

# Factly Weekly

**Compilation**

2026

**For UPSC CSE Prelims  
Exam**

**1<sup>st</sup> Week  
April 2026**

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## Malwan – Anti-Submarine Warfare Shallow Water Craft

News: Malwan, the second of eight Anti-Submarine Warfare Shallow Water Craft, was delivered to the Indian Navy on 31 March 2026.

### About Malwan – Anti-Submarine Warfare Shallow Water Craft



Source – AIR

- **Malwan is a high-tech, waterjet-propelled warship designed for specialized naval operations in coastal and shallow waters.**
- **Built by:** It has been constructed by Cochin Shipyard Limited (CSL), Kochi as per Indian Navy specifications.
- **Standards Compliance:** The ship is built in accordance with Det Norske Veritas (DNV) classification rules, which ensure international safety and construction standards.
- **Naming:** It is named after Malwan, a historic coastal town in Maharashtra linked to the maritime heritage of Chhatrapati Shivaji Maharaj.
- **Aim:** It aims to provide advanced capabilities for underwater surveillance and specialized combat operations in littoral zones.
- **Key features**
  - **Dimensions:** It measures about 80 m in length with a displacement of around 1,100 tons.
  - **Propulsion:** It uses Waterjet propulsion for high manoeuvrability in shallow waters.

- **Weapon systems:** It is equipped with torpedoes and multifunctional anti-submarine rockets.
- **Sensors:** It has advanced radars and sonar systems for detecting underwater threats.
- **Operational role:** It can perform Anti-Submarine Warfare, Low Intensity Maritime Operations, and mine warfare.

### **Bhavasagara**

**News:** The Ministry of Environment, Forest and Climate Change designated CMLRE's "Bhavasagara" Referral Centre as a National Repository for Deep-Sea Fauna.

#### **About Bhavasagara**



Source – Goa News

- **Bhavasagara is a specialized scientific hub and National Repository for preservation, study, and documentation of deep-sea marine life, officially designated on March 30, 2026.**
- **Aim :** It aims to provide a foundational resource for ocean scientists while strengthening India's blue economy and marine biodiversity framework.
- **Location:** It is located in Kochi, Kerala.
- **Parent organisation:** It functions under the Centre for Marine Living Resources & Ecology (CMLRE).
- **Nodal ministry:** It operates under the Ministry of Earth Sciences (MoES).
- **Designated by:** It is designated by the Ministry of Environment, Forest and Climate Change (MoEFCC).
- **Legal Framework:** It is recognized under the provisions of the Biological Diversity Act, 2002.
- **Key Functions:**

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- **Secure custody:** It preserves biological samples as voucher specimens along with DNA and associated data for future scientific reference.
- **Specimens custodian:** It acts as the official custodian for new deep-sea species discovered in Indian waters.
- **Capacity building:** It promotes expertise in deep-sea taxonomy aligned with the UN Decade of Ocean Science (2021–2030).
- **Scientific repository:** It maintains over 3,500 taxonomically identified and geo-referenced specimens covering diverse marine life.
- **Research facilitation:** It provides a centralized platform for researchers and institutions to access deep-sea data.

### **About Centre for Marine Living Resources & Ecology (CMLRE)**

- **Institutional status:** It is a premier institute under the Ministry of Earth Sciences, Government of India.
- **Core mandate:** It is dedicated to exploration, management, and conservation of marine living resources.
- **Operational area:** It focuses on the Indian Exclusive Economic Zone (EEZ) and adjacent deep seas.

## **Energy Statistics India 2026**

**News:** The National Statistics Office released Energy Statistics India 2026, presenting updated data on reserves, production, consumption, trade, and energy sector trends.

### **About Energy Statistics India 2026**



Source – MoSPI

- It is an annual publication providing an integrated dataset on India’s energy sector covering major energy resources.
- Released by: It is released by the National Statistics Office under the Ministry of Statistics and Programme Implementation.
- Edition: It is the 33rd edition of the report.
- Key Findings
  - Growth in Energy Supply: Total Primary Energy Supply grew by 2.95% to 9,32,816 KToE in FY 2024-25.
  - Renewable Energy Potential: Renewable energy potential reached 47,04,043 MW, with solar contributing around 71%.
  - More than 70% of renewable potential is concentrated in six states, including Rajasthan, Maharashtra, Gujarat, Andhra Pradesh, Karnataka, and Madhya Pradesh.
  - Installed Capacity Expansion: Renewable capacity increased from 90,134 MW in 2016 to 2,29,346 MW in 2025 with 10.93% CAGR.

- **Rise in Renewable Electricity Generation:** Electricity generation from renewables increased from 1,89,314 GWh to 4,16,823 GWh.
- **Increase in Per Capita Consumption** Per capita energy consumption rose from 15,296 to 18,096 megajoules per person.
- **Improved Efficiency** Transmission and distribution losses reduced from about 22% to 17%.
- **Dominance of Coal and Rising Demand** Coal supply increased to 5,52,315 KToE, and Total Final Consumption (TFC) over 30% to 6,08,578 KToE, along with a rise in credit flow to ₹10,325 crore.

### **20 Cities Towards Zero Waste Initiative and International Day of Zero Waste**

News: Ahead of the International Day of Zero Waste on 30 March, 20 Cities Towards Zero Waste Initiative has been initiated.

About 20 Cities Towards Zero Waste Initiative and International Day of Zero Waste



Figure 1. Source: UNEP

#### **About 20 Cities Towards Zero Waste Initiative**

- It highlights cities demonstrating ambitious and innovative approaches to reducing waste, advancing circular economy solutions, and building more sustainable, resilient, and inclusive

urban systems.

- **Initiative led by:** The initiative is led by the U.N. Secretary-General's Advisory Board on Zero Waste, with support from UN-Habitat and the UN Environment Programme (UNEP).
- **Aim:** It aims to –
  - **Recognise city leadership and innovation**
  - **Promote exchange of good practices and lessons learned**
  - **Inspire other cities to accelerate their transition toward zero waste**

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- It contributes directly to the **SDG 11 (Sustainable Cities and Communities)**, **SDG 12 (Responsible Consumption and Production)**, and **SDG 13 (Climate Action)**.
- **Selected cities:** 20 cities including cities such as **Accra (Ghana)**, **Bologna (Italy)**, **Chefchaouen (Morocco)**, **Dar es Salaam (Tanzania)**, **Dehiwala City (Sri Lanka)**, **Florianópolis (Brazil)**, etc. have been identified.
  - **Varkala, Kerala**, is the **identified city in India**.
  - The selected cities will be **showcased on global platforms to share experiences** and inspire further action.

### **About International Day of Zero Waste**

- **The United Nations General Assembly adopted a resolution on 14 December 2022, during its 77th session, declaring 30 March as the International Day of Zero Waste.**
- **The Day is observed annually on 30 March across the world.**
- **The observance is facilitated by United Nations Human Settlements Programme and United Nations Environment Programme.**
- **Its main objective is to promote sustainable production and consumption patterns.**
- **It raises awareness about the importance of reducing waste generation, reusing materials, and recycling resources efficiently.**

### **Carpet Industry of India**

**News:** Key global carpet exhibitions are being postponed and cancelled due to ongoing geopolitical conditions, which will impact the exports of carpets from Kashmir, overall affecting the Carpet Industry of India.

### **About Carpet Industry of India**



Source – CEPC

- The Indian carpet industry includes **handmade carpets, handloom carpets, coir carpets, silk carpets, and floor coverings.**
- **Currently, India is ranked first in handmade carpet and other floor coverings production and exports in terms of value and volume.**
- **Governing body:** Carpet industry is governed by **Carpet Export Promotion Council India (CEPC).**
- **Major carpet producing states:** Currently, the sector has a broad cluster spread across several states such as **Uttar Pradesh, Jammu & Kashmir, Rajasthan, Punjab, Haryana, and Madhya Pradesh.**
  - **Major carpet-producing centres:** The major carpet-producing centres in India are **Bhadohi, Mirzapur, Varanasi, Agra, Jaipur, Panipat, Srinagar, and Gwalior.**
- **G.I. Tagged carpets:** Seven key products in the carpet and durries sector registered in a geographical indication (GI) are –
  - **Handmade Carpet of Bhadohi, Mirzapur Handmade Dhurrie, Kashmir Handmade Carpet, Navalgund Durrie, Ghazipur Wall hanging, Wrangle Durries, and Agra Durrie.**

- Export trends:

