



May - 13

## TNPSC BITS

- ❖ 56% of deliveries in Tamil Nadu took place in government hospitals during 2024-2025, and of this, 83% were in the Comprehensive Emergency Obstetric and the Newborn Care (CEmONC) centres.
  - Tamilnadu State accounts for 99.9% institutional deliveries (8.02 lakh) and State's MMR was 39 per 1,00,000 live births during 2024-2025.
- ❖ Bhutan launched the world's first national-level cryptocurrency tourism payment system in partnership with Binance Pay and DK Bank.
- ❖ At the 20th session of the United Nations Forum on Forests (UNFF20) held in New York, India highlighted its ongoing commitment to forest conservation and sustainable forest management.

## TAMIL NADU NEWS

### U5 Mortality rate in Tamil Nadu

#### Under 5-years mortality rate

- The **numerator** is the number of deaths among children under 5-years of age reported during a given time period
- The **denominator** is the number of live births reported during the same time period.
- The under 5-years mortality rate is usually expressed per 1,000 live births.

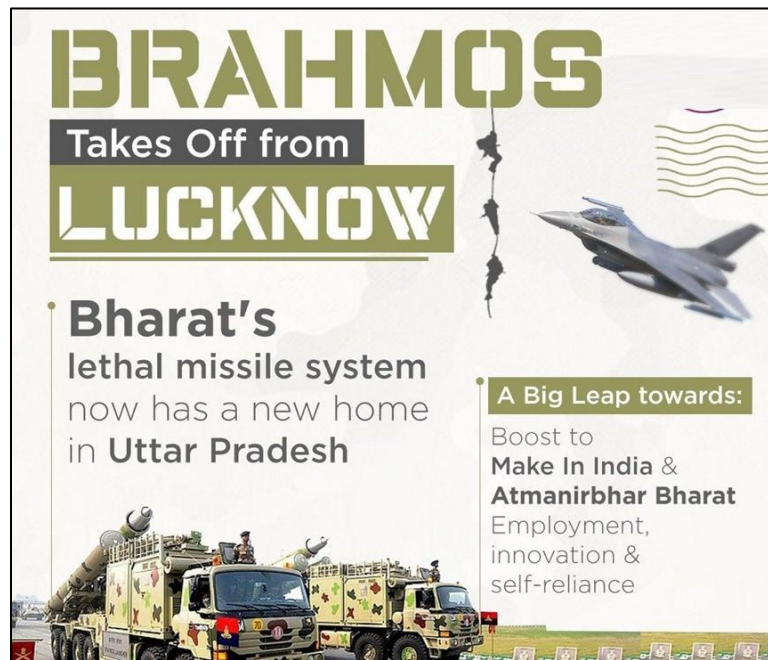
- ❖ The under-five mortality rate (per 1,000 live births) has been falling from 10.9 during 2022-2023, it dropped to 8.2 during 2024-2025.
- ❖ Tamil Nadu has a special scheme - Uttachathai Uruthi Sei (Ensure nutrition) - to identify malnourished children in anganwadi centres through our health teams.

- ❖ Also, there is an Integrated Child Development Services (ICDS) to providing them with supplementary nutrition.

## **NATIONAL NEWS**

### **BrahMos Missile Production unit**

- ❖ The BrahMos missile production unit was officially inaugurated at the Uttar Pradesh Defence Industrial Corridor, Lucknow.
- ❖ This facility's target is to produce 80 to 100 missiles annually.
- ❖ The BrahMos is one of the fastest supersonic cruise missiles in the world.
- ❖ With a range of 290 to 400 km and a top speed of Mach 2.8, the missile can be launched from land, sea, or air.



### **Determination of Cost of Production Regulations, 2025**

- ❖ The Competition Commission of India (CCI) has notified the regulations for determining the cost of production.
- ❖ It is aimed at effectively assessing alleged predatory pricing and deep discounting practices in the quick commerce and e-commerce sectors.
- ❖ Predatory pricing occurs when a dominant firm sets prices below the production costs to eliminate competition.
- ❖ Once competitors are driven out, the firm can raise prices.

