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## National Action for Mechanized Sanitation Ecosystem (NAMASTE)

**Context:** Minister of State for Ministry of Social Justice and Empowerment, Shri Ramdas Athawale, mentioned NAMASTE Scheme in the reply to Lok Sabha yesterday.

- **Duration:** 01.04.2023 to 31.03.2026
- **Objective:** Tackle hazardous cleaning practices
- **Key Features:**
  - ✓ Sanitation workers collectivized into Self-Help Groups (SHGs) to run sanitation enterprises.
  - ✓ Sewer and septic tank sanitation workers (SSWs) and their dependents get access to livelihoods through capital subsidies for sanitation equipment.
- **Capital Subsidy for Sanitation Projects:**
  - ✓ Projects up to Rs. 5.00 lakh: 50% of project cost
  - ✓ Projects above Rs. 5.00 lakh and up to Rs. 15.00 lakh: Rs. 2.50 lakh + 25% of the remaining cost above Rs. 5.00 lakh
  - ✓ Group projects up to Rs. 50.00 lakh: Each beneficiary's share maximum up to Rs. 10.00 lakh.
  - ✓ Group projects: Maximum per member subsidy of Rs. 3.75 lakh, and maximum group project subsidy of Rs. 18.75 lakh.
- **Subsidy Details**
  - ✓ Capital Subsidy Released under SRMS:
    - Rs. 22.93 Cr released for 286 units of sanitation-related equipment/projects.
    - Benefited 641 Safai Karamcharis.
  - ✓ Loans Released under **Swachhta Udyami Yojana (SUY):**
    - Rs. 86.84 Cr released to State Channelizing Agencies (SCAs).
    - Benefited 2509 beneficiaries for procurement of mechanized cleaning equipment/vehicles.

### Swachhta Udyami Yojana (SUY)

- Launched on 2nd October 2014 by the Ministry of Social Justice and Empowerment.
- **Objectives:** Promote cleanliness and provide livelihoods to Safai Karamcharis and liberated Manual Scavengers under "Swachh Bharat Abhiyan."
- **Components:**
  - ✓ Pay and Use Community Toilets in PPP mode.
  - ✓ Sanitation-related Vehicles procurement and operation.
- **Eligibility:** Individuals, self-help groups, and target group of Manual Scavengers/Safai Karamcharis and their dependents.
- **Loan Amount:** Maximum Rs. 25 lakhs for toilets, Rs. 15 lakhs for vehicles.
- **Subsidy:** Maximum Rs. 3.25 lakh for eligible units under SRMS.
- **Training:** Skill development training provided by NSKFDC with stipend if required..

## TransLunar Injection (TLI)

**Context:** ISRO has successfully executed the TransLunar Injection (TLI) to propel Chandrayaan-3 towards the moon.

- The TransLunar Injection (TLI) is a critical maneuver in space missions.
- It is performed to transfer spacecraft from Earth's orbit to a trajectory aimed at reaching the Moon.
- TLI enables the spacecraft to overcome Earth's gravitational pull and travel towards the Moon.
- TLI is conducted when the spacecraft reaches a specific point in its orbit known as the 'perigee,' which is the closest point to Earth.
- The TransLunar Injection (TLI) is accomplished through the following process:



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- ✓ The spacecraft's propulsion system ignites its engines, leading to an acceleration of the spacecraft.
- ✓ As a result of the acceleration, the spacecraft attains the necessary velocity to escape Earth's gravitational influence and set course towards the moon.
- ✓ The thrust and duration of the TLI burn are determined by factors such as the spacecraft's mass, its velocity in Earth's orbit, and the mission's specific goals.

#### What next?

- After a successful TLI, the spacecraft is on a lunar trajectory without further propulsion from Earth.
- It enters a transfer orbit, intersecting with the Moon's orbit.
- The spacecraft continues its journey in an eccentric orbit until it reaches the Moon.
- Additional maneuvers, like lunar orbit insertion (LOI), may be performed for lunar orbit or landing, based on the mission's objectives.
- TLI has been used in various lunar missions, including Apollo, Chang'e, and Artemis missions.

## India Stack

**Context:** India's Ministry of Electronics and IT (MeitY) and Papua New Guinea's Ministry of Information and Communication Technology (MICT) signed an MoU to share India Stack.