**India's carpet and other floor coverings export (US\$ million)**



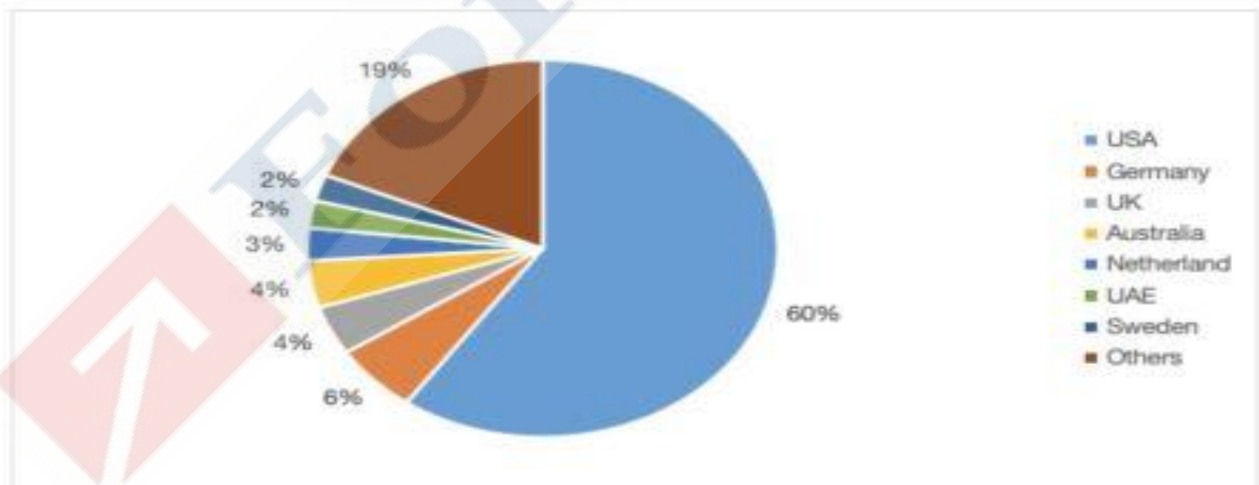
Source: Department of Commerce & Industry, Niryat

Source – IBEF

- India exports silk, coir, jute, and handloom carpets and floor coverings.
- The country exports about 85-90% of the total carpets it produces and is the largest exporter in the world.
- India is responsible for around 40% of worldwide exports of handmade carpets.
- India's carpet export in FY25 stood at US\$ 1.54 billion, whereas in FY24 carpet exports stood at US\$ 1.39 billion.

Major export destinations: India exports carpets to more than 100 countries in the world.

**Country-wise share of India's exports (FY25)**



Source: Department of Commerce & Industry, Niryat

Source – IBEF

- The USA, Germany, Australia, the UK, Netherlands, and Sweden are amongst the largest importers from India.

- The USA was the biggest importer of carpets from India in FY25, with an amount of US\$ 921 million, accounting for about 59% of total export.
- Germany and United Kingdom were among the top 3 importers in FY25, with carpet imports from India valued at US\$ 91.7 million and US\$ 65.4 million, respectively.

#### About Carpet Export Promotion Council India (CEPC)

- It was formed in 1982 by the Ministry of Textiles.
- **Objective:** Its objective is to promote handmade carpets, rugs and other floor coverings.
- **Functions:** Some of the activities taken up by the CEPC are fairs and exhibitions as a part of Market Access Initiative (MAI), liaising with the Government, protecting the interest of the exporters in the global markets, conducting trade meets and surveys, conducting training and information dissemination.

### Molucca Sea

News: A magnitude 7.6 earthquake struck Indonesia's Northern Molucca Sea, causing damage, one death, tsunami waves, and multiple aftershocks.

#### About Molucca Sea



Figure 2. Source – NBC News

northward to the Philippine Sea.

- **Tectonic activity:** The sea lies over the Molucca Sea Plate, which is subducted in two opposite directions, called Divergent Double Subduction.

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- **Divergent Double Subduction:** This is a rare geological phenomenon where the Molucca Sea Plate is being subducted in two opposite directions – westwards under the Eurasian (Sangihe) Plate and eastwards under the Philippine Sea (Halmahera) Plate.
- **Seismic zone:** It is part of a highly active seismic region with frequent earthquakes and crustal movements.
- **Basin Structure:** The sea floor is divided into three basins, with the deepest being the Batjan basin at 15,780 feet.
- **Indonesian Throughflow (ITF):** It serves as a vital passage for the Indonesian Throughflow, a current system that transports warm water from the Pacific Ocean to the Indian Ocean, playing a crucial role in global climate regulation.

### **TAK-003 Dengue Vaccine**

**News:** TAK-003 dengue vaccine received clearance from Subject Expert Committee under Drugs Controller General of India for individuals aged 4 to 60 years.

#### **About TAK-003 Dengue Vaccine**



Source – NDTV

- **TAK-003 (commonly known as 'Qdenga')** is a tetravalent dengue vaccine designed to protect against all four dengue virus serotypes 1, 2, 3, and 4.
- **Developed by:** The vaccine is developed by Takeda.

- **Mechanism:** It is a live-attenuated vaccine containing weakened versions of dengue virus serotypes 1, 2, 3, and 4, and it uses the DENV-2 strain as the genomic backbone.
- **Dose:** The vaccine is administered as a two-dose series, with both doses given three months apart.
- **Eligibility:** It has received clearance for use among individuals aged 4 to 60 years in India.
  - **WHO Recommendation:** As per WHO guidance, TAK-003 (Qdenga) is recommended for children aged 6 to 16 years in settings with high dengue transmission, and it is administered as a two-dose series with a three-month interval.
- **Strong protection:** The vaccine provides strong protection against severe dengue and hospitalisation, reducing pressure on healthcare systems.
- **Nature of protection:** It reduces severity of illness rather than completely preventing infection, so dengue transmission may continue.
- **Limitation:** It shows lower effectiveness against DENV-3 and DENV-4, especially in individuals without prior infection.
- **India-specific Context:** All four serotypes co-circulate in India, with DENV-2 accounting for about 48–66% cases and DENV-3 contributing around 20–30%, indicating evolving epidemiology.

#### **About India's Dengue Vaccine Pipeline**

- **Indigenous candidate:** 'DengiAll' is being developed by Panacea Biotec in collaboration with Indian Council of Medical Research (ICMR).
- **Clinical stage:** It is currently undergoing large phase III clinical trials, indicating advanced evaluation status.
- **Scientific basis:** The vaccine is based on the National Institutes of Health (NIH) TV003 platform and is designed as a single-dose vaccine for balanced protection across all four serotypes.
- **Future potential:** If successful, it may be available around 2027 and could offer broader protection and better suitability for large-scale public health deployment.

### **Maternal Mortality**

**News:** A recent Lancet study highlights slowing progress in reducing Maternal Mortality Ratio and challenges in achieving the SDG 2030 target.

About Maternal Mortality

## INDIA MATERNAL HEALTH: THE NUMBERS

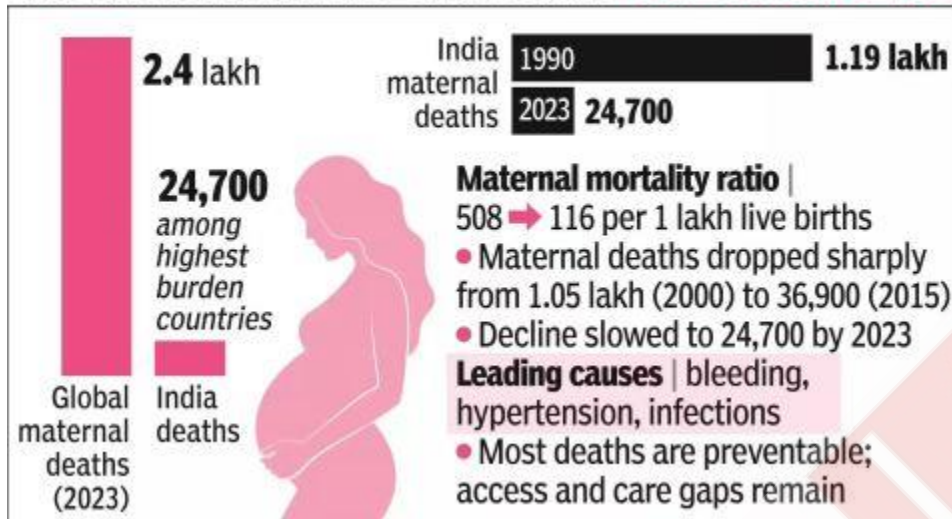


Figure 3. Source – ToI

- **Maternal Mortality Ratio:** It refers to the number of maternal deaths per 100,000 live births in a given time period.

- India aims to reduce Maternal Mortality Ratio to below 70 deaths per

one lakh live births by 2030.

- **Maternal Mortality Ratio Trend (Global)**

- **Global burden:** Total maternal deaths were 4 lakh in 2023, showing a high global burden.
- **Target achievement:** 100 out of 204 countries achieved MMR below 70 by 2023, indicating partial success.
- **Uneven progress:** 73 countries still have MMR above 140, highlighting serious gaps.
- **Developing regions:** Majority of deaths occur in developing regions due to inequality in healthcare access.

- **Maternal Mortality Ratio Trend (India):**

- **Long-term decline:** Maternal deaths reduced from 19 lakh in 1990 to 24,700 in 2023, showing strong improvement.
- **MMR reduction:** MMR declined from 508 (1990) to 116 (2023), reflecting nearly 80% reduction.
- **Recent trend:** As per SRS, MMR declined from 122 (2015-17) to 88 (2021-23), but progress has slowed.

- **Global share:** India accounts for one-tenth of global maternal deaths, indicating a significant burden.
- **Regional disparity:** States like Assam and Uttar Pradesh continue to pull down national performance.

### Samrat Samprati

**News:** On Mahavir Jayanti, Prime Minister Narendra Modi inaugurated the Samrat Samprati Museum, dedicated to Jain history and Samprati's legacy.