- ❖ This practice is considered anti-competitive and is explicitly prohibited under Section 4(2)(a)(ii) of the Competition Act, 2002.

CCI (Determination of Cost of Production) Regulations, 2009	CCI (Determination of Cost of Production) Regulations, 2025
The regulation relied on market value, that was defined as consideration which the customer pays or agrees to pay for a product that is/can be sold or provided.	The regulation relies on average total cost, i.e., defined as total cost divided by total output during the referred period.
The determination of cost included cost concepts such as avoidable cost, long-run average incremental cost, market value.	The determination of cost proposed to include cost concepts such as average total cost, average avoidable cost, or long-run average incremental cost.
<i>The proposed draft is a shift from market value to average total cost as a factor for the determination of cost.</i>	

## 2025 Updates in MMR, U5MR, NMR

MATERNAL MORTALITY RATIO							Karnataka has already met the United Nations Sustainable Development Goal (SDG) target of reducing MMR to 70 by 2030.
Year	India	K'taka	AP	Telangana	Kerala	TN	
2014-16	130	108	74	81	46	66	<b>PANEL'S RECOMMENDATIONS</b> <ul style="list-style-type: none"> <li>● After recent deaths of new mothers in Ballari, the health department's expert committee made recommendations to improve maternal care</li> <li>● Administer correct dosages of IFA tablets, iron sucrose, and FCM injections to treat anemia</li> <li>● Strengthen documentation in Thyai card, RCH portal, and other records</li> <li>● Mandate hospital stays: 3 days after normal birth, 5-7 days after caesarean</li> <li>● Avoid unnecessary caesarean sections</li> <li>● Conduct monthly counselling/tracking of mothers until 8th month, increasing frequency as delivery approaches</li> <li>● Finalise local transport arrangements well before delivery date</li> </ul>
2015-17	122	97	74	76	42	63	
2016-18	113	92	65	63	43	60	
2017-19	103	83	58	56	30	58	
2018-20	97	69	45	43	19	54	
2019-21	93	63	46	45	20	49	

### WHO DEFINITION

As per World Health Organisation, maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

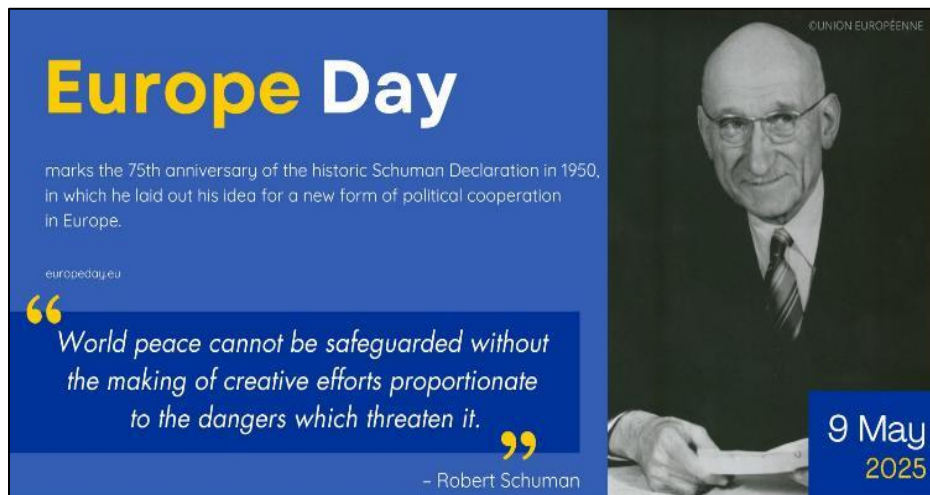


- ❖ Three States in India — Kerala, Maharashtra, and Tamil Nadu — have attained the U.N. Sustainable Development Goals (SDGs) targets in MMR, U5MR, NMR.
- ❖ The targets in Maternal Mortality Rate or MMR are  $\leq 70$  by 2030; Under-Five Mortality Rate or U5MR are  $\leq 25$  by 2030; and Neonatal Mortality Rate or NMR are  $\leq 12$  by 2030).
- ❖ Eight States have already attained the MMR SDG target, including Kerala (20), Maharashtra (38), Telangana (45), Andhra Pradesh (46), Tamil Nadu (49), Jharkhand (51), Gujarat (53), and Karnataka (63).

