NEXT IAS

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

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80 YEARS OF HIROSHIMA

In News

- On August 6, 1945, the United States dropped the first atomic bomb, nicknamed **"Little Boy,"** on Hiroshima, marking the first use of nuclear weapons in warfare.

About

- The incident serves as a stark reminder of the unprecedented devastation wrought by nuclear weapons and underscores the urgent global call for nuclear disarmament.
- The bombings of Hiroshima and Nagasaki not only ended World War II but also ushered in the nuclear age—shaping international politics, security doctrines, and peace efforts for the next eight decades.

How things rolled thereafter: the nuclear arms race?

- **Cold War & Arms Buildup:** USSR tested its first nuke in 1949, triggering a dangerous arms race. The world saw the development of hydrogen bombs, ICBMs, and mutually assured destruction (MAD) as the doctrine of deterrence.
  - ◆ This deterrence principle held that any nuclear attack would provoke overwhelming retaliation, guaranteeing total annihilation of both attacker and defender.
- **Establishment of IAEA:** In response to the growing danger, 1957 saw the formation of the International Atomic Energy Agency (IAEA) to promote the peaceful use of nuclear energy and prevent diversion for military purposes.
- **Cuban Missile Crisis (1962):** Nearly pushed the world into nuclear war.
- **Proliferation:** More nations joined the nuclear club — UK (1952), France (1960), China (1964), and later India (1974), Pakistan (1998), and North Korea (2006).
- **India's Position:** India maintains a No First Use (NFU) policy and emphasizes credible minimum deterrence. Refuses to sign the NPT on grounds of nuclear apartheid.

Major Treaties & Efforts at Disarmament

- **Treaty on the Non-Proliferation of Nuclear Weapons (NPT), 1968:** Aims to prevent spread of nuclear weapons. The treaty has three pillars: Non-proliferation, disarmament, and peaceful use of nuclear energy.
  - ◆ It has been criticized for being discriminatory and recognized NWS (Nuclear Weapon States) are not held to the same disarmament obligations.

- **Comprehensive Nuclear-Test-Ban Treaty (CTBT), 1996:** Prohibits all nuclear explosions. Not in force as key nations (including the US, China, India, Pakistan) haven't ratified it.
- **Treaty on the Prohibition of Nuclear Weapons (TPNW), 2017:** First legally binding international treaty to completely ban nuclear weapons. Opposed by all nuclear-armed states.
- **Strategic Arms Reduction Treaties (START & New START)**: Bilateral US-Russia agreements to cap deployed nuclear warheads. New START expires in 2026; future is uncertain due to geopolitical tensions.

Why Disarmament Still Matters: The Need for Urgency

- **Modernization of Arsenals:** Nations are modernizing, not dismantling their nuclear weapons (e.g., US, China, Russia, India).
- **Nuclear Terrorism Risk:** With unstable regimes and terrorist groups, risk of non-state actors accessing nuclear material is growing.
- **Environmental Catastrophe:** A full-scale nuclear exchange could trigger nuclear winter, leading to mass starvation and ecological collapse.
- **Erosion of Norms:** The nuclear taboo is weakening as disarmament talks stagnate and strategic competition rises.

Source: TOI

BILLS TO MODERNISE INDIA'S SHIPPING LAWS

Context

- Recently, the Parliament of India has passed the **'Merchant Shipping Bill, 2025'** and the **'Carriage of Goods by Sea Bill, 2025'** to overhaul India's maritime legal framework.

Key Highlights of the Merchant Shipping Bill, 2025 (replacing the 1958 Act)

- **Expanded Definition of Vessels:** The Bill broadens the definition of "vessels" to include a wider range of marine craft, such as mobile offshore drilling units (MODUs), submersibles, and non-displacement crafts.
- **Mandatory and Temporary Registration:** The 2025 Bill makes vessel registration mandatory for all vessels, regardless of their propulsion type or weight. It also introduces a new provision for temporary registration, specifically for vessels intended for recycling, which helps streamline operations at ship recycling hubs like Alang.
- **Relaxed Ownership Criteria:** It allows for partial ownership by Indian citizens, entities registered

under Indian law, registered cooperative societies, and Overseas Citizens of India (OCIs). The previous law required 100% Indian ownership.