#### About Samrat Samprati



Figure 4. Source: IE

- Samrat Samprati was a **Mauryan ruler**.
- He was the **son of Kunala** and the **grandson of Ashoka**.
- **Title:** He was also known as **Indrapalit, Sangat and Vigatashok**.
- **Reign:** His reign is believed to be between **230 BCE and 220 BCE**.
  - After Ashoka's death (232 BCE), a theory suggests the **Mauryan Empire was divided between Samprati and**

#### Dasharatha.

- **Religious journey:**
  - He is described as a **Jain from birth**, while most accounts say he **converted under the monk Suhastin**.
  - He **accepted Suhastin** as his **guru** and followed the **ritual conduct of a Jain layman**, including daily icon worship.
    - **Suhastin** was the **eighth leader of the Jain congregation** established by Mahavira.
  - In the **Shvetambara Jain tradition**, he is considered the **most central person in the Mauryan dynasty**.

- **Associated texts:** His story first appears in **Shvetambara writings related to monastic practice rules.**
  - Later medieval texts, such as **Samprati Nripa Charitra** were devoted entirely to his life.
- **Contribution to the spread of Jainism:**
  - **Some historians believe that he helped spread Jainism to regions like China, Myanmar, Afghanistan, Nepal, and Bhutan.**
  - **He also strengthened Jainism in Andhra Pradesh, Tamil Nadu, Karnataka, Maharashtra, Gujarat, Malwa, and Rajputana.**
  - Broader interpretations further credit him with extending Jain influence into **Central Asia, the Arabian peninsula, and parts of West Asia.**
  - He also contributed in building **125,000 new temples, renovating old temples, consecrating stone icons and metal icons and establishing charitable centres for the poor.**

#### **About Samrat Samprati Museum**

- The **Samrat Samprati Sangrahalaya** is a major Jain heritage museum located in **Koba, Gujarat.**
- **It is named after Samrat Samprati Maharaj.**
- **Objective:** Its primary objective is **to preserve, promote, and showcase the rich artistic and religious traditions of Jainism** for present and future generations.
- It has been developed as a **Kala-Tirth**, meaning it serves both as a **cultural centre and a spiritual heritage site** dedicated to Jain philosophy and art.

#### **INS Agray, INS Dunagiri and INS Sanshodhak**

**News:** Three frontline naval platforms, **INS Dunagiri, INS Sanshodhak, and INS Agray** were delivered to the Navy by **Garden Reach Shipbuilders and Engineers Ltd. (GRSE).**

#### **About INS Agray, INS Dunagiri and INS Sanshodhak**



Source: PIB

#### About 'Agray' ASW SWC

- INS Agray is the fourth vessel among the eight Anti-Submarine Warfare Shallow Water Craft (ASW SWC) being built for the Indian Navy.
- Designed and constructed by: It has been indigenously designed and constructed by Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.
- It is a reincarnation of the earlier INS Agray, which belonged to the 1241 PE class of patrol vessels and was decommissioned in 2017.
- It has been designed and built in accordance with the classification rules of the Indian Register of Shipping (IRS).
- Features: It measures approximately 77 metres in length.
  - It is among the largest Indian Naval warships powered by waterjet propulsion systems.
  - It is equipped with state-of-the-art lightweight torpedoes, indigenous rocket launchers, and shallow-water SONAR, enabling effective detection and engagement of underwater threats.

#### About INS Dunagiri



Source: Indiandefensenews

- It is the fifth ship of Nilgiri Class developed under Project 17A.
- Features: It is 149-metre-long and 6,670-tonne stealth frigate.

- It is equipped with advanced weapons and sensors, including BrahMos cruise missiles, AESA radar, and an integrated combat management system.
- It is powered by a combined diesel and gas turbine configuration.
- It is capable of multi-dimensional operations across air, surface, and sub-surface domains.

#### About INS Sanshodhak



Figure 5. Source: Newsd Defence

- INS Sanshodhak is the fourth and final Survey Vessel (Large) of the four Survey Vessel (Large) (SVL) class ships.
- Features: It is 110-metre vessel, with a displacement of around 3,400 tonnes.
- It is equipped with advanced systems such as data acquisition and processing units, autonomous underwater vehicles, remotely operated vehicles and digital side scan sonar.
- It can also support helicopter operations, HADR missions, and limited combat roles.
- It is designed for coastal and deep-water surveys, collection of oceanographic data and geophysical data for both defence and civilian applications.

### About Project 17A

- Project 17A is an Indian Navy initiative to build seven advanced stealth frigates as successors to the Shivalik-class (Project 17).
- Project 17A frigates are versatile multi-mission platforms, designed to address current and future challenges in the maritime domain.
- These frigates feature superior stealth characteristics, enhanced automation, advanced sensors, and modern weapon systems.
- Built by: Of the seven ships, four – Nilgiri, Udaygiri, Taragiri, and Mahendragiri – are being built by MDL, and three– Himgiri, Dunagiri, and Vindhyagiri by GRSE.
- The four frigates earlier delivered under the Project are –
  - [INS Himgiri](#)
  - [INS Udaygiri](#)
  - [INS Nilgiri](#)
  - [INS Taragiri](#)

### Non-Deliverable Derivative (NDD) Market

News: The Reserve Bank of India barred banks from NDD contracts in rupee to curb misuse, stabilize currency, and improve transparency.

#### About Non-Deliverable Derivative (NDD) Market



Figure 6. Source – Outlook Money

- An NDD is a derivative contract where parties agree on a future rupee exchange rate but settle differences in cash, usually in US dollars.
- Mechanism
  - Agreement on Exchange Rate: Two parties enter into a contract and agree

- on a future exchange rate for the rupee.
- **No Physical Delivery:** Due to capital controls, offshore investors cannot trade the rupee physically, so the contract does not involve actual currency delivery.
- **Calculation of Difference:** On the settlement date, the difference between the agreed exchange rate and the prevailing market rate is calculated.
- **Cash Settlement:** The calculated difference is settled in cash, usually in US dollars, instead of exchanging the rupee.
- **Purpose of Structure:** This mechanism allows participants to take positions on the rupee's movement without handling the currency itself.
- **Offshore Nature:** NDD trades occur outside India in financial hubs and remain outside RBI control.
- **Eligibility:** It is mainly used by foreign investors, hedge funds, and global banks who cannot freely access the rupee market.
- **Role in Price Discovery:** NDD markets influence rupee expectations and often act as a price discovery mechanism before Indian markets open.
- **Limitations:** NDD markets distort price discovery and are misused for speculative activities through repeated contract entry and exit.
- **Significance for India:** The RBI move reduces speculative activity, limits misuse, stabilises rupee volatility, and strengthens the onshore market.

### **Rebate of State and Central Taxes and Levies (RoSCTL) Scheme and Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme**

**News:** The Ministry of Textiles has extended the Rebate of State and Central Taxes and Levies Scheme (RoSCTL) for apparel exports and continued the Remission of Duties and Taxes on Exported Products Scheme (RoDTEP) till 30 September 2026.

**About Rebate of State and Central Taxes and Levies (RoSCTL) Scheme**



Source: GOI

- It is a scheme **to rebate all embedded State and Central taxes and levies not covered under any other scheme** to enhance the global competitiveness of India's apparel and made-up exports.
  - It has replaced the previous "Rebate of State Levies (RoSL) Scheme."
- It is **operational from 7th March 2019**.
- **Launched by:** It was launched by the Ministry of Textiles.
- **Implementing agency:** It is being implemented by the Department of Revenue, Ministry of Finance.
- **Objective of the scheme:** Its objective is **to compensate for the State and Central Taxes and Levies in addition to the Duty Drawback Scheme** on export of apparel/ garments and Made-ups by way of rebate.
- It is **based on the principle of zero-rating of exports**, ensuring remission of unrefunded taxes embedded in exported products.
- **Features**
  - **Beneficiary Eligibility:** All exporters of garments, apparel, and made-ups manufactured in India can get benefits under the RoSCTL scheme
  - Those exporters whose **Importer -Exporter Code (IEC) is in the DGFT Denied Entity List are not eligible**.
  - Eligible exporters under RoSCTL **cannot claim RoDTEP benefits**.
  - **Mechanism:** The rebate under the scheme shall be given to the exporter in the form of **duty credit scrips**, which will be **maintained in the electronic duty credit ledger**.

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- The scrips shall be **issued electronically** on the **Customs automated system**.
- **Transferable:** The scrips is used for **payment of basic customs duty only** and is **transferable** to any other person.
- The duty credit available in an e-scrip shall be transferred **at a time for the entire amount in the said e-scrip to another person. Partial transfer is not allowed.**
- **Validity of the e-scrip:** The period of validity of the e-scrip, of one year from its creation, shall not change on account of transfer of the e-scrip.

### About the Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme



Figure 7. Source: My Gov

- **Launched in:** It was launched in 2021 and has been extended till September 30, 2026.
- It replaced the Merchandise Export Incentive Scheme (MEIS).
- **Launched by:** It was launched by the Department of Commerce, Ministry of Commerce and Industry.
- **Implementing agency:** It is being implemented by the Department of Revenue, Ministry of Finance.
- **Objective:** It is to provide refunds on taxes, duties, and levies incurred by exporters during manufacturing and distribution.
- **Features:**
  - **Beneficiary eligibility:** Both manufacturer and merchant exporters (traders) are eligible to avail benefits under the RoDTEP scheme.
  - Special Economic Zone Units are also eligible to claim the benefits under this Scheme.
  - **Coverage:** It covers all sectors, with priority given to labour-intensive sectors.
  - It is also applicable to goods exported through courier via e-commerce platforms.
  - **Mechanism:** The refund will be provided as transferable electronic scrips, and these duty credits will be recorded and monitored through an electronic ledger.
  - Its benefit cannot be claimed for services exported outside India.
  - Re-exported products are not eligible under the scheme.