- ❖ Twelve States/Union Territories have already attained the U5MR SDG target — Kerala (eight), Delhi (14), Tamil Nadu (14), Jammu & Kashmir (16), Maharashtra (16), West Bengal (20), Karnataka (21), Punjab (22), Telangana (22), Himachal Pradesh (23), Andhra Pradesh (24), and Gujarat (24).
- ❖ Six States/Union Territories have already attained the NMR SDG target — Kerala (four), Delhi (eight), Tamil Nadu (nine), Maharashtra (11), Jammu & Kashmir (12), and Himachal Pradesh (12).
- ❖ India's MMR had shown a marked reduction, declining by 37 points from 130 per lakh live births in 2014-16 to 93 in 2019-21.
- ❖ India's Infant Mortality Rate (IMR) declined from 39 per 1,000 live births in 2014 to 27 per 1,000 live births in 2021.
- ❖ The NMR declined from 26 per 1,000 live births in 2014 to 19 per 1,000 live births in 2021.
- ❖ The U5MR declined from 45 per 1,000 live births in 2014 to 31 per 1,000 live births in 2021.
- ❖ The Sex Ratio at Birth improved from 899 in 2014 to 913 in 2021.
- ❖ The Total Fertility Rate has remained consistent at 2.0 in 2021.
- ❖ This is a significant improvement from 2.3 in 2014.

## INTERNATIONAL NEWS

### 75<sup>th</sup> anniversary of the Schuman Declaration



- ❖ The European Union celebrated the 75th anniversary of Schuman Declaration.
- ❖ It is the founding document that laid the groundwork for European integration and, ultimately, the EU.



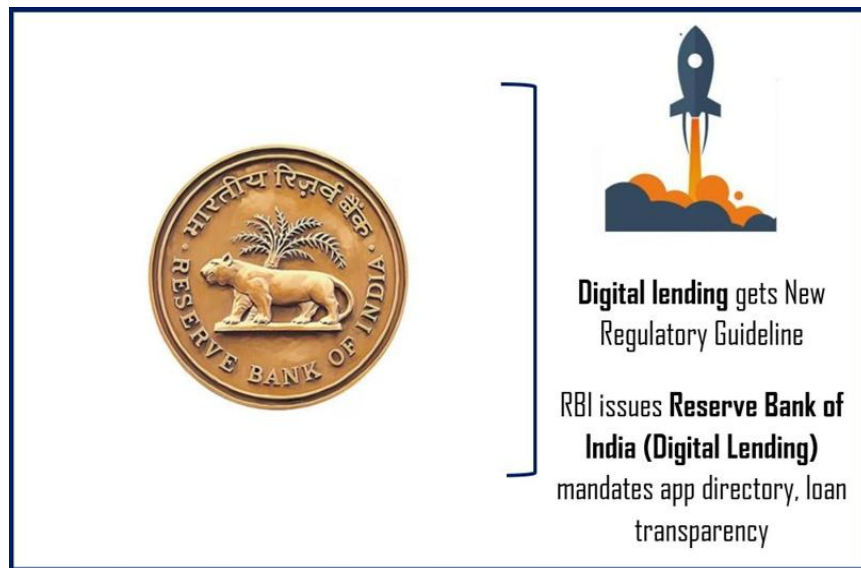


- ❖ On May 9, 1950, the then-French Foreign Minister Robert Schuman proposed establishing a European Coal and Steel Community.
- ❖ It is widely regarded as the first formal step in the formation of the European Union.