- **Enhanced Seafarer Welfare:** The Bill expands welfare provisions to cover Indian seafarers working on foreign-flagged vessels, a group that was previously excluded.

- **Strengthened Pollution Control**: While the 1958 Act had some provisions, the 2025 Bill fully incorporates international conventions like MARPOL to prevent and combat marine pollution.

- **Governance and Regulatory Changes:** The Bill renames the Director-General of Shipping to the Director-General of Marine Administration. This official is also given the authority to regulate maritime education and training.

Key Highlights of the Carriage of Goods by Sea Bill, 2025 (replacing the 1925 Act)

- **Adopts Hague-Visby Rules (1924):** The new Bill **adopts the Hague-Visby Rules** *(cargo movement laws)*, a more modern and globally accepted framework.

- **Central Government Role:** The government can issue directions and amend rules related to Bills of Lading — documents detailing goods carried by sea, their condition, and destination.

- **Promote Ease of Doing Business:** It simplifies legal language, reduces litigation risks, and improves transparency and efficiency in cargo movement.

Understanding the Hague-Visby Rules

- These are a set of internationally recognized legal standards that govern the carriage of goods by sea.

- It was adopted as amendments to the original Hague Rules of 1924, they form the backbone of cargo liability law in many countries, including India.

Origin and Evolution

- **Hague Rules (1924):** Established basic responsibilities and liabilities of carriers.

- **Hague-Visby Protocol (1968):** Updated provisions to reflect modern shipping practices.

- **SDR Protocol (1979):** Introduced standardized compensation limits using Special Drawing Rights.

Why did India adopt the Hague-Visby Rules?

- **Global Alignment:** These rules are widely accepted in international shipping, including by the UK and EU.

- **Legal Clarity:** They simplify cargo liability, reducing litigation and ambiguity.

- **Trade Facilitation:** Enhances trust and transparency for exporters, insurers, and carriers.

- **Parliamentary Oversight:** India's new law ensures executive actions under these rules are subject to legislative review.

Implications for India's Maritime Future

- These two bills are not just legal updates — they represent a strategic repositioning of India as a global maritime leader.

- By aligning with international norms and streamlining governance, the Bills are expected to:
    - Boost investment and innovation in the maritime sector.
    - Enhance India's competitiveness in global shipping.
    - Support trade commitments under agreements like the **Comprehensive Economic and Trade Agreement (CETA)** with the UK.

Source: TH

FIRST BIMSTEC TRADITIONAL MUSIC FESTIVAL

Context

- **The first BIMSTEC Traditional Music Festival** was organised at New Delhi.

About

- It was organised by the **Indian Council for Cultural Relations (ICCR)**, the festival called **'SaptaSur: Seven Nations, One Melody'**, witnessed the celebration of the distinct musical traditions of the seven BIMSTEC countries.

- The Festival served as a **vibrant platform** to promote and celebrate the rich and diverse cultural heritage of the BIMSTEC region.

- **The event brought together musicians** from all the **BIMSTEC countries** - Bangladesh, Bhutan, India, Myanmar, Nepal, Srilanka and Thailand.

BIMSTEC

- **The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** is a grouping of **seven Member States** lying in the **littoral and adjacent areas of the Bay of Bengal.**

- The organization was formed in **1997** with the signing of the **Bangkok Declaration.**

- ◆ It unites South and **Southeast Asian nations bordering the Bay of Bengal.**
- **Founding Members (1997):** Bangladesh, India, Sri Lanka, Thailand.
- **Current Members (7):** Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.
- **Objective:** To help countries in their economic growth, to support social development, and to encourage development in other areas, like science, technology and economic development.
- The BIMSTEC region brings together **1.7 billion people** - **22%** of world population with a combined GDP of **US$ 5 trillion.**
- **BIMSTEC Secretariat:** Dhaka, Bangladesh.