- **Refund range:** Refunds under the scheme range from 0.3 per cent to 3.9 per cent.

### **Indian Softshell/Gangetic Softshell Turtles**

**News:** Police rescued 16 Indian Softshell turtles from a smuggler in Jharcha, Greater Noida, during a routine check, exposing illegal wildlife trade.

#### **About Indian Softshell/Gangetic Softshell Turtles**



Figure 8. Source – Research Gate

- **The Indian softshell turtle (*Nilssonina gangetica*) is a freshwater turtle species found in South Asia.**
- **Habitat:** It lives in rivers, canals, ponds, and freshwater systems.
- **Distribution:** The species is found in major river basins such as the Indus, Ganga and Mahanadi, along with their tributaries and intervening drainages.
- **Geographical range:** It occurs across India (including Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Odisha, Punjab, Rajasthan, Uttar Pradesh and West Bengal), and is also found in Afghanistan, Bangladesh, southern Nepal and Pakistan.
- **Characteristics**
  - **Carapace structure:** It has a large soft shell with eight pairs of costal plates and well-developed plastral callosities.
  - **Appearance:** The body is olive above with yellowish lower parts and distinct black streaks on the head.
  - **Size:** It can reach a carapace length of up to 94 cm.
  - **Diet:** It feeds mainly on fish, amphibians, carrion, other animal matter, and also consumes aquatic plants.
  - **Breeding:** It breeds during August and November.
    - **Nests are located in islands and clayey river banks.**

- **Ecological role:** They are predatory scavengers that help maintain water quality by consuming organic waste and carrion.
- **Cultural significance:** It is considered sacred and is often maintained in temple ponds in Odisha.
- **Threats**
  - **Habitat degradation through hydrologic alteration**
  - **Accidental drowning in fishing nets**
  - **Poaching**
  - **Illegal trade**
  - **Sand mining**
- **Conservation Status**
  - **IUCN Red List: Vulnerable**
  - **CITES: The species is listed under Appendix I.**
  - **Wildlife (Protection) Act, 1972: The species is placed under Schedule I (Part II), which provides it the highest level of legal protection in India.**

### Dudhwa Tiger Reserve

**News:** The Opposition criticized the Uttar Pradesh government after a tigress died after being hit by a train in Dudhwa buffer zone.

#### About Dudhwa Tiger Reserve

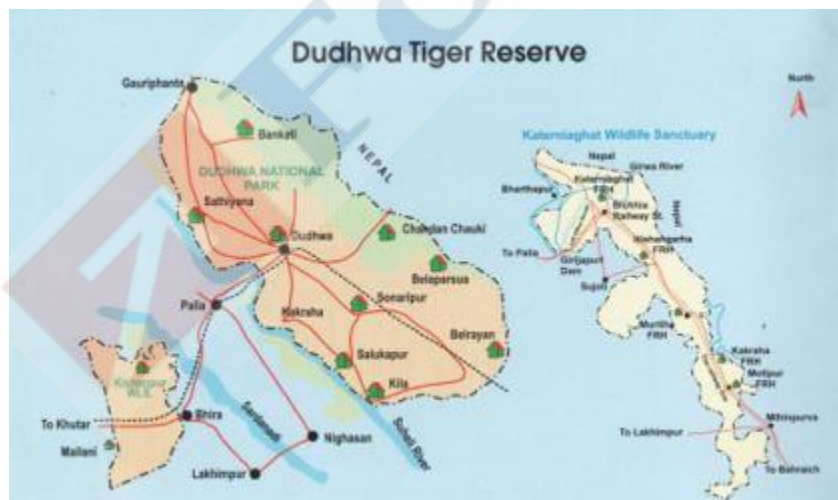


Figure 9. Source – Dudhwa NP

- **Location:** It is located on the Indo-Nepal border in Lakhimpur-Kheri district of Uttar Pradesh in the Terai region.
- **Establishment:** It was established as a Tiger Reserve in 1988 under Project Tiger.
- **Constituent areas:** It comprises Dudhwa National

Park, Kishanpur Wildlife Sanctuary and Katarniaghat Wildlife Sanctuary.

- **Topography:** It is a typical Tarai-Bhabar habitat of the upper Gangetic plains biogeographic province.
- **Rivers:** The reserve is drained by the Sharda (near Kishanpur), Geruwa (through Katarniaghat), and Suheli and Mohana streams (in Dudhwa National Park), all tributaries of the Ghagra River.
- **Vegetation:** It has North Indian Moist Deciduous vegetation with dominant Sal forests and associated species like *Terminalia alata*, *Lagerstroemia parviflora*, and *Adina cordifolia*.
- **Fauna:** It includes tiger, leopard, swamp deer, rhinoceros, chital, hog deer, barking deer, sambar, wild boar, and ratel.
  - It has about 400 bird species such as florican and black-necked stork.
  - It is a biodiversity hotspot with interlinked food chains and ranked 4th in All-India Tiger Census 2022 with about 135 tigers and 180 butterfly species.

### Chambal River

**News:** The Supreme Court of India stayed a Rajasthan notification altering the boundaries of the National Chambal Gharial Sanctuary that freed 732 hectares along the Chambal River.

#### About Chambal River



Source – ResearchGate

- **Origin:** It is a perennial river which originates from Janapav hills, situated south of Mhow town near Indore, along the southern slopes of the Vindhya Mountain Range in Madhya Pradesh.
- **Course of river:** From its source, it flows in a north-northeasterly direction through Madhya Pradesh, then passes through Rajasthan for a short stretch.

## Factly Compilation [First Week] April 2026

- It subsequently forms part of the **boundary between Rajasthan and Madhya Pradesh** before turning **southeastward** and eventually joining the **Yamuna River in Uttar Pradesh**.
- It **ends at a confluence of five rivers**, including the **Chambal, Kwari, Yamuna, Sind, and Pahuj, at the Pachnada confluence near Bhareh in Uttar Pradesh**.
- It is bounded by the **Vindhyan range (West-East-South)** and the **Aravalli range (NW)**.
- **Total Length:** Its total length is 1024 km.
- **States covered:** It flows through **Madhya Pradesh, Rajasthan and Uttar Pradesh**.
- **Tributaries:** Its main tributaries include the **Banas, Mej (left bank) and Parbati, Kali Sindh, and Shipra (right bank) rivers**.
- **Drainage:** The **Chambal and its tributaries** drain the **Malwa region of northwestern Madhya Pradesh**.
  - Its largest tributary **Banas River, drains southeastern Rajasthan**.
- **Drains into:** It is a **right bank tributary of Yamuna River** meeting it in **Jalaun district of Uttar Pradesh**.
- **Dams situated:** **Gandhi Sagar Dam, Jawahar Sagar Dam, Ranapratap Sagar Dam, Kota Barrage, Kotwal Dam, Pagara Dam and Pillowa Dam** are the dams situated on it.
- **Protected area:** The **[Chambal National Sanctuary](#)** extends along a **425 km stretch of the Chambal River** which is **India's first and only tri-state protected riverine sanctuary**.

### **Kar Saathi AI Website and PRARAMBH Programme**

**News:** The Income Tax Department launched 'Kar Saathi' website to simplify tax processes and support transition to the Income Tax Act, 2025.

#### **About Kar Saathi AI Website**



Figure 10. Source – Legal Dev

- **Kar Saathi** is an **AI-powered digital assistant** integrated into the **revamped income tax portal** for **guidance and compliance support**.
- **Launched by:** It is launched by the **Income Tax Department**.

- **Aim:** It aims to simplify tax compliance, provide 24×7 assistance, and improve taxpayer experience through technology-driven governance.
- **Key Features:**
  - **24×7 AI assistance:** It provides round-the-clock automated responses for queries related to filing returns, provisions, forms, notices, refunds, and compliance.
  - **Single platform access:** It brings all direct tax resources such as forms, challans, e-payment, e-verification, and FAQs under one roof.
  - **User-friendly system:** It is designed for faster navigation, easier usability, and reduced compliance complexity for taxpayers.