- India Stack comprises a set of Application Programming Interfaces (APIs) offering a unique digital infrastructure for governments, businesses, startups, and developers.
- The **three layers of open APIs** in India Stack are **identity, payments, and data**.
- Despite the name, India Stack's vision is not limited to India and can be applied in any country, regardless of its development status.
- India Stack consists of **four technology layers**:
  - ✓ **Presenceless layer:** Enables universal biometric digital identity for easy access to services across the country.
  - ✓ **Paperless layer:** Allows digital records to replace physical documentation.
  - ✓ **Cashless layer:** Provides a unified interface for all bank accounts and wallets for seamless payments.
  - ✓ **Consent layer:** Facilitates secure data movement to democratize the data market.
- India Stack includes key APIs like Aadhaar Proof, Aadhaar e-KYC, e-Sign, Digital Locker, and Unified Payment Interface (UPI).
- The Open API team at iSPIRT has been a pro-bono partner, contributing to the development, evolution, and promotion of these APIs and systems.

#### What is API?

- API stands for **Application Programming Interface**. It allows software applications to communicate and interact, enabling developers to access specific features or data from other applications without understanding their internal workings.
- **Functions:**
  - ✓ **Communication Bridge:** APIs facilitate communication between different software applications.
  - ✓ **Standardized Interfaces:** APIs provide standardized rules and protocols for interaction.
  - ✓ **Data Access:** APIs allow access to specific data or resources from external systems.
  - ✓ **Functionality Extension:** APIs let developers extend app functionality by integrating with third-party services.
  - ✓ **Software Integration:** APIs enable seamless integration between diverse software systems.
- **Examples:**
  - ✓ **Twitter API:** Access and interact with Twitter features programmatically.
  - ✓ **Google Maps API:** Integrate Google Maps functionality into applications.
  - ✓ **Spotify API:** Fetch songs and music data from Spotify.
  - ✓ **GitHub API:** Interact with GitHub repositories and manage issues.

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## Lokmanya Tilak National Award

**Context:** The Prime Minister was honoured with the Lokmanya Tilak National Award during his visit to Pune.

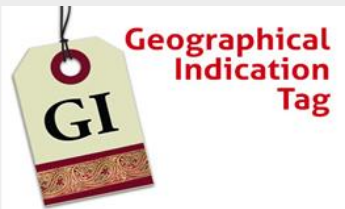
- The Lokmanya Tilak National Award was instituted in 1983 by the Tilak Smarak Mandir Trust.
- It is presented every year on 1st August, the death anniversary of Lokmanya Tilak.
- The award recognizes individuals who have made remarkable and extraordinary contributions to the progress and development of the nation.

### Some facts about Lokmanya Bal Gangadhar Tilak

- Bal Gangadhar Tilak, known as Lokmanya Tilak, was a prominent Indian nationalist and freedom fighter during the Indian independence movement.
- He advocated strongly for Swaraj (Self Rule) for India, famously declaring, "Swaraj is my birthright and I shall have it."
- Tilak joined the Indian National Congress Party in 1890 and helped found the All India Home Rule League in 1916–18 with G. S. Khaparde and Annie Besant.
- He was considered a radical nationalist and was termed the "Father of Indian Unrest" by the British Government.
- Tilak was a prolific writer and journalist, using newspapers like "Kesari" (in Marathi) and "Maratha" (in English) to promote nationalist ideas.
- He established the Deccan Education Society in 1884, founding institutions like Fergusson College and the New English School to promote modern education in Maharashtra.
- Tilak advocated for social reform, supporting the eradication of untouchability and child marriage, and promoting education for women.
- He was imprisoned for sedition multiple times, and during one incarceration, he wrote the famous book "Gita Rahasya" (The Secret of the Bhagavad Gita).
- Tilak, along with Bipin Chandra Pal and Lala Lajpat Rai, formed the 'Lal-Bal-Pal triumvirate' of popular leaders.
- In 1916, he concluded the Lucknow Pact with Mohammed Ali Jinnah, promoting Hindu-Muslim unity in the nationalist struggle.

## NEWS IN BETWEEN THE LINES

### India's GI Tagged Crafts



Recently, the Geographical Indications Registry in Chennai granted the GI tag to seven products from different regions of India, with four originating from Rajasthan.

