

NEWS TODAY

SOP for Green Tug Transition Program (GTTP) launched

Union Minister of Port Shipping and Waterways launched the SOP for GTTP to drive the transition from conventional fuel-based harbour tugs to greener, more sustainable alternatives towards Green shipping.

➤ A tug is a particular class of boat which helps mega-ships enter or leave a port.

About GTTP

- GTTP, announced in 2023, is a key initiative under the 'Panch Karma Sankalp' to phase out conventional fuel-based harbour tugs operating in Indian Major Ports and replace them with green tugs.
 - ⊕ 'Panch Karma Sankalp' includes 5 major announcements including 30% financial support for the promotion of Green Shipping, Single Window Portal to facilitate and monitor river and sea cruises, etc.

Need of Green Shipping

- Shipping sector accounts for nearly 3% of world's CO2 emissions.
- For India, GHG emissions from maritime (excluding military operations) contribute 1% of overall transport sector GHG emissions.

Challenges in Decarbonization of Shipping

- **High Dependency on fossil Fuels:** About 99% of energy demand from the international shipping sector is met by fossil fuels.
- **Transition cost:** e.g., For use of LNG fuel, it requires extensive retrofits to existing infrastructure as it require storage of fuel at cryogenic temperatures.
- **Others:** Inadequate port facilities resulting in sub-optimal route planning and inefficient fuel consumption, difficulty in enforcing regulations in international waters, etc.

Key Initiatives

Global

- **Revised Greenhouse Gas (GHG) Strategy by IMO:** Set a sectoral target of net-zero emissions by or around 2050.
- **Green Voyage 2050:** Global programme supporting developing countries to reduce emissions from ships, in line with the 2023 IMO GHG Strategy.

India

- **Sagarmala Programme:** Focuses on port-led development with emphasis on green port initiatives and coastal community development.
- **Maritime India Vision 2030:** Focuses on development of Green Ports & Green Shipping in India.

MoHFW Issues 'FIR within 6 hrs' Order Over Violence Against Health Workers

The ministry mandated the Head of the Institution to file an Institutional FIR within 6 hours of any violence against healthcare workers on duty.

- The order takes cognisance of rising violence against doctors and other healthcare staff mostly perpetuated either by the patient or their relatives.
 - ⊕ Social instability, deterioration of personal interrelationships, the unacceptability of complications and death, etc. are key causes of such violence
- Public health is a 'State' subject and there is no Central law for preventing violence against healthcare workers (VAHCW).

Current status of VAHCW

According to the WHO:

- Health workers are at high risk of violence all over the world.
 - ⊕ Between 8% and 38% of health workers suffer physical violence while other face verbal aggression.
- Most violence is perpetrated by patients and visitors.
- Also, in disaster and conflict situations, health workers may become the targets of collective or political violence.

Consequences of VAHCW

- Negative impact on the psychological and physical well-being of health-care staff.
- Deterioration in the quality of care provided.
- Threat to equal access to primary health care if health workers abandon their profession because of the threat of violence.

Key Initiatives to Prevent VAHCW





- **By Centre:**
 - ⊕ The Prevention of Violence Against Healthcare Professionals and Clinical Establishments Bill, 2022.
 - ⊕ Epidemic Diseases (Amendment) Act, 2020: Acts of violence against healthcare personnel during an Epidemic situation are considered cognizable and non-bailable offences.
- **State laws:** Some States have implemented their statutes.
 - ⊕ Example, Kerala Healthcare Service Persons and Healthcare Service Institutions (Prevention of Violence and Damage to Property) Amendment Act of 2023.
- **Global effort:** WHO, ILO, among others jointly developed 'Framework guidelines for addressing workplace violence in the health sector'.

Satellite-based Agriculture Decision Support System launched

Union Minister of State for Agriculture launched **Krishi-Decision Support System (Krishi-DSS)** a geo-spatial platform to provide real-time information on crop conditions, weather patterns, water resources, and soil health.