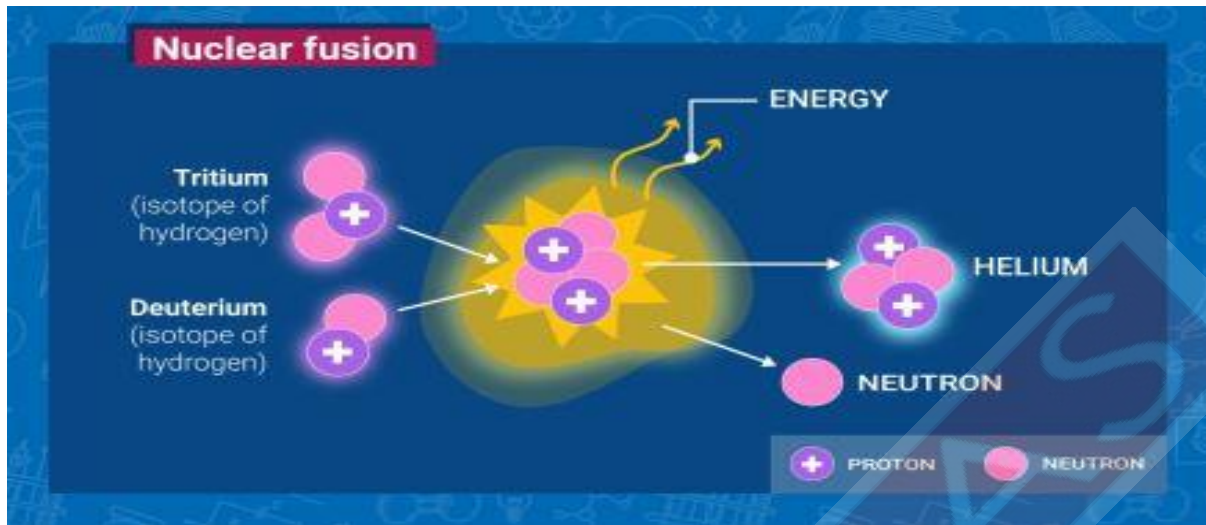
#### **About PRARAMBH Programme**

- **PRARAMBH** stands for Policy Reform and Responsible Action for Mission Viksit Bharat, which is a nationwide outreach programme for tax awareness.
- **Nature:** It is a citizen-first outreach and facilitation initiative conducted through print, digital media, workshops, and guidance material.
- **Aim:** It aims to reduce confusion, encourage voluntary compliance, and ensure clear understanding of new tax rules.
- **Philosophy:** It is guided by the spirit of “Nagrik Devo Bhava”, focusing on simple, clear, and reliable tax administration.
- **Components**
  - **Multi-channel Outreach:** It uses print, radio, television, digital platforms, and social media for awareness.
  - **Educational Support:** It provides simplified guidance material, FAQs, and workshops for better understanding.
  - **System Reforms:** It highlights reduction of rules from 510 to 333 and forms from 399 to 190, easing compliance and reducing over six crore transaction requirements.

### **Nuclear Fusion**

**News:** Researchers and investors are investing billions in nuclear fusion as a potential green energy source, but a Nature Energy study warns that cost assumptions may misguide investments.

#### **About Nuclear Fusion**



Source – IAEA

- Nuclear fusion is a process where light atomic nuclei combine to release a large amount of energy.
- Process: Two light nuclei are brought very close under very high temperature and pressure, allowing strong nuclear forces to combine them and release energy.
- Fuel: It uses light elements like isotopes of hydrogen, especially deuterium and tritium, which form helium and a neutron after reaction.
- Conditions: Extremely high temperature of about 100 million °C and high pressure are required to overcome electrostatic repulsion between nuclei.
- Methods: It is achieved through magnetic fusion and laser-based inertial fusion, where plasma state is created for the reaction.
- Differences between Nuclear Fission and Fusion
  - Nature of Reaction: Fission involves splitting of a heavy nucleus, whereas fusion involves combining light nuclei into a heavier nucleus.
  - Fuel Used: Fission uses heavy elements like uranium or plutonium, while fusion uses light elements like hydrogen isotopes.
  - Energy Process: Fission produces energy through a chain reaction, whereas fusion does not depend on a chain reaction.
  - Waste and Safety: Fission generates long-lived radioactive waste, whereas fusion produces minimal long-lived radioactive waste.

- Examples: Nuclear reactors and atomic bombs are based on fission, whereas the Sun and hydrogen bombs are based on fusion.

### Key Facts About Indonesia

News: A 7.4-magnitude earthquake struck Indonesia's Molucca Sea near Ternate, causing casualties, injuries, and temporary tsunami warnings later withdrawn.

### Key Facts About Indonesia



Figure 11. Source – Legal Dev

### Source – World Atlas

- **Location:** Indonesia is an archipelagic nation located in Southeast Asia between the Indian Ocean and the Pacific Ocean, along major global sea lanes.
- **Bordering countries :** It shares borders with Malaysia, Papua New Guinea, and Timor-Leste, with some islands shared with these countries.
- **Maritime boundaries:** It is surrounded by the Indian Ocean in the south and the Pacific Ocean (including the South China Sea) in the north.
- **Capital city:** Jakarta is the present capital city, and the new capital named Nusantara (meaning “archipelago” in Javanese) will be established in the future.
- **Major islands:** Indonesia's islands are grouped into the Greater Sunda Islands (Sumatra, Java, Kalimantan, and Sulawesi), the Lesser Sunda Islands (Bali and island chain up to Timor), the

Moluccas (Maluku) between Sulawesi and New Guinea, and the western part of New Guinea (Papua), showing its vast and diverse island system.

- **Underlying Structure:** Beneath the surface, Indonesia has a complex physical structure formed by the junction of three major sections of the Earth's crust with shelves, volcanic mountain chains, and deep-sea trenches.
- **Geology (Plate):** The islands of Sumatra, Java, Madura, and Kalimantan lie on the Sunda Plate, while western New Guinea lies on the Australian Plate, showing Indonesia's location across major tectonic plates.
- **Topography:** The major Indonesian islands have densely forested volcanic mountains in the interior that slope down to coastal plains with thick alluvial swamps, which further merge into shallow seas and coral reefs.
- **Climate:** The climate of Indonesia is almost everywhere equatorial, which is hot, humid, and rainy throughout the year.
- **Mountains:** The highest peak is Puncak Jaya (5,030 m).
- **Rivers:** The main rivers are Kapuas, Barito, Musi, and Digul.
- **Resources:** Indonesia is rich in natural gas, crude petroleum, coal, nickel, bauxite, gold, tin, and copper, showing strong resource-based importance.
- **Time zones:** Indonesia has three time zones—covering different island regions.

### **Tribes of Nicobar – Nicobari (Nicobarese) and Shompen**

**News:** A draft plan to relocate Nicobarese tribal communities affected by the Great Nicobar Island mega-infrastructure project to their ancestral lands has created confusion and increased concerns among local people.

**About Tribes of Nicobar – Nicobari (Nicobarese) and Shompen**



Source: Official Website of Nicobar

### About Nicobari (Nicobarese) Tribe

- The Nicobari tribe lives in **all the inhabited islands of the Nicobar Islands.**
- **Origin:** They belong to the **Mongoloid racial group.**
- **Population:** According to the 2011 census, the **indigenous Nicobarese number 23,681.**
- **Language:** They speak various dialects of the Nicobarese language, which belongs to the **Austroasiatic language family.**
- They are **not divided into sub-tribes**, but territorially, they are divided into **six groups**:
  - The people of **Car Nicobar, Chowra, Teressa with Bompoka, the Central Group, the Southern Group** and the **single inland tribe of the Shompen on Great Nicobar.**
- **Food:** Their chief food is **Coconut, Pandanus pulp, fish and rice and tropical fruits.** **Pigs and fowls** are mainly **reared for feasts.**
- **Social structure:** The Nicobari family system is **patriarchal in nature.**
  - They usually live in **joint families**, which are known as **Tuhet.**
  - In the Tuhet system, **land, coconut trees, and pigs are owned jointly by the family**, and there is **no individual ownership.**
  - **Love marriage is very common** and the **age of marriage is comparatively high** in the Nicobari society.
- **Houses and Settlement Pattern:** They live in **large and permanent villages**, which are mostly located near the seashore.

- Their houses are well-built and raised 5–7 feet above the ground on wooden piles, with entry through a movable ladder. Most of the houses are circular in shape.
- **Village Public Structures:** In most islands, there is a place near each coastal village called Elpanam.
- The **Elpanam** consists of important public buildings such as a **meeting house, a lying-in house, a mortuary, and a cemetery.**
- **Livelihood:** They engage in pottery making, basket making, canoe and iron spear making, pig rearing and collection of forest produce.
- **Feasting is one of the major cultural activities** of the Nicobari people.
- **Football is the most popular sport** among them. Other popular sports played by them are **canoe racing, volleyball, and wrestling.**

#### About Shompen Tribe

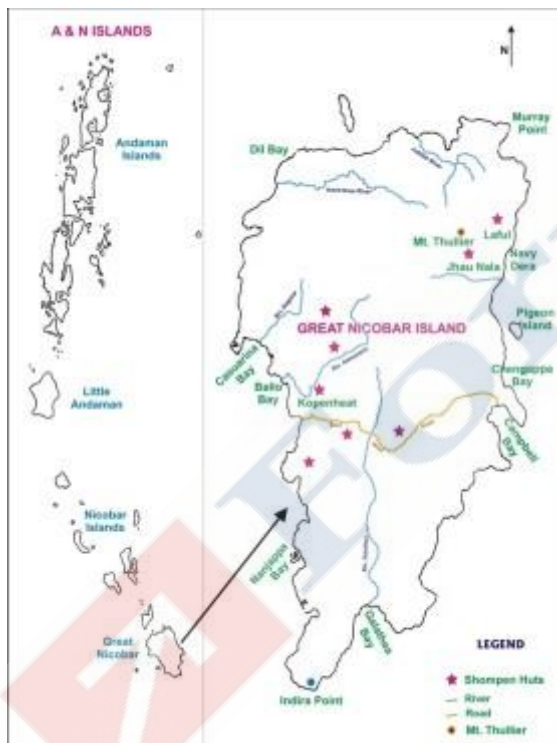


Figure 12. Source: Researchgate

- The Shompen tribe are the **indigenous tribe of the interior of Great Nicobar Island.**
- They are **designated as a Particularly Vulnerable Tribal Group** within the list of Scheduled Tribes.
- They are one of the **most isolated tribes on Earth.**
- **Note: In 2024, for the first time, 7 members of the Shompen tribe cast their votes in the Andaman and Nicobar Lok Sabha constituency.**
- **Livelihood:** They are **semi-nomadic hunter-gatherers**, and their main sources of livelihood are **hunting, gathering, fishing**, and a little bit of horticultural activities in a rudimentary form.
- **Food:** They **collect a wide variety of forest plants**, but their staple food is the pandanus fruit, which

they call larop.