Significance of BIMSTEC for India

- **Bridges South Asia and Southeast Asia:** BIMSTEC connects India with Thailand and Myanmar (ASEAN) and the Bay of Bengal.
  - ◆ Supports initiatives like the Kaladan Multi-Modal Transit Project and India–Myanmar–Thailand Trilateral Highway.
- **Counterbalance to China:** Enhances India's regional influence and offers an alternative to China's Belt and Road Initiative (BRI).
- **Maritime Security:** The Bay of Bengal is vital for India's naval strategy and energy trade routes.
- **Support for India's Northeast:** Opens new avenues for development and integration of the Northeast region with regional markets.
- **Bay of Bengal as an Energy Hub:** Scope for collaboration in oil and gas exploration, renewable energy, and the blue economy.
- **Shared Civilizational Links:** Common cultural and religious heritage, particularly Buddhism.
  - ◆ Easier regional travel, promotion of Buddhist circuits and cultural exchanges.
- **Alternative to SAARC:** With SAARC stagnating due to Indo-Pak tensions, BIMSTEC serves as a more productive regional forum.

Conclusion

- India's approach towards the Bay of Bengal countries and BIMSTEC is underpinned by a clear vision of **regional integration and strategic autonomy.**
  - ◆ The bay remains a **keystone in India's Indo-Pacific strategy,** with its economic and security imperatives demanding proactive engagement.
- The **transformation of the Northeast** underscores India's commitment to internal development as a foundation for external engagement.

- These interlinked policies have **reinforced India's role as a key pillar** in the rapidly emerging multipolar order across Asia and beyond, fostering **long-term economic growth, security and diplomatic influence.**

Source: AIR

SUPREME COURT EXAMINES SCREENING PROCESS IN CORRUPTION PROBES AGAINST PUBLIC SERVANTS

Context

- the Supreme Court heard a petition challenging the constitutional validity of **Section 17A of the Prevention of Corruption Act, 1988**, balancing protection of honest officers and ensuring accountability in corruption probes.

What is Section 17A of the Prevention of Corruption Act?

- Introduced via the **2018** Amendment, **Section 17A prohibits any police inquiry or investigation** into public servants without prior approval from the competent authority (Central or State Government) if the act was done in the discharge of official duties.
- It aims to **shield honest officials from harassment** and prevent policy paralysis due to fear of prosecution.
  - ◆ However, critics argue it creates hurdles in timely action against corruption, as prior approvals are often delayed or denied.

Key Issues Raised in the Supreme Court

- **Challenge to Section 17A:** The petition by **Public Interest Litigation (CPIL),** argued that;
  - ◆ The provision cripples anti-corruption investigations.
  - ◆ Governments, being the competent authority, are essentially judging their own officers, compromising impartiality.
  - ◆ In many cases, especially at the state level, sanctions are not granted, blocking investigation.
- The **deletion of Section 13(1)(d)(ii) (abuse of position)** is criticised as diluting the anti-corruption law's scope.

Supreme Court Observation

- **Constitutionality vs. Implementation:** The Court observed that many concerns raised were more about implementation flaws, not the constitutional validity of the provisions.

- It warned that fear of prosecution would lead to **policy paralysis**, and emphasised the necessity of **shielding honest officers from frivolous proceedings.**

- The Court highlighted a need to **strike a balance** between protecting honest officials and enabling corruption probes.

What are the concerns?

- The requirement of prior sanction under **Section 17A** causes significant delays in initiating corruption investigations, thereby reducing the deterrent effect of the anti-corruption law.

- The separation of powers **limits the judiciary scope** for immediate corrective action, unless the provision is found to be unconstitutional.

- The current framework **lacks an impartial and time-bound mechanism** for **granting sanctions, raising concerns about transparency** and the objectivity of the decision-making process.

Various Committee Recommendations

- **Rajya Sabha Select Committee (2016)** highlighted that requiring government sanction for every investigation is difficult at the grassroots, undermining public trust and emboldening corruption.