## **ECONOMY NEWS**

### **RBI's New Digital Lending Regulations 2025**

- ❖ It aims to streamlining and consolidating the regulatory framework for the digital lending activities undertaken by Regulated Entities (REs).
- ❖ The new rules require regulated entities to report their digital lending applications through the Centralised Information Management System (CIMS) portal.
- ❖ This initiative is set to encourage trust among borrowers and mitigate unethical practices in digital lending.

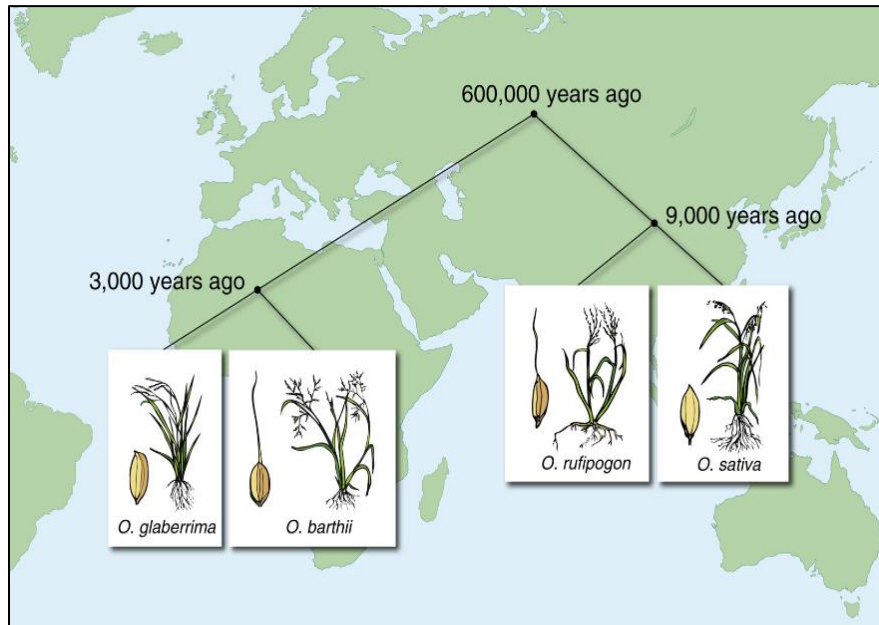


## **SCIENCE AND TECHNOLOGY NEWS**

### **First Pangenome of Asian rice**

- ❖ The Chinese Scientists have created the first-ever Asian rice pangenome, encompassing genetic data from 144 wild and cultivated rice varieties.
- ❖ The rice pangenome allows the researchers to develop the new rice cultivars and introduce new traits for disease-tolerance as well as resilience against climate shocks.

- ❖ Asian cultivated rice (*Oryza sativa* L.) was domesticated from its wild progenitor *O. rufipogon*.
- ❖ *Oryza - IIIa* is a variant of *O. rufipogon*.



## Kamikaze Drones



- ❖ Pakistan's military used Turkish Byker YIHA III Kamikaze drones against India.

- ❖ Kamikaze drones operate by hovering over a target and then crashing into them once they are identified - turning themselves into explosive missiles.
- ❖ They are single-use attack weapons which are remotely operated, also known as 'suicide drones.'