- **Population: According to the Census (2011),** the estimated population of Shompen is **229.**

- **Language:** They **speak their own language**, which has many dialects. Members of one band do not understand the dialect of the other.
- **Social structure:** They have **nuclear families** comprising **husband, wife, and their unmarried children**.
  - The **family is controlled by the eldest male member**, who controls all activities of the women and kids.
  - **Monogamy is generally practised**, though polygamy is also permitted.

### Gangotri National Park

**News:** Gangotri National Park has reopened for tourists after a six-month winter closure.

#### About Gangotri National Park

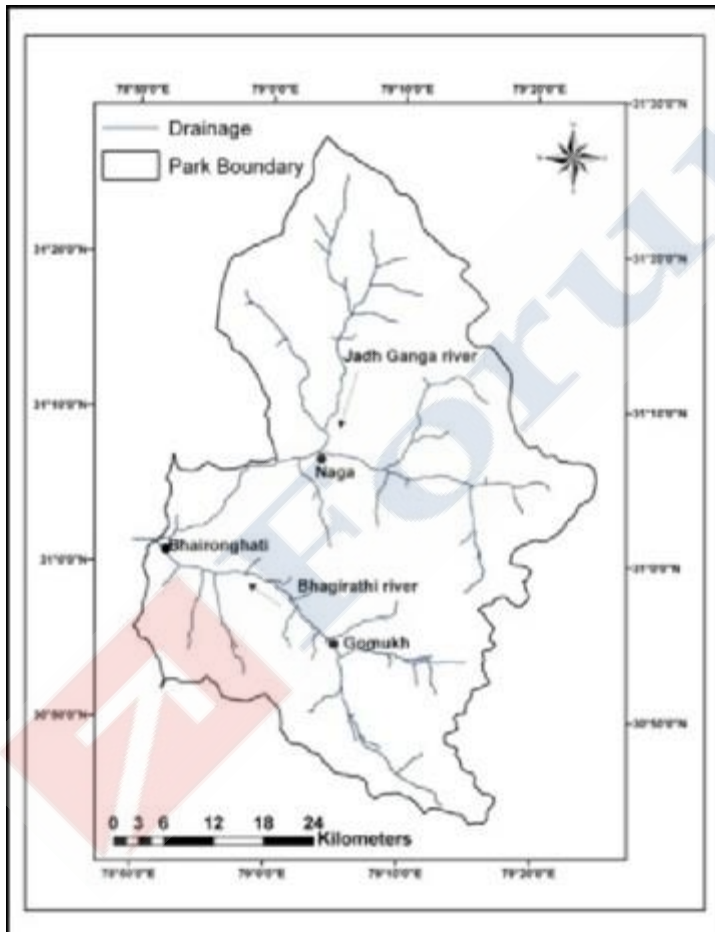


Figure 13. Source: Researchgate

**catchments of the River Bhagirathi.**

- Gangotri National Park is located in the **Uttarkashi district, Uttarakhand**.
- It derives its name from the **famous Gangotri Temple**, one of the four highly revered Hindu Dhams.
- **Established:** It was established in **1989**.
- **Area:** It spreads over an area of **about 2,390 square kilometres**.
- It falls **under the bio-geographical zone** and sits at an **altitude of 1,800 meters to 7,083 meters above sea level**.
- It **forms a corridor** between **Govind National Park and the Kedarnath Wildlife Sanctuary**.
- **Boundary:** The northeastern section of the park forms the **international boundary of India and Tibet (China)**.
- **River associated:** It lies in the **upper**

- **Gaumukh glacier**, the origin of the Ganga, is **located inside the park**.
- It also includes the **Gaumukh–Tapovan Trek**, which is one of the most popular trekking routes in the region.
- **Peaks:** It includes iconic peaks like **Chaukhamba I–III, Satopanth, and Kedarnath Main**.
- **Flora:** It is covered with dense temperate coniferous forests, where **chir pine, deodar, fir, spruce, oak, and rhododendron** are the main types of vegetation.
- **Fauna:** It is the natural home of the **snow leopard**. Other species such as **black bear, brown bear, musk deer, blue sheep (Bharal), and Himalayan Monal** are found there.

### **Babu Jagjivan Ram**

**News:** On 5 April 2026, the 119th birth anniversary of Babu Jagjivan Ram was observed with floral tributes and prayers in New Delhi.

#### **About Babu Jagjivan Ram**

- **Babu Jagjivan Ram**, known as **Babuji**, was a national leader, freedom fighter, and a strong crusader for social justice.
- **Birth:** He was born on April 5, 1908, in Chandwa village of Bihar in a Dalit family.
- **Education:** Despite facing caste discrimination, he studied at Banaras Hindu University and later graduated from Calcutta University in 1931.
- **Philosophy:** He followed the philosophy of equality and human dignity throughout his life and worked continuously to remove social discrimination and injustice.
- **Key Contributions & Legacy:**
  - **Freedom Struggle:** He participated in movements and also acted as a bridge between Dalits and the Indian National Congress, linking social reform with national freedom.
  - **Social Reformer:** In 1934, he founded the All India Depressed Classes League to promote equality for untouchables.
  - **Interim Government (1946):** He became the youngest minister in Jawaharlal Nehru's interim government and handled the Labour portfolio.
  - **Labour Minister (1946–1952):** During this period, he introduced important labour laws such as the Minimum Wages Act, Employees' State Insurance scheme, and Provident Fund Act.

- Defence Minister (1970–1974): He led India during the 1971 Indo-Pak war, which resulted in the creation of Bangladesh.
- Agriculture Minister (1967–1970): During this tenure, he guided the Green Revolution and made India self-sufficient in food grains.
- Other Key Role: In 1977, he formed the Congress for Democracy and later served as Deputy Prime Minister from January 1979 to July 1979.
- Longest-Serving Minister: He served as a Union Cabinet Minister for 35 years, which is the longest tenure in Indian history.
- Literature: In 1980, he wrote Caste Challenge in India, which explains his views on social inequality.
- Death: He passed away on July 6, 1986.

### Bengal Florican

News: Bengal florican populations are declining as grasslands vanish due to land conversion, agriculture expansion, burning, and habitat fragmentation pressures.

#### About Bengal Florican



Figure 14. Source – DTE

- It is a medium-sized bustard species found in grasslands, and it is a grassland indicator species.

- Different names: It is called ulu-mo'ra in Assamese and daotriling in Bodo, and it is also known as the “dancer of the grasslands.”

- Habitat: It lives in seasonally inundated

alluvial grasslands of the Gangetic-Brahmaputra plains dominated by grasses.

- **Distribution:** It is found in Uttar Pradesh (Dudhwa National Park), Assam (Manas, Kaziranga, Orang, and Dibru-Saikhowa National Parks), and Arunachal Pradesh, as well as in the terai of Nepal and in Bangladesh.
- **Characteristics**
  - **Appearance:** The male shows black plumage, crest, elongated display feathers, and white wing patches visible in flight.
  - **Behaviour:** It performs vertical leaps, wing movements, and vocalisations in group displays called “lekking.”
  - **Sexual traits:** It shows reverse sexual dimorphism and colour dichromatism.
  - **Diet:** It is omnivorous and eats insects, fruits, seeds, flowers, and small reptiles.
- **Threats**
  - **Habitat loss** occurs due to land conversion, agriculture expansion, burning, overgrazing, encroachment, river changes, fragmentation, invasive species, and fire mismanagement.
- **Conservation Status**
  - IUCN: Critically Endangered
  - Schedule I of the Wildlife Protection Act, 1972
  - Appendix I of CMS

### India-UN Development Partnership Fund

**News:** The Board of Directors of the India-UN Development Partnership Fund met at India’s Permanent Mission in New York to review operations, ongoing projects, and future scope.

**About India-UN Development Partnership Fund**



Figure 15. Source – India in UN

It is a fund established by India in partnership with the United Nations to support development projects in other developing countries, especially in the Global South.

- **Established in:** It was established in 2017.

- **Implemented by:** It is implemented by the United Nations agencies in close collaboration with partnering governments.
- **Managed by:** It is managed by the United Nations Office for South-South Cooperation.
- **Core Objectives:**
  - **South-South Cooperation:** It promotes shared prosperity through Southern-owned and led, demand-driven development initiatives.
  - **SDG Alignment:** It supports projects contributing to all 17 Sustainable Development Goals across sectors like health, climate resilience, and infrastructure.
  - **Priority Groups:** It focuses on least developed countries and small island developing States.
- **Funding**
  - **Commitment:** The Government of India has committed \$150 million over 10 years.
  - **Commonwealth Window:** A specific \$50 million portion of the fund is dedicated to supporting developing countries within the Commonwealth of Nations.
- **Significance:** It promotes shared prosperity and strengthens cooperation between developing countries through sustainable and country-led development initiatives.

## Measles

**News:** Bangladesh launched an emergency vaccination campaign targeting more than a million children as a fast-spreading measles outbreak sweeps across the nation.