  - It **suggested limiting the sanction mechanism to senior officials,** not minor ranks, and streamlining approvals

- **The Santhanam Committee (1962)** recommended establishment of the Central Vigilance Commission (CVC) to independently review sanction requests and direct **investigations through agencies like the CBI.**

Way Ahead

- **Time-Bound Sanction Process:** Introduce a mandatory timeline for granting or denying sanction under Section 17A to prevent undue delays in initiating investigations.

- **Judicial Safeguards:** Empower courts to review arbitrary refusals or delays in granting sanctions, thereby reinforcing checks and balances within the anti-corruption framework.

Source: TH

SUPREME COURT VERDICT ON ENVIRONMENT IMPACT ASSESSMENT (EIA)

Context

- The Supreme Court held that projects with a **built-up area above 20,000 square meters**, whether industrial, educational, or otherwise, **cannot be exempted from the environment impact assessment (EIA) 2006 regime.**

About

- The SC reaffirmed that the **State Environment Impact Assessment Authority (SEIAA) and the State Expert Appraisal Committee (SEAC)** would remain the competent authorities for conducting project-level environmental assessments.

Environment Impact Assessment (EIA)

- EIA can be defined as the **study to predict the effect of a proposed activity/project on the environment.**

- **EIA systematically examines both beneficial and adverse consequences** of the project and ensures that these effects are taken into account during project design.

  - It also **proposes measures to mitigate adverse effects.**

- **Significance:** Protection of environment, optimum utilisation of resources and saving of time and cost of the project.

  - It also lessens conflicts by promoting community participation, informing decision makers, and helping lay the base for environmentally sound projects.

EIA in India

- **1994:** The Union Ministry of Environment and Forests (MEF), under the Environmental (Protection) Act 1986**, made Environmental Clearance (EC) mandatory.**

- **EIA 2006 Regime:** It is the governing legal instrument to grant green clearance for establishment or expansion of an industry on the basis of the expected environmental impact of the project.

  - It made it mandatory for various projects such as mining, thermal power plants, river valley, infrastructure and industries to get environment clearance.

  - However, unlike the EIA Notification of 1994, the new legislation has **put the onus of clearing projects on the state government** depending on the size/capacity of the project.

Legal and Institutional Framework

- **EIA Notifications:** Issued by the Ministry of Environment, Forest and Climate Change (MoEFCC) using powers under the Environmental (Protection) Act 1986.

- **Institutional Authorities:**

 - **Central Expert Appraisal Committee (EAC):** For Category A projects (national level).

◆ **State Expert Appraisal Committees (SEACs):** For Category B projects (state level).

◆ **State Environment Impact Assessment Authorities (SEIAAs):** Grant environmental clearance at state level.

- **Categorisation of Projects**

◆ **Category A:** National-level projects with significant impacts (e.g., large dams, major highways).

◆ **Category B1:** Moderately sized projects with regional impact.

◆ **Category B2:** Small-scale projects with less impact.

Concerns

- One positive of the 2006 EIA notification is its **dynamism to accommodate changes in its provisions and processes** as per the requirement of the changing times.

◆ However, this characteristic of the legal instrument seems to have been exploited.

- Over 110 changes were made in just 5 years — most of them without public consultation.

TRACK CHANGE
Number of changes introduced in the Environment Impact Assessment Notification, 2006, in past five years
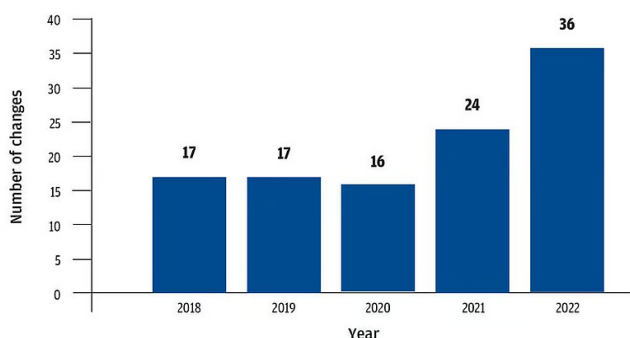
Source: CSE analysis

- **This flexibility has been misused** and industries get approvals — even if they pollute or harm the environment.