- It has been developed by **Union Ministry of Agriculture and Farmers Welfare** and **Department of Space** using **RISAT-1A** and **Visualization of Earth observation Data and Archival System (VEDAS)** of the space department.

Application of Space Technology in Agriculture Sector

Technology	Applications	Significance
Remote Sensing and Imagery 	<ul style="list-style-type: none"> Early detection of pests and diseases Land Use Mapping 	<ul style="list-style-type: none"> Reduces potential yield loss. Identifying suitable land for agriculture, optimizing land use
Global Positioning System (GPS) 	<ul style="list-style-type: none"> Precision farming by precisely mapping fields and applying resources like seeds, fertilizers, etc., with high accuracy. Livestock tracking: e.g., GPS collars help monitor livestock movements and grazing patterns. 	<ul style="list-style-type: none"> Reduces inputs and saves cost Creating digital maps of fields for better planning
Communication Technologies 	<ul style="list-style-type: none"> Real-Time Data dissemination 	<ul style="list-style-type: none"> Enable farmers to access real-time market prices, weather updates, agricultural advisories, etc.
Weather Forecasting and Climate Modelling 	<ul style="list-style-type: none"> Early Warning Systems Monitoring Impact of Climate Change 	<ul style="list-style-type: none"> Help to mitigate impact of extreme weather events and disasters

Initiatives undertaken

- Forecasting Agricultural Output using Space, Agro-meteorology and Land based Observations (FASAL) Project**
- Coordinated programme on Horticulture Assessment and Management using geoinformatics (CHAMAN) Project**
- KISAN (C[K]rop Insurance using Space technology And geoinformatics)** for improvement in yield estimation.

India's Fuel Exports to Europe Shifted from Suez Canal to Cape of Good Hope

Before the **Red Sea security** crisis, India's fuel exports to Europe depended almost entirely on the Red Sea-Suez Canal route.

- India emerged as a **major fuel supplier** to Europe after the Russia-Ukraine conflict and the follow-up Western countries' sanctions on Russia.
- The Suez Canal is the **shortest maritime route between Asia and Europe**. It usually accounts for about 12-15% of **global maritime trade (UNCTAD)**.

Need for Shifting Route

- Attacks from Houthis:** Iran-backed Houthi rebels of Yemen attacking ships around the **Bab el-Mandeb strait** (choke point), which leads to Red Sea and Suez Canal.
- Israel-Hamas conflict:** Growing concerns over the possibility of the Israel-Hamas conflict developing into a wider Middle Eastern crisis

Consequences of Shifting Route

- Decline in Supply to Europe:** India's petroleum fuel exports to Europe in recent months have edged lower.
 - Shipping time for trade via Cape of Good Hope is around **2 weeks more** and it also raises container **freight rates by over 30%**.
- Diversification of Export Destination:** India's overall fuel exports are stable with **increased dispatches to Asian markets and Australia** offsetting the decline in supplies to Europe.



Foreign Exchange Management (Non-debt Instruments) (Fourth Amendment) Rules, 2024 notified

Rules have been notified by in pursuance of the Union Budget 2024-25 announcements to **simplify rules and regulations for Foreign Direct Investment (FDI) and Overseas Investment.**

- Rules have been notified by the **Union Ministry of Finance** under the **Foreign Exchange Management Act, 1999.**

Key highlights of the amended rules

- **Cross-border share swaps:** Simplifies cross-border share swaps and provide for issue or transfer of Indian company equity instruments in exchange for foreign company equity instruments.
 - ⊕ It aims to **facilitate global expansion of Indian companies** through **mergers, acquisitions, and other strategic initiatives**, enabling them to reach new markets and grow their presence worldwide.
- **FDI in White Label ATMs:** Allows **100% FDI under Automatic Route** in White Label ATMs to **boost financial inclusion nationwide.**
 - ⊕ **White Label ATMs** are ATMs **set up, owned, and operated by non-banks.**
- **Definition of 'Startup Company':** Harmonizes definition of 'Startup Company' with 2019 notification issued by Department of Industry and Internal Trade.
 - ⊕ According to 2019 notification, an entity will be considered and Startup -
 - ◆ **Upto a period of 10 years from the date of incorporation/ registration**, if it is incorporated as a private limited company (under Companies Act, 2013) or registered as a partnership firm (under Partnership Act, 1932) or a limited liability partnership.
 - ◆ **Turnover** of the entity for any of the financial years since incorporation/ registration **has not exceeded ₹ 100 crore.**