### About Measles

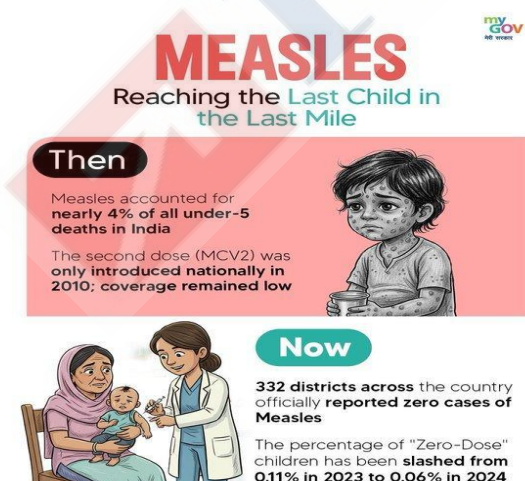


Figure 16. Source: My gov India

Measles is an infection of the respiratory system, immune system and skin.

○ It is also known as morbilli.

● **Caused by:** It is caused by the measles virus (MV), a paramyxovirus of the genus *Morbillivirus*.

○ Paramyxovirus is a family of negative-strand RNA viruses in the order Mononegavirales.

● **Transmission**

○ It is a highly contagious disease

- It spreads by contact with infected nasal or throat secretions (coughing or sneezing) or breathing the air that was breathed by an infected person.
- The virus remains active and contagious in the air or on infected surfaces for up to two hours.
- **Symptoms:** It usually begins 10–14 days after exposure to the virus.
  - Rash is the most visible symptom along with a running nose, cough, red and watery eyes and small white spots inside the cheeks.
  - The rash begins about 7–18 days after exposure, usually on the face and upper neck.
  - It usually lasts 5–6 days before fading.
- **Who is at greater risk:** Any non-immune person can become infected.
  - Unvaccinated young children and pregnant persons are at the highest risk of severe measles complications.
- **Treatment:** There is no specific treatment for measles.
  - Care focuses on relieving symptoms, staying hydrated, and eating a healthy diet.
  - Vitamin A supplements are given to children and adults to help prevent eye damage and blindness.
- **Prevention:** Community-wide vaccination is the most effective way to prevent measles.
  - **Vaccines used:** Vaccines such as Measles, mumps, rubella (MMR) vaccine and Measles, mumps, rubella, varicella (MMRV) vaccine are used for prevention.
- **India's effort toward prevention:** Union Health Minister recently launched the [National Zero Measles-Rubella Elimination Campaign 2025–26](#).

### **Mission MITRA**

**News:** India's four Gaganyaan astronauts began Mission MITRA, which is a high-altitude test in Ladakh.

**About Mission MITRA**



Source: ISRO

- Mission MITRA stands for **Mapping of Interoperable Traits and Response Assessment**.
- It is a **first-of-its-kind team behavioural study** to examine the **physiological, psychological, and operational dynamics of Crew and ground teams functioning** in a high-altitude environment.
- **Aim:** The primary aim of the Mission MITRA is to **study how the crew members communicate amid stressful working conditions**, which include **communication, dealing with conflicts, taking up leadership positions, and making decisions**.
- **Led by:** It is led by **ISRO's Human Space Flight Centre**.
- **Designed by:** It is designed by **ISRO & IAF-Institute of Aerospace Medicine**.
- **Testing site:** It will be **conducted at Leh, Ladakh**.
  - This place is chosen as **it is about 3,500 m** above mean sea level and **naturally offers a certain space-like environment**, including **hypoxia, coldness, and isolation**.
- **How it will be conducted:** The participants are **put in environments where the presence of thin air, cold, and isolation** mirrors the experience of actual space flight.
  - **Such analog missions conducted under controlled yet realistic conditions are utilised to understand how the gaganyatris perform under challenging conditions**.
- **Significance:** The information gathered in this experiment is expected to be **used to prepare for future flights**.
  - It will also help **create guidelines related to crew interaction and survival**.

## Hokersar and Wular Lake

News: A CAG report highlighted that 518 lakes (74%) in Jammu and Kashmir have disappeared or shrunk, causing ecosystem degradation and climate insecurity.

### About Hokersar Lake



Source – WII

- Hokersar is an important high-altitude wetland in Kashmir Valley known for biodiversity and migratory birds.
- Location: It is located in Baramulla district of Jammu and Kashmir, at an altitude of 1,583 m.
- It is known as the “Queen of Wetlands” or “Queen Wetland of Kashmir”.
- Ramsar status: It is an acknowledged Ramsar Site, designated in 2005.
- River associated: It is connected to the Jhelum River through a network of channels, which sustains its ecosystem.
- Key features
  - Biodiversity support: It provides habitat to birds, fish, amphibians, and reptiles with rich vegetation like Typha and Phragmites.
  - Migratory birds: More than half a million migratory birds visit between October and March, including species from Siberia and Europe.

### About Wular Lake

- Location: Wular Lake lies between Bandipora and Sopore at the foothills of Haramuk Mountain.

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- It is the largest freshwater lake in India and second largest in Asia.
- **Formation:** Its basin was formed due to tectonic activity and is considered a remnant of ancient Satisar Lake.
- **Ramsar status:** It was designated as a Ramsar Site in 1990.
- **River:** It is fed by the Jhelum River.
- **Key features**
  - **Rich biodiversity:** It supports 56 bird species, 39 fish species, and over 20 plant types.
  - **Notable species:** It hosts rare birds like White-bellied Heron and Pink-headed Duck.
- **Conservation Management:** The Wular Conservation and Management Authority (WUCMA) is currently implementing a comprehensive management action plan for biodiversity conservation and desilting.

### About First ever Annual Survey of Incorporated Services Sector Enterprises (ASISSE)

News: The National Statistics Office launched the first-ever ASISSE from April 2026 to build a comprehensive database of the services sector.

### About Annual Survey of Incorporated Services Sector Enterprises (ASISSE)



Figure 17. Source – DD News

- It is a nationwide survey to generate reliable data on incorporated services sector enterprises.

- **Launched by:** It is launched by the National Statistics Office (NSO) under the Ministry of

Statistics and Programme Implementation (MoSPI).

- **Reference period:** The reference period is the financial year 2024–25.
- **Legal Framework:** It is conducted under the provisions of the Collection of Statistics Act, 2008.

- **Sampling Frame:** The sampling is based on the GSTN database and covers about 1.21 lakh enterprises, ensuring wide and representative coverage.
- **Objectives**
  - It aims to develop a comprehensive database of the incorporated services sector.
  - It provides key operational and economic indicators for evidence-based policymaking.
- **Coverage:** It covers companies registered under the Companies Act and Limited Liability Partnership Act across sectors like trade, transport, hospitality, information technology, education, and healthcare in all States and Union Territories.
- **Complementary Survey:** ASISSE complements Annual Survey of Industries (ASI) for manufacturing and Annual Survey of Unincorporated Sector Enterprises (ASUSE) for unincorporated sector to provide a holistic view of the non-agricultural economy.
- **Significance:** It strengthens data on a sector contributing over half of India's GDP and generating millions of jobs.

### **Prototype Fast Breeder Reactor (PFBR)**

**News:** India achieved a major milestone in its civil nuclear programme as the 500 MWe Prototype Fast Breeder Reactor at Kalpakkam attained criticality, marking the start of a controlled nuclear chain reaction.

#### **About Prototype Fast Breeder Reactor (PFBR)**



Figure 18. Source – TNIE

The Prototype Fast Breeder Reactor is India's first fast breeder reactor, a nuclear reactor that produces more fissile material than it consumes using fast neutrons and plutonium-based fuel.

- **Developed by:** The reactor was indigenously developed by Indira Gandhi Centre for Atomic Research.
- **Built by:** It was built and commissioned by Bharatiya Nabhikiya

**Vidyut Nigam Limited.**

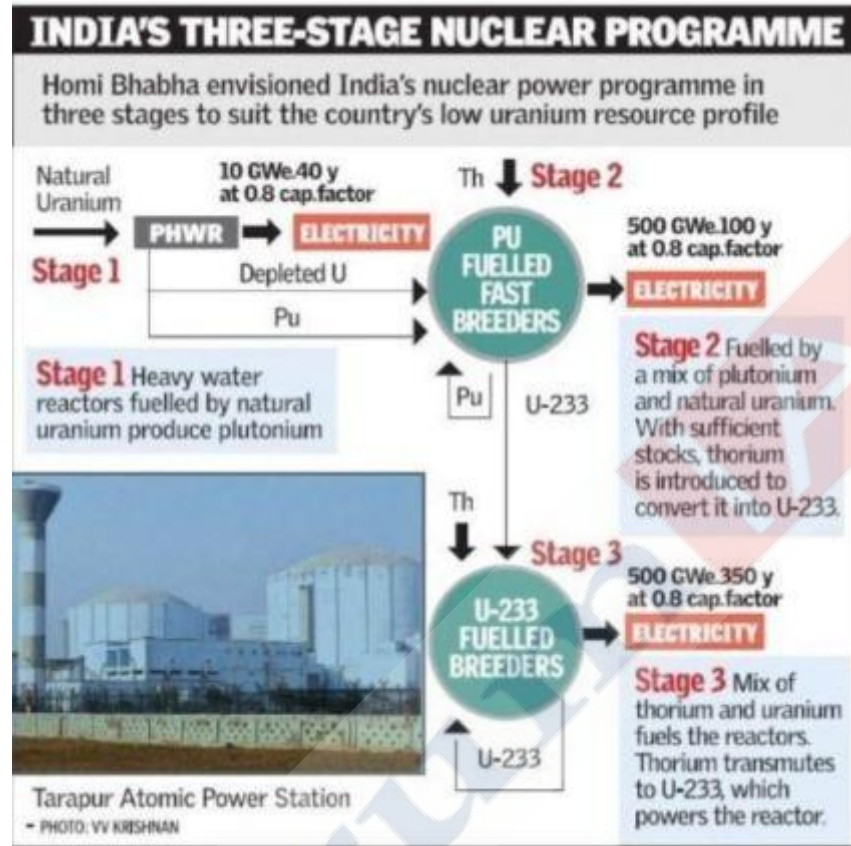
- **Operated by:** It is operated by the BHAVINI under the Department of Atomic Energy (DAE).
- **Working Mechanism of PFBR:**
  - **Fuel use:** The reactor uses Uranium-Plutonium Mixed Oxide (MOX) fuel, where plutonium undergoes fission using fast neutrons.
  - **Neutron process:** Fast neutrons convert fertile Uranium-238 into fissile Plutonium-239, sustaining the chain reaction.
  - **Breeding process:** This conversion enables the reactor to produce more fuel than it consumes, which is the core principle of breeder reactors.
  - **Coolant system:** The reactor uses liquid sodium coolant, which efficiently removes heat and allows fast neutrons to persist.
  - **Thorium pathway:** The reactor is designed to use Thorium-232, which can be converted into Uranium-233 for the third stage.
- **Key Features:**
  - **High fuel efficiency:** It can extract more energy from uranium, improving resource utilization.
  - **Support to nuclear programme:** It acts as a bridge between Stage I and Stage III of India's nuclear programme.
  - **Closed fuel cycle:** It enables recycling of nuclear materials, reducing waste.
  - **Energy security role:** It supports long-term clean and reliable base-load power generation.