Suggestions

- Create an independent EIA authority to avoid conflict of interest.
- Strengthen public consultation, especially in local languages.
- Ensure scientific and transparent baseline data.
- Regularly update the list of exempted projects based on environmental concerns.

Source: HT

BIOCHAR

In News

- India's carbon market is expected to rely on CO removal technologies like **biochar**, which will play a key role in meeting climate goals and offsetting emissions.

Biochar

- It is black carbon produced from biomass sources [i.e., wood chips, plant residues, manure or other agricultural waste products] for the purpose of transforming the biomass carbon into a more stable form (carbon sequestration).
- It offers a sustainable alternative to manage waste and capture carbon.

Status in India

- India generates vast amounts of agricultural and municipal waste, much of which is burned or dumped, causing pollution.
- Utilizing 30–50% of this surplus to produce biochar could remove 0.1 gigatonnes of CO annually.
- Byproducts like syngas and bio-oil could generate 8–13 TWh of electricity and offset up to 8% of diesel/kerosene use, reducing coal demand and cutting over 2% of India's fossil fuel emissions.

Significance

- Biochar is a durable carbon sink that can store carbon in soil for 100–1,000 years and offers scalable emission reduction across sectors.
- In agriculture, it improves water retention and can cut nitrous oxide emissions by 30–50%.
- It also **restores soil health** by enhancing organic carbon.
- Modified **biochar can capture CO_2 from industrial emissions,** though less efficiently than other methods.
- In construction, **adding 2–5% biochar** to concrete boosts strength, heat resistance, and sequesters 115 kg CO/m^3.
- **In wastewater treatment**, biochar can treat 200–500 litres per kg, with a potential demand of 2.5–6.3 million tonnes in India.

What hinders biochar's application?

- Despite its high carbon removal potential, biochar remains underutilised in carbon credit systems due to lack of standardised feedstock markets, inconsistent carbon accounting, and weak investor confidence.
- Key barriers to large-scale adoption include limited resources, evolving technologies, policy gaps, and low stakeholder awareness.

Suggestions

- Biochar needs sustained R&D, integration into climate and agricultural policies, and recognition in the Indian carbon market.

- ◆ This could generate income for farmers, create around 5.2 lakh rural jobs, and enhance soil health, crop yields, and fertilizer efficiency.
- Biochar offers a promising, science-backed solution for India's climate and development goals.

Source: TH

FIRST-EVER AUCTION FOR PROCUREMENT OF GREEN AMMONIA UNDER NATIONAL GREEN HYDROGEN MISSION

In News

- The **Solar Energy Corporation of India Limited (SECI)** has conducted its first-ever auction for **Green Ammonia** procurement via SIGHT Scheme (Mode-2A) under **National Green Hydrogen Mission.**

Hydrogen

- It is the lightest and most abundant element in the universe and rarely found in nature in its elemental form and must always be extracted from other hydrogen-containing compounds.
- It is categorised into three categories, namely, **Grey, Blue and Green.**
- **Grey Hydrogen:** It is produced via coal or lignite gasification (black or brown), or via a process called steam methane reformation (SMR) of natural gas or methane (grey). These tend to be mostly carbon-intensive processes.

Source: World Economic Forum

- **Blue Hydrogen:** It is produced via natural gas or coal gasification combined with carbon capture storage (CCS) or carbon capture use (CCU) technologies to reduce carbon emissions.
- **Green Hydrogen:** It is produced using electrolysis of water with electricity generated by renewable energy. The carbon intensity ultimately depends on the carbon neutrality of the source of electricity (i.e., the more renewable energy there is in the electricity fuel mix, the "greener" the hydrogen produced)