New Study of Indian Institute of Astrophysics (IIA) Can Facilitate Space Weather Forecasting

IIA scientists studied the **solar chromospheric images** from **Kodaikanal Solar Observatory (Tamil Nadu).**

- They discovered that the **width of the supergranular cells on the solar surface** during the **minimum year of the solar cycle** is strongly related to the **number of sunspots** seen during the **subsequent solar cycle maximum.**
 - ⊕ This method can be used in **space weather forecasting.**

About Space weather

- Space Weather describes **the variations in the space environment between the sun and Earth.**
- The active elements of space weather are **particles, electromagnetic energy, and magnetic field.**
- **Solar activity associated with space weather** are
 - ⊕ **Coronal Mass Ejections (CMEs):** They are **large expulsions of plasma and magnetic fields** from the Sun's corona (the outermost part of the Sun's atmosphere).
 - ⊕ **Solar Flares:** An intense **burst of radiation** coming from the **release of magnetic energy** associated with **sunspots.**
 - ⊕ **Solar Wind:** The solar wind **continuously flows outward from the Sun** and consists mainly of protons and electrons in a state known as a plasma.
 - ⊕ **High-Speed Solar Wind:** It is **more powerful than regular solar wind**, and it streams from areas of the sun known as **coronal hole.**

About Solar Cycle

- Solar cycle is a nearly **periodic change in the Sun's activity** which generally lasts for 11 years.
 - ⊕ **Beginning** of a solar cycle is a **solar minimum** (Sun has the least sunspots)
 - ⊕ **Middle of the solar cycle** is the **solar maximum** (Sun has the most sunspots).
- Also, **at the peak of each solar cycle, the Sun's magnetic field changes polarity** as its inner magnetic dynamo reorganizes itself.
 - ⊕ This can **stir up stormy space weather around our planet.**

Also in News



Cabinet Secretary

Appointments Committee of the Cabinet (ACC) approved the appointment of new Cabinet Secretary with a 2-year tenure starting from Aug 30, 2024.

About Cabinet Secretary (CS)

- Appointed by the **ACC on seniority-cum-merit basis.**
- Responsible for administration of **Government of India (Allocation of Business) Rules, 1961** and **Government of India (Transaction of Business) Rules, 1961.**
- **Functions:** Ensures **inter-ministerial coordination**, irons out differences among ministries and departments, etc.
- CS is also the **ex-officio Chairman of Civil Services Board (CSB).**
- **CS has no authority over working departments**, as CS is regarded as **primus inter pares among secretaries** of Union Government.



Guam Island

After participating in world's largest Multinational Maritime Exercise RIMPAC 2024, **INS Shivalik** reached Guam, an island territory of the United States.

About Guam Island

- Guam is the **largest and southernmost island** in the **Mariana Islands chain**, situated in the **North Pacific Ocean.**
- Formed by **two former volcanoes**, it's a **tropical island.**
- In 1898, after the Spanish-American War, **Spain ceded Guam to the US.**
- **Indigenous people:** Chamorros
- **Endemic Bird Species:** Guam kingfisher, Rota white-eye, and the Guam rail



NBFC-P2P leading

RBI issued a master circular to tighten norms for **Non-Banking Financial Companies (NBFCs) – P2P lending platforms.**

- P2P lending involves **individual lending and borrowing money directly through digital platforms**, without the involvement of traditional financial institutions like banks.

Key Regulation

- **NBFC–P2P lending platforms** are supposed to act as an intermediary for P2P lending participants.
- **Limiting exposure of a lender** across all P2P platforms to **Rs.50,00,000**
- **Prohibits P2P platforms from promoting P2P lending as an investment product** and cross-selling any insurance product.

