societies Registration Act, 1860.
- Objective: Aims to ensure effective abatement of pollution, conservation and rejuvenation of River Ganga by adopting river basin approach.
- It acted as the implementation arm of the National Ganga River Basin Authority (NGRBA).
 - ⊕ NGRBA was constituted under EPA, 1986 and replaced by National Ganga Council (chaired by Prime Minister) in 2016.
- Consists two tier management structure and comprises Governing Council and Executive Committee, both headed by Director General, NMCG.

World Bank's Brief on Poverty and Equity in India

Key Highlights

Poverty

- **Decline in Extreme Poverty (living on less than \$2.15 per day in PPP terms):** Declined from 16% (2011–12) to just 2.3% (2022–23), lifting around 171 million people above global poverty line.
- **Rural-Urban Gap:** Narrowed from 7.7 to 1.7 %.
- **Multidimensional Poverty:** Non-monetary poverty (measured by Multidimensional Poverty Index) declined from 53.8 % (2005-06) to 16.4 % (2019-21).
- **5 Most Populous states:** Uttar Pradesh, Maharashtra, Bihar, West Bengal, & Madhya Pradesh accounts for 54 % of India's extremely poor (2022-23) & 51 % of the multidimensionally poor (2019-21).

Inequality

- **Income Inequality:** India's consumption-based Gini index improved from 28.8 (2011-12) to 25.5 (2022-23). However **income inequality increased** from a Gini of 52 (2004) to 62 (2023) (World Inequality Database).
 - ⊕ Gini index/coefficient is a measure of income inequality.
- **Wage Disparity:** Median earnings of the top 10 % are 13 times higher than the bottom 10 % (2023-24).

Employment

- **Rising Employment:** Employment rates, especially among women, are rising, & urban unemployment also fell to the lowest since 2017-18.
- **Informal Jobs:** Only 23 % of non-farm paid jobs are formal.
- **Gender Disparities:** Despite a female employment rate of 31 %, gender disparities remain, with 234 million more men in paid work.



70th Year of the Bandung Conference

The first Asia-Africa summit, also known as the Bandung Conference, took place in Bandung, Indonesia, from April 18 to 24, 1955.

About Bandung Conference

- **Genesis:** In April, 1955, representatives from **29 governments** of Asian and African nations gathered in Bandung, Indonesia to discuss peace and the role of the **Third World** in the Cold War, economic development, and decolonization.
- It was co-sponsored by **Indonesia, Myanmar, Sri Lanka, India, and Pakistan.**
- **10 Core Principles of Bandung Conference:** Political self-determination, mutual respect for sovereignty, non-aggression, non-interference in internal affairs, and equality etc.
- **Precursor of the Non-Aligned Movement (NAM):** The Bandung Conference and its final resolution laid the foundation for the NAM during the Cold War.

What is NAM?

- **About:** The Non-Aligned Movement (NAM) is an **organization of States that did not formally align with the US or USSR** and sought to remain independent.
- **Formation:** It was formed in 1961, in the background of cold war between USSR and US.
- **NAM's first conference:** The **Belgrade Conference** in 1961.
- **Core Principles:** "Ten Principles of Bandung" proclaimed during Bandung Conference were later adopted as the main goals/principles of NAM.
- **Membership: 121 members** (including India).
- The NAM does not have a formal founding charter or treaty, nor does it have a permanent secretariat.



Also In News

Ramsar Convention

The Secretary General of the Ramsar Convention said that India has more Ramsar sites compared to China.

- India currently has 89 Ramsar site whereas China has 82.

About Ramsar Convention

- It is the **intergovernmental treaty** that provides the framework for the conservation and wise use of wetlands and their resources.
- It was **adopted in the Iranian city of Ramsar in 1971** and came into force in 1975.
 - ⊕ India ratified Convention in 1982
- Almost 90% of UN member states have become "**Contracting Parties**".
- A wetland must meet at least 1 of 9 criteria such as regularly supporting 20,000 or more water birds, or conserving biological diversity etc.

Ca. Electrothrix yaqonensis

Scientists in USA have discovered bacteria named Ca. Electrothrix yaqonensis which conducts electricity.

About Ca. Electrothrix yaqonensis

- It is named after the **Yaqona people**, indigenous to the Yaquina Bay region (USA).
- Notable for **electric conductivity** which is rare among bacteria. This conductivity helps **optimize metabolic functions** in sediment environments.
- **Significance:**
 - ⊕ It holds potential to develop **bioelectronic devices** for use in **medicine, industry, food safety etc.**
 - ⊕ These bacteria can transfer electrons to clean up pollutants, so they could be used to remove harmful substances from sediments.