## ENVIRONMENT NEWS

### New Crocodile Species at Mexico

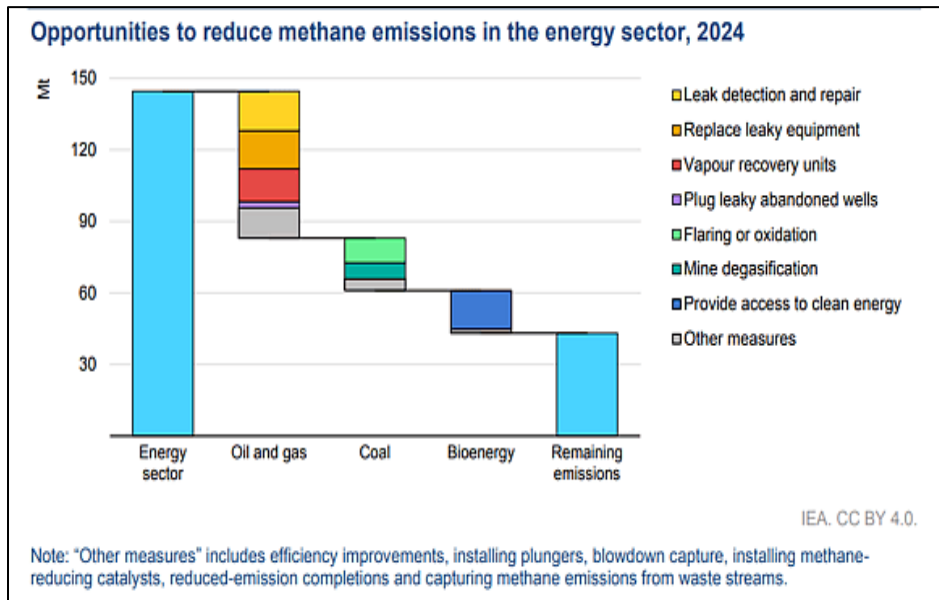
- ❖ Scientists have discovered two previously unknown species of crocodiles living on the island of Cozumel and the other on the atoll of Banco Chinchorro.
- ❖ Each of the newly identified species consists of fewer than 1,000 breeding individuals.
- ❖ This brings the number of New World crocodile species from 4 to 6.
- ❖ Here previously known species are American, Morelet's, Cuban, and Orinoco crocodiles.



### IEA's Global Methane Tracker 2025

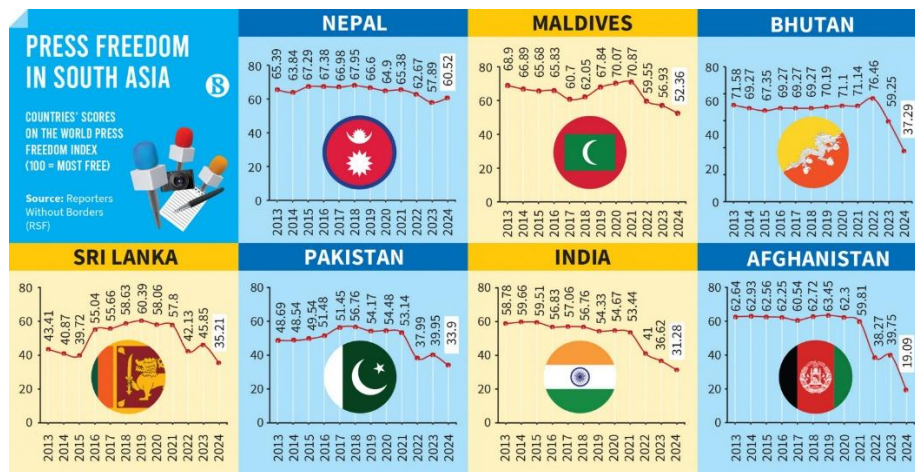
- ❖ The International Energy Agency's (IEA) has released the Global Methane Tracker 2025.
- ❖ The energy sector alone contributed around 145 million tonnes (Mt) of methane emissions in 2024.
- ❖ The three main sources of methane include agriculture, energy and the waste sectors.
- ❖ The energy sector accounts for more than 35 per cent of methane emissions from human activity.

- ❖ Around 18 Mt was from the incomplete combustion of bioenergy, mostly from the traditional use of biomass.
- ❖ Countries like Algeria, China, India, Iran, Russia, Syria, Thailand and Venezuela, which account for nearly 45 per cent of global energy-related methane emissions.
- ❖ \$175 billion is needed for the oil and gas sector and \$85 billion for the coal sector to achieve reductions.