Agni Missile

Shri R.N. Agarwal, the father of the Agni missile and a recipient of the **Padma Bhushan**, passed away recently.

- He served as the **Agni program director** and also as the **director of the Advanced Systems Laboratory in Hyderabad.**

About Agni Missile

- Agni was conceived under **Integrated Guided Missile Development Programme** of DRDO.
- Agni missiles are **surface-to-surface ballistic missile.**
- They are fuelled by **Solid propellant** and **mainstay of India's nuclear launch capability.**
- They have **medium- to intercontinental-range.**
- **Agni Prime is the latest missile** while other missiles are Agni 1-5.

Serosurvey

Indian Council of Medical Research (ICMR) has been conducting serosurvey since last year to determine exposure to Mpxo among India's high-risk population.

About Serosurvey

- It is the **collection and testing of blood** (or proxy specimen such as oral fluid) **from a specimen of a defined population over a specified period of time.**
- **Objective:** To estimate prevalence of **IgG antibodies against an infectious pathogen** as an indicator of exposure to a pathogen.
- **Significance:** Can be used to estimate prevalence of infection, immunity gap, key parameters for infectious disease modeling, etc.

Eri Silk

North Eastern Handicrafts and Handlooms Development Corporation successfully obtained **Oeko-Tex certification** for its Eri Silk.

- Oeko-Tex certification is standard that **ensures textiles are tested for harmful substances and produced in environment friendly conditions.**

About Eri Silk

- Renowned as **world's only vegan silk as moth inside the cocoon is not killed.** Instead moth **naturally exits the cocoon.**
- It is produced by **silkworm Philosamia ricini** which is **multivoltine** and reared indoors 5-6 times a year.

Note: India produces all the five types of silk: **Mulberry, Eri, Tropical & Temperate Tasar, and Muga.**

World's Oldest Calendar Discovered

World's oldest calendar, **dating back nearly 13,000 years** was discovered at **Göbekli Tepe**, an ancient site in Turkey.

- **Carvings on stone pillars** reveal a **sophisticated solar-lunar calendar**, possibly created to track time and celestial events, including a **comet strike around 10,850 BCE.**
- The discovery **challenges previous beliefs** about early human technological development, **showcasing advanced astronomy long before written language.**

Göbekli Tepe

- It has **round-oval and rectangular megalithic structures erected by hunter-gatherers in the pre-pottery neolithic age between 9,600 and 8,200 BCE.**
- It is a **UNESCO World Heritage Site.**

National Film Awards

70th National Film Awards for the year 2022 have been announced.

About National Film Awards

- Established in 1954 and were **initially called 'State Awards'** and **2 President's Gold Medals, 2 certificates of merit, and 12 silver medals for regional films** were presented in the earlier years.
- Awards have been **administered by the Directorate of Film Festivals since 1973.**
- **Awards are given in 3 categories:** Feature Films, Non-Feature Films, and Best Writing in Cinema.
- Most Film Friendly State award is also given, along with the National Film Awards, to a **State of India that has been helpful in furthering the growth of the film industry.**

Places in News

Vietnam (Capital: Hanoi)

Recently, **4th India-Vietnam Maritime Security Dialogue** was held at **Hanoi, Vietnam.**

Political Features

- It occupies the **eastern portion of mainland Southeast Asia.**
- **Land boundaries:** **China (North), Cambodia and Laos (West).**
- **Maritime boundaries:** **South China Sea** to the east and south, the **Gulf of Thailand (Gulf of Siam)** to the southwest.

Geographical Features

- **Major Rivers:** Mekong, Red, Ma, etc.
- **Many rare and unusual animals live in Vietnam**, including **giant catfish, Indochinese tigers, Saola antelopes, Sumatran rhinos, etc.**
- **Climate:** Tropical characterized by high temperature and humidity all year round.
- **Highest Peak:** Fansipan.