Goods and Services Tax Appellate Tribunal (GSTAT)

Union Government notified GST Appellate Tribunal (Procedure) Rules, 2025.

- These rules detail the procedures for filing, managing, and adjudicating appeals before this quasi-judicial body.

About GSTAT

- It is the **second Appellate Authority** established under the **Central Goods and Services Tax Act, 2017 (CGST Act)**.
- **Function:** It hears various appeals under the **CGST Act** and the respective **State/UT GST Acts**.
- **Benches:** It has **one Principal Bench located at Delhi** and **31 State benches** located at various locations across States.

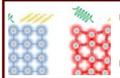


Human papillomavirus (HPV)

India's first indigenously developed **HPV test kits** for cervical cancer screening validated by **Department of Biotechnology (DBT)**.

About HPV

- HPV is a **common sexually transmitted infection** which can affect the skin, genital area and throat.
- In **most** cases the immune system clears HPV from the body.
- **Persistent infection with high-risk HPV** can cause abnormal cells to develop, which go on to become cancer.
 - ⊕ **Cervical cancer** is the most common type of cancer caused by HPV.
- **Treatment:** There is currently no treatment for HPV infection.



Phonon

A breakthrough method discovered of **controlling properties of phonons**.

About Phonon

- A phonon is a unit of **vibrational energy** resulting from the **collective oscillation of atoms** within a crystal.
 - ⊕ These vibrations, akin to **sound waves**, propagate through the material and can carry energy.
- Phonons are responsible for **carrying energy**, especially in the form of heat, through the material.
- **Significance:** Phonons play a key role in designing materials with custom thermal, optical, and electronic properties, making them crucial for advancements in **quantum technology**.



UN Spotlight Initiative

The **UN Spotlight Initiative** finds that climate change is intensifying the social and economic stresses that are fuelling increased levels of violence against women and girls.

- **Every 1°C rise in global temperature is associated with a 4.7% increase in intimate partner violence.**

About UN Spotlight Initiative

- It is a global strategic partnership between the **European Union (EU)** and the **United Nations (UN)**.
- **Launch:** 2017
- **Objective:** To ensure that all women, especially those **marginalised and vulnerable**, live free from violence and harmful practices.



Temperature Flip

Over 60% of the global land area has experienced **temperature flips** since 1961 as per study.

- Researcher observed that **first intense flips** likely began in the **early 20th century**, with acceleration in recent decades.

About Temperature Flip

- It refers to sudden **swings between extreme heat and cold** (or vice versa) within a short time frame.
- It can lead to **severe health, environmental, and infrastructure impacts** due to lack of time to adapt.



Labeo uru and Labeo chekida

ICAR-National Bureau of Fish Genetic Resources (NBFGR) discovered two new species of fish.

About Discovery

- Labeo uru, named after the traditional wooden dhow for its sail-like elongated fins, was found in the **Chandragiri river**.
 - ⊕ **Chandragiri river is a west flowing** interstate river originating from **Pattimala hills in Kodagu in Karnataka**.
- **Labeo chekida**, a small, dark-bodied fish known locally as 'kaka chekida', inhabits the **Chalakkudy river**.
 - ⊕ **Chalakkudi River** is formed by the **confluence of five streams originating** in the Anamalai Hills of the Western Ghats.
- Both are **freshwater fish and endemic to river systems**, highlighting the role of the **Western Ghats as a biodiversity hotspot**.

Personality in News



Dr. Krishnaswamy Kasturirangan (1940-2025)

Distinguished space scientist Dr. K. Kasturirangan passed away.

Key Contributions

- **Space:** Served as **Chairman of ISRO (1994–2003)**, under his leadership **key space missions were materialised** including:
 - ⊕ Operationalization of **Polar Satellite Launch Vehicle (PSLV)** and the first successful **Geosynchronous Satellite Launch Vehicle (GSLV) flight**.
 - ⊕ **Earth observation satellites** like BHASKARA-I & II etc.
 - ⊕ Conceptualising India's first space-based high-energy astronomy observatory "AstroSat".
- **Education:** He chaired the **Committee on Draft National Education Policy (2019)**.
- **Environment:** He led a **10-member High-Level Working Group** for preparing a report on the ecologically sensitive **Western Ghats**.
 - ⊕ The report proposed to identify **37 per cent of the Western Ghats** as environmentally sensitive.



Values

- Visionary leadership, public service, etc.