#### About Criticality in Nuclear Reactors

- It is the stage where a nuclear chain reaction becomes self-sustaining and stable.
- **Operational importance:** It marks readiness of the reactor for power generation.
- **States of Criticality:**
  - **Subcritical state:** In this state, neutron losses are greater than production, so the chain reaction gradually dies out and the reactor shuts down.
  - **Critical state:** In this state, neutron production equals neutron loss, so the chain reaction becomes stable and self-sustaining, and power remains constant.
  - **Supercritical state:** In this state, neutron production exceeds losses, so the chain reaction increases rapidly, and reactor power rises.

- Safety aspect: Controlled criticality is essential for safe reactor operation.

### About India's 3 Stage Nuclear Programme



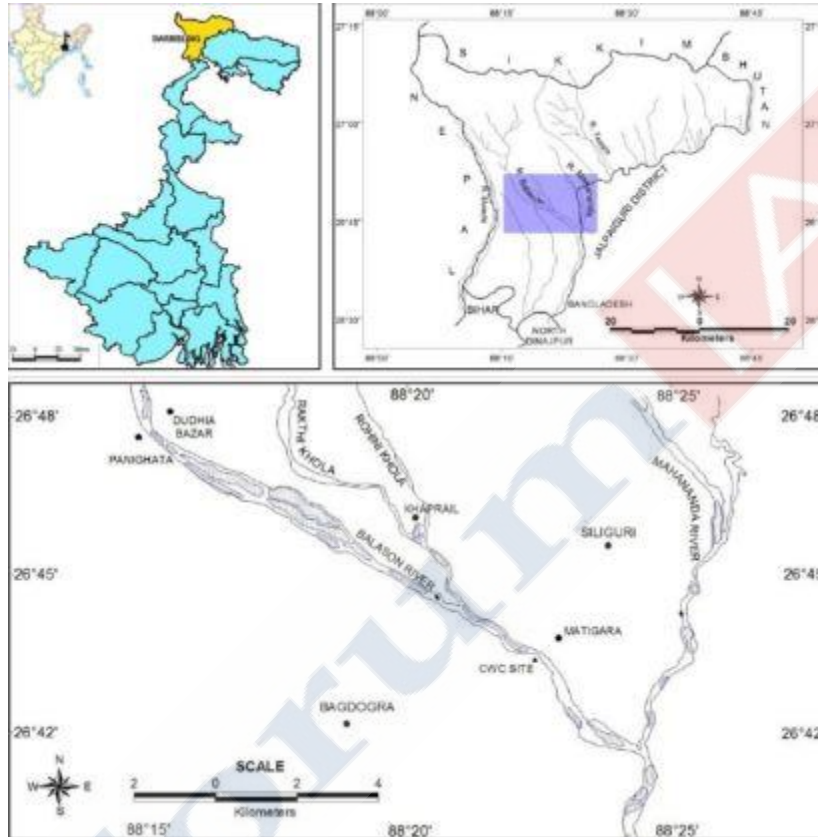
Source - TH

- It is a long-term strategy to achieve energy security using uranium and vast thorium reserves.
- Formulated by: It was formulated by Homi Bhabha in the 1950s.
- Aim: It aims to ensure energy independence, efficient fuel use, and utilisation of abundant thorium reserves.
- Three stages are:
  - Stage 1: Pressurised Heavy Water Reactors using natural uranium.
  - Stage 2: Fast Breeder Reactors using plutonium-based fuel.
  - Stage 3: Advanced systems using thorium to produce Uranium-233.

## Balason River

**News:** An application filed before the NGT has raised concerns over violations of environmental laws and riverbank regulations by the construction of the Balason Blues Resort & Camping on the Balason riverbank in Darjeeling.

### About Balason River



### Source – Research Gate

- **Origin:** It originates from **Lepchajagat** on the **Ghum-Simana ridge** at an altitude of about **2,361 m** in the **Darjeeling Himalayas**, below **Tiger Hill** in **Darjeeling District** of **West Bengal**.
- **Naming:** The name '**Balason**' is derived from the **Lepcha language**, highlighting **local heritage**.
- **Course of the river:** The **main course** of the **Balason River** flows from **north to southeast** for approximately **51.92 km**.
  - It flows **north to south-east**, **joining the Mahananda River at Naukaghat (Siliguri)**.
  - **So, it is a major right-bank tributary of the Mahananda River.**
  - The **Mahananda River** eventually merges with the **Ganga** River system.

## Factly Compilation [First Week] April 2026

- **River basin:** The river basin spans parts of **Rangli Rangliot, Naxalbari, Matigara, Jorebunglow Sukiapokhri, Mirik, and Kurseong** in the Darjeeling district of West Bengal.
  - The basin area is **largely composed of intensely metamorphosed rocks**, including gneiss, slates, phyllite, and schists and the basin area is dominated by **Inceptisol soils**.
- **Tributaries: Its right bank and left bank tributaries are:**
  - **Right-bank tributaries:** Pulungdung Khola, Rangbang Khola, Marma Khola, Manjwa Jhora, and Dudhia Jhora.
  - **Left-bank tributaries:** Bhim Khola, Rangmuk Khola, Pachhim Khola, Rinchigtong Khola, and Ghatta Hussain Khola.
- **Drainage pattern:** The drainage network exhibits a **dendritic pattern** and the river valley is characterised by a **steep, ungraded channel, a narrow valley floor, and steep valley sides**.

### Global Heat Health Information Network (GHHIN)

**News:** On the occasion of World Health day 2026, a South Asia Hub of the Global Heat Health Information Network (GHHIN) was advanced by the Council on Energy, Environment and Water (CEEW).

#### About Global Heat Health Information Network (GHHIN)



## GLOBAL HEAT HEALTH INFORMATION NETWORK

#### Source: Global Heat Health Information Network official page

- The Global Heat Health Information Network (GHHIN) is an **independent, member-driven platform** comprising scientists, practitioners, and policymakers.
- It focuses on **enhancing global capacity** to protect populations from **avoidable health risks caused by extreme heat** in the context of a changing climate.
- **Launched in:** It was **launched in 2016** by experts from multiple founding institutions.
- **Led by:** It is led by **World Health Organisation (WHO), World Meteorological Organisation (WMO) and United States National Oceanic and Atmospheric Administration (NOAA)**.

- **Aim:** It aims to **strengthen the capacity of professionals, organisations, and governments** to safeguard populations from the **preventable health impacts of extreme ambient heat**.
- **Goals:** The Network accelerates heat action through three goals:
  - **Connect and empower people and institutions to form multi-disciplinary partnerships to reduce heat risks.**
  - **Accelerate the generation of evidence, actionable knowledge, and standardized guidance and risk metrics.**
  - **Catalyze global, national and local policy and action to minimize societal consequences of heat impacts.**
- **Key activities and programmes:** The network supports capacity-building through:
  - **Biannual Global Forum on Heat and Health**
  - Dissemination of **news, information, and knowledge** via an online platform
  - Development of **inventories of Heat Health Action Plans and case studies**
  - Preparation of **country profiles**
- **Report:** It publishes **Global Synthesis Reports on Heat Health**.

#### **About South Asia Hub of the Global Heat Health Information Network (GHHIN)**

- The **South Asia Hub of the Global Heat Health Information Network (GHHIN)** is a **regional initiative** aimed at **strengthening preparedness and response to extreme heat** by translating scientific evidence into practical action.
- **Developed by:** It is being developed by the **Council on Energy, Environment and Water (CEEW)** under the joint Climate and Health programme of the **WHO** and the **WMO**, with support from the Wellcome Trust.
  - **India's Participation:** The Hub will work closely with the **South Asia Climate and Health Desk at the Indian Institute of Tropical Meteorology and the India Meteorological Department**.
- **Goal:** Its main goal is **to strengthen preparedness for extreme heat by converting scientific data into early warnings** and actionable measures to protect communities.
- It reflects a **One Health approach**, bringing together climate science, public health, and partnerships to deliver solutions for saving lives.