National Green Hydrogen Mission

- It was launched on 4th January 2023, with an outlay of Rs. 19,744 crores up to FY 2029-30.
- It will contribute to India's goal to become Aatma Nirbhar (self-reliant) through clean energy and serve as an inspiration for the global Clean Energy Transition.
- It will lead to significant decarbonisation of the economy, reduced dependence on fossil fuel imports, and enable India to assume technology and market leadership in **Green Hydrogen.**
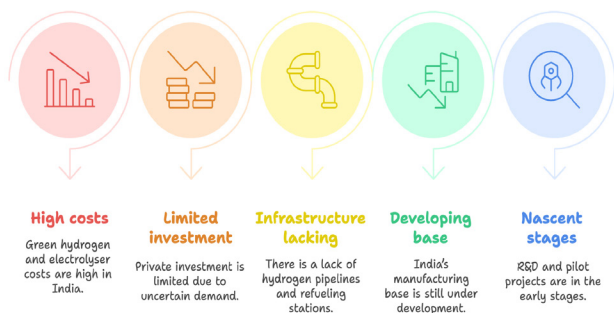
Mission Subcomponents

- **SIGHT Programme:** Under the Strategic Interventions for Green Hydrogen Transition Programme (SIGHT), two distinct financial incentive mechanisms – targeting domestic manufacturing of electrolysers and production of Green Hydrogen – will be provided under the Mission.
- **Pilot projects:** The Mission will also support pilot projects in emerging end-use sectors and production pathways. Regions capable of supporting large scale production and/or utilization of Hydrogen will be identified and developed as Green Hydrogen Hubs.
- **R&D Projects:** Public-Private Partnership framework for R&D (Strategic Hydrogen Innovation Partnership – SHIP) will be facilitated under the Mission. R&D projects will be goal-oriented, time bound, and suitably scaled up to develop globally competitive technologies.
- **Skill Development:** A coordinated skill development programme will also be undertaken under the Mission.

Benefits

- **Decarbonization**: Significant reductions in CO2 emissions from industrial, mobility, and energy sectors.
  - Making India a leading producer and supplier of Green Hydrogen in the world.
- **Reduced Dependence on Imports:** Diminished reliance on imported fossil fuels, enhancing energy security.
  - Creation of export opportunities for Green Hydrogen and its derivatives.
- **Indigenous Manufacturing**: Development of domestic capabilities in green hydrogen technology and infrastructure.
- **Employment Opportunities:** Creation of over 6 lakh jobs throughout the value chain, from production to utilization.
- **Technological Innovation:** Advancement of cutting-edge technologies and innovation ecosystems within the country.

Challenges for green hydrogen in India

High costs	Limited investment	Infrastructure lacking	Developing base	Nascent stages
Green hydrogen and electrolyser costs are high in India.	Private investment is limited due to uncertain demand.	There is a lack of hydrogen pipelines and refueling stations.	India's manufacturing base is still under development.	R&D and pilot projects are in the early stages.

Source:PIB

═══ NEWS IN SHORT ═══

SYLHETI LANGUAGE

Context

- Sylheti was recently in the news, after a remark linking it to Bangladeshi dialects, sparking debate over its distinct identity and Indian roots.

What Is Sylheti?

- **Sylheti is a language** (or dialect) spoken in South **Assam's Barak Valley**, as well as in the **Sylhet Division** of present-day Bangladesh.
  - It also has a presence in neighbouring regions of **Meghalaya and Tripura.**
- Despite being closely related to standard Bengali, **Sylheti has distinct phonetics, vocabulary, and syntax**.

- **Linguistically, the status of Sylheti is contested**. Some argue it is a dialect of Bengali due to mutual intelligibility, while others, including many scholars and native speakers, regard it as a separate language.
- Areas where Sylheti is spoken are often characterised by diglossia , with standard **Bengali used in formal domains** like education and literature, and **Sylheti in informal, everyday speech.**

Source: IE

MOUNT KILIMANJARO

Context

- Kabak Yano, a mountaineer from Arunachal Pradesh, has successfully summited Mount Kilimanjaro.

About

- **Location:** Tanzania, East Africa.
- **Height:** Approx. **5,895 meters (19,340 feet)**, Africa's tallest mountain. It is also the **largest free-standing mountain rise** in the world, meaning it is **not part of a mountain range**.
- **Type:** Stratovolcano – composed of layers of ash, lava, and rock.
- **Volcanic Cones:**
  - **Kibo** – the highest and only dormant cone (summit point).
  - **Mawenzi** and **Shira** – extinct cones.
- **Glacial Retreat:** Has lost over **90% of its ice cap since 1900**, making it a symbol of climate change.
- **Conservation Status:**
  - In 1973, the mountain and its six surrounding forest corridors were named **Kilimanjaro National Park**.
  - Designated a **UNESCO World Heritage Site** in 1987.