**GI Tag:** A Geographical Indication (GI) tag is a form of intellectual property right granted to products with specific geographical origins and distinct qualities, reputation, or characteristics closely linked to that region.

**Statewise GI Tagged Products are as follows:**

#### Rajasthan:

- **Udaipur Koftgari Metal Craft:** Intricate designs, gold-silver wirework on ornamental weaponry.
- **Bikaner Kashidakari Craft:** Intricate mirror work on wedding gift items.
- **Jodhpur Bandhej Craft:** Traditional tie and dye fabric art.
- **Bikaner Usta Kala Craft:** Rich gold nakashi work tradition.

#### Goa:

- **Goa Mankurad Mango:** Unique mango variety, delightful flavor.
- **Goan Bebinca:** Traditional Indo-Portuguese dessert.

#### Uttar Pradesh:

- **Jalesar Dhatu Shilp (Metal Craft):** Decorative metal craft, brassware production.

### State Human Rights Commission

#### What is the State Human Right Commission?

The State Human Rights Commission (SHRC) in India is an independent government body established under the Protection of Human Rights Act, 1993.

**Jurisdiction:** It can investigate violations of human rights in subjects included in the State List (List-II) and the Concurrent List (List-III) of the Constitution's Seventh Schedule.

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**Functions:** It addresses human rights breaches, recommends actions and relief and seeks information during inquiries conducted within one year of an alleged violation.

**Powers:** The Commission can govern its procedure, seek information and provide recommendations, compensation or relief for victims.

**Composition:** Each SHRC includes a Chairperson (retired Chief Justice or High Court Judge) and two Members (retired High Court or District Judges with human rights experience).

**Protection of Human Rights (Amendment) Act, 2019:** The amendment expanded the composition and tenure of the National and State Human Rights Commissions, allowing more flexibility in delegation of tasks.

## Polypill



### What is Polypill?

Polypill is a fixed-dose combination of cardiovascular medicines used for primary and secondary prevention of atherosclerotic cardiovascular diseases.

**Recent Endorsement:** The World Health Organization (WHO) included three polypills in its revised Model Lists of Essential Medicines 2023.

**Evidence-based:** Polypills have shown reduced risks of cardiovascular events, including heart attacks and strokes, based on large randomized-controlled trials.

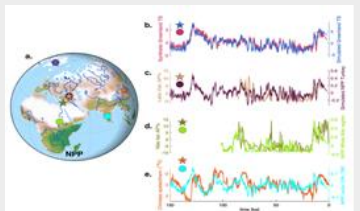
**Contributions:** Dr. Salim Yusuf and co-researchers proposed the concept in early 2000s, demonstrating a 40% to 50% reduction in cardiovascular risks.

**Polycap:** One of the included polypills, Polycap, combines four drugs (simvastatin, ramipril, atenolol, hydrochlorothiazide) and aspirin.

**Cost-effective Intervention:** Polypills are considered a low-cost public health intervention, enhancing medication adherence and preventing hospitalizations.

**Implementation:** Widening polypill prescription through government formulary can increase its usage among private practitioners, leading to a significant reduction in cardiovascular events and deaths.

## Paleo Proxy



### What is Paleo Proxy?

A Paleo Proxy is a biological or chemical signature used to estimate historical temperatures before thermometers were invented.

**Measurement Basis:** Proxy indicates past temperatures as deviations from a modern baseline value, but it does not directly measure temperatures.

**Dating Method:** Scientists use isotopes with steady radioactive decay rates (e.g., carbon or lead) to estimate the age of proxies and determine historical temperature variations.

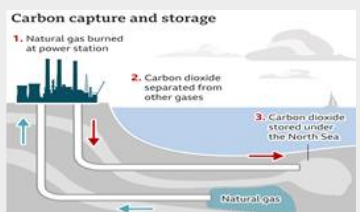
**Time and Spatial Scales:** Paleo Proxies provide temperature anomaly estimates over long timescales (centuries to thousands of years) and at local or regional levels.

**Limitation:** They cannot estimate daily temperatures or short-term changes, and global estimates based on averaging local proxies have higher uncertainties.