## REPORTS AND INDICES

### South Asia Press Freedom Report 2024–25



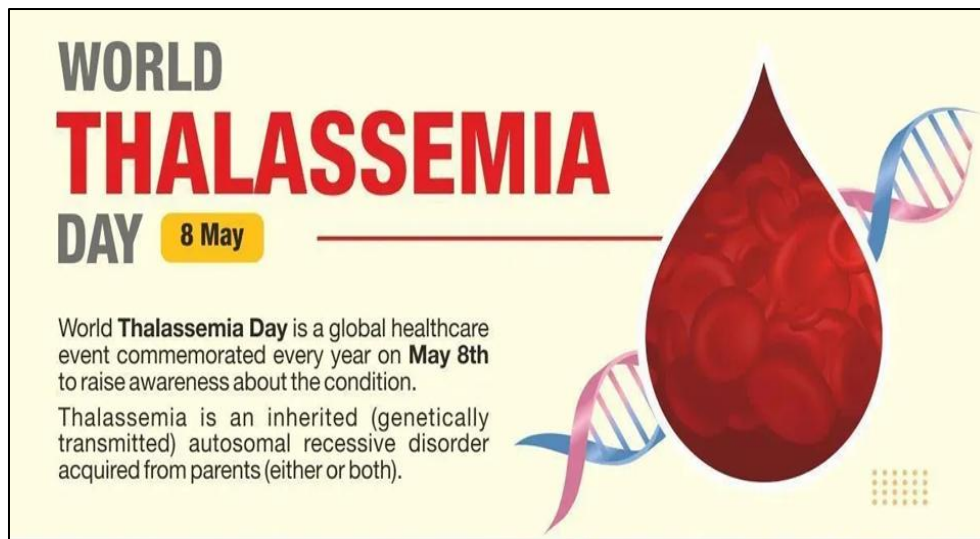
- ❖ The report, titled 'Frontline Democracy: Media and Political Churn' was released by Asia Press Freedom group.



- ❖ The report reviews the state of press freedom in India, Pakistan, Afghanistan, Sri Lanka, Bangladesh, Nepal, Bhutan and Maldives.
- ❖ 250+ media rights violations were recorded; 69 journalists are jailed/detained, 20 were killed in the line of duty.
- ❖ Pakistan saw its most violent year for journalists in two decades.

## IMPORTANT DAYS

### World Thalassaemia Day 2025 - May 08

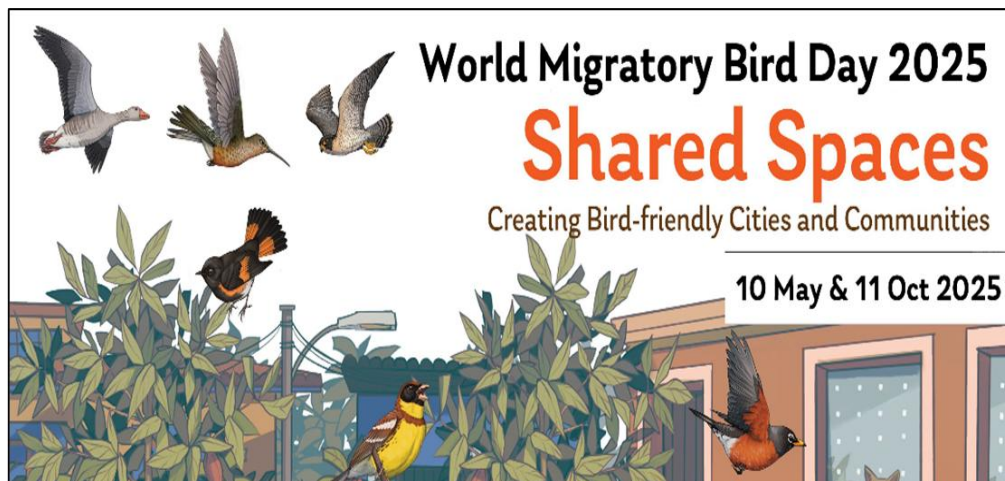


- ❖ Thalassaemia can be described as a group of the inherited blood disorders characterized by reduced or absent haemoglobin production.
- ❖ One of the causes of thalassaemia is genetic mutations that affect haemoglobin production.
- ❖ It can be categorised as alpha and beta thalassaemia, based on the affected haemoglobin chain.
- ❖ Beta-thalassaemia major is a form that manifests in infancy, presents with the anaemia, and thereby requires lifelong transfusions.
- ❖ This year's Theme is "Together for Thalassaemia: the Uniting Communities, and Prioritising Patients".