**Climate Change Study:** Paleo Proxies offer valuable insights into climate responses over longer timescales, like the Holocene epoch.

**Scientific Caution:** Making record-breaking warm day claims from paleo proxies lacks accuracy and may jeopardize scientific credibility and climate action efforts.

## Carbon Capture Storage



### What is Carbon Capture Storage?

Carbon Capture Storage (CCS) is a technology that captures carbon dioxide (CO<sub>2</sub>) emissions produced at the source (point-source CCS) or removes CO<sub>2</sub> already released into the atmosphere (direct air capture).

**Types of CCS:** CCS includes point-source CCS (captures CO<sub>2</sub> at the source like smokestacks) and direct air capture (removes CO<sub>2</sub> from the atmosphere).

**CCS Process:** CO<sub>2</sub> is separated from industrial gases, compressed and transported via pipelines to be injected deep underground into rock formations for long-term storage.

**Role in Climate Targets:** CCS can aid in reaching global climate targets set under the Paris Agreement, but focus should remain on preventing emissions in the first place.

**UK Government Support:** The UK government is investing \$25.7 billion over 20 years in CCS projects to achieve net zero goals.

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	<p><b>Project Objectives:</b> The new British CCS projects aim to capture emissions from heavy-emitting sectors (e.g., oil and gas refining, steel manufacturing) and store them underground in depleted oil and gas fields off the coast of Britain.</p> <p><b>Proven Technology:</b> CCS has been operational since the 1970s, with over 200 million tonnes of CO2 captured and stored globally.</p>
<p><b>Pingali Venkayya</b></p> 	<p><b>About Pingali Venkayya:</b></p> <ul style="list-style-type: none"> <li>➤ Pingali Venkayya (August 2, 1876 - July 4, 1963) was an Indian freedom fighter, linguist, and geologist. He was born in present-day Andhra Pradesh, India.</li> <li>➤ Venkayya was proficient in several languages, including Telugu, Hindi, Urdu, Bengali, Tamil and English.</li> </ul> <p><b>Designing the Indian National Flag:</b></p> <ul style="list-style-type: none"> <li>➤ In 1921, during the All India Congress Committee meeting in Bezwada (present-day Vijayawada), Venkayya proposed the design of the Indian National Flag.</li> <li>➤ The original design featured three stripes of saffron, white and green, with a spinning wheel in the middle, representing India's rural economy and the Khadi movement.</li> </ul> <p><b>Recognition and Honors:</b></p> <ul style="list-style-type: none"> <li>➤ After India gained independence in 1947, the Indian government recognized Venkayya's contributions.</li> <li>➤ He was awarded the Padma Bhushan, one of India's highest civilian honors, in 1955.</li> </ul> <p><b>Contributions to the Indian Independence Movement:</b></p> <ul style="list-style-type: none"> <li>➤ Inspired by Mahatma Gandhi's ideals, Venkayya actively participated in the Indian freedom struggle.</li> <li>➤ He was a member of the Indian National Congress and played a role in various campaigns and agitations for independence.</li> </ul>
<p><b>Place in News</b> <b>Port of Vitoria</b></p>	<p>Recently, four Nigerian stowaways embarked on a perilous and life-threatening journey across the Atlantic Ocean, which culminated at the Port of Vitoria in southeastern Brazil.</p> <p><b>Location:</b> The Port of Vitoria is a large-sized port located on the East Coast of South America in Brazil.</p> <p><b>Type of Port:</b> Vitoria is a Large-sized Port.</p> <p><b>Types of Vessels:</b> The port regularly receives various types of vessels, including Bulk Carriers (22%), General Cargo (15%), Offshore Supply Ships (11%), Vehicles Carriers (10%), and Pipe Layers (7%).</p> 

## POINTS TO PONDER

**What is the state bird of Himachal Pradesh?** - Western horned Tragopan

**The iconic bird logo of Twitter has been replaced with a new logo. What is that?** – The alphabet X

**What river primarily acts as the border between the United States and Mexico?** – Rio Grande

**What is X-59, also known as the 'Son of Concorde'?** – USA's Experimental Supersonic Aircraft

**Which institution had developed Structured Financial Messaging System (SFMS)?** - Indian Financial Technology & Allied Services (IFTAS)

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