### World Migratory Bird Day 2025 - May 10

- ❖ It is celebrated on the second Saturday in May and the second Saturday in October.

- ❖ This is an annual awareness-raising event to highlight the necessity of conserving migratory birds and their habitats.
- ❖ Globally, 49% of all bird species are in decline and about 1 in 8 species is threatened with extinction.
- ❖ “Shared Spaces: Creating Bird-Friendly Cities and Communities” is theme for 2025.




### **National Technology Day 2025 - May 11**

On this day in 1998, India conducted Pokhran-II, celebrated as National Technology Day

## WHEN INDIA BECAME **NUCLEAR**

Three detonations happened on **May 11** & two on **May 13**



Former President Abdul Kalam and R. Chidambaram were the chief coordinators of **Pokhran-II**

Power of the three bombs		
<b>15kt</b> Atom bomb	<b>45kt</b> Hydrogen bomb	<b>0.2kt</b> The sub-kiloton device

India became the **6th country** to join the nuclear club

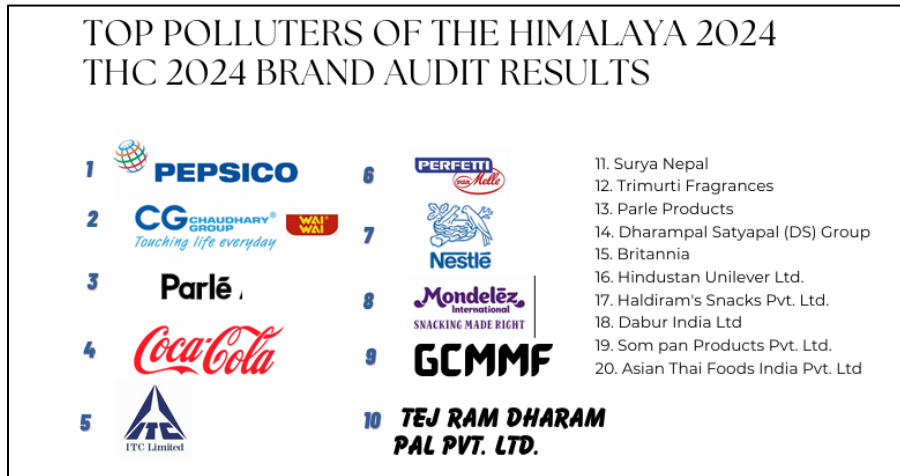
- ❖ It honours India's remarkable strides in science and technology, while reminding the nation of the power of innovation and self-reliance.
- ❖ This day commemorates the success of Pokhran II nuclear tests, also known as 'Operation Shakti', conducted on May 11, 1998.



- ❖ The successful test flight of the Hansa-3, India's first indigenous aircraft, developed by the National Aerospace Laboratories, also occurs on the same day.

## MISCELLANEOUS NEWS

### Himalayan Cleanup Report 2024



- ❖ This report draws on extensive plastic waste and brand audits conducted from Jammu and Kashmir to Arunachal Pradesh since 2018.
- ❖ In 2024, Nepal and Bhutan also joined the initiative.
- ❖ 80 per cent of plastic waste in the region comes from single-use food and beverage packaging.
- ❖ 70 per cent of this waste comprises of plastic products that are neither recyclable nor have any alternate market value.
- ❖ Only 18.5 per cent of the total waste is made up of recyclable plastics such as Polyethylene terephthalate (PET).
- ❖ Sikkim emerged as the most proactive state, with 53,814 pieces of waste collected from 86 sites.
- ❖ Multi-layered plastics (MLP) constituted 68.5 per cent of the total plastic waste.
- ❖ While PET accounted for 18.5 per cent, LDPE for 5.4 per cent, and HDPE just one per cent.