Source: AIR

HEPATITIS D VIRUS LABELLED CANCER-CAUSING AGENT

Context

- The World Health Organization (WHO) and the International Agency for Research on Cancer (IARC) has reclassified the Hepatitis D virus (HDV) as carcinogenic to humans, placing it alongside Hepatitis B and C as known causes of liver cancer.

About HDV and Global Burden

- **Hepatitis B, C, and D** affect over **300 million** people worldwide, contributing to 1.3 million deaths annually, mainly from liver cirrhosis and cancer.
    - HDV infects nearly 5% of people with chronic HBV, equating to around 12 million individuals globally.
- **High-Risk Populations:** Residents of Asia, Africa, the Amazon Basin (high HBV prevalence), People who inject drugs, Haemodialysis patients.
- **The virus spreads** through infected blood, unprotected sex, unsafe injections, or occasionally passes from mother to child during birth.
- **Symptoms include** fatigue, nausea, abdominal discomfort, dark urine or yellowing of the skin.
- **Treatment:** HBV can be controlled with life-long antivirals. The antiviral **bulevirtide** has emerged in Europe as an approved therapy alongside **pegylated interferon**.

Why is hepatitis D considered dangerous?

- HDV can only infect individuals **who already carry HBV**.
    - Co-infection or superinfection with HBV increases liver cancer risk **2 to 6 times** compared to HBV alone.
    - **Up to 75%** of chronic HDV patients develop liver cirrhosis within 15 years.
- **Prevention:**
    - There is **no separate vaccine** for HDV.
    - The only way to eliminate HDV is through universal HBV vaccination and testing.

Source: BS

US HIKES LEVY ON INDIAN IMPORTS TO 50%

Context

- The US President has issued an order imposing an additional **25% tariff** over India's purchases of Russian oil.

- It will raise the total tariff on Indian imports to the United States to **50%.**

About

- The new rate will come into **effect in 21 days.**
- The additional tariff would mean a **steep 50% duty on key Indian exports** like textiles, gems and jewellery, auto parts, and seafood, hitting major job-creating sectors.
    - Electronics, including iPhones, and pharma remain exempt for now.
- **Oil and gas are Russia's biggest exports,** and China, India and Turkey are the largest importers of these.
    - Russia is now the **biggest seller of oil to India, accounting for more than 35% of India's overall supplies.**
- India's foreign ministry said that India had already made clear its stance on imports from Russia, and reiterated that the **tariff is "unfair, unjustified and unreasonable".**

Source TOI

HAND, FOOT AND MOUTH DISEASE (HFMD)

In News

- Schools in Delhi have issued advisories urging parents to isolate children showing symptoms of **Hand, Foot and Mouth Disease (HFMD).**

Hand, Foot and Mouth Disease (HFMD)

- **About:** HFMD is a common illness that usually causes fever, mouth sores, and skin rash. It can spread quickly at schools and day care centers.
- **Transmission**: HFMD spreads through contact with infected droplets, surfaces, blister fluid, or poop.
- **Prevention**: There's no specific treatment for hand-foot-and-mouth disease. Most people get better in 7 to 10 days.
    - But certain medicines can ease pain and general discomfort in the meantime.

Do you know?

- Hand, Foot and Mouth Disease (HFMD) is different from Foot and mouth disease (FMD) which is a severe, highly contagious viral **disease of livestock that has a significant economic impact.**

Source :IE

BHARATGEN AI

In News

- India's 'BharatGen' AI Models to support all 22 scheduled languages by June 2026.

About BharatGen AI initiative

- The **BharatGen AI initiative is a flagship program** launched by the Government of India to develop sovereign, foundational artificial intelligence (AI) models tailored specifically for Indian languages and societal contexts.

- It is implemented under the **National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS)** of the Department of Science and Technology, with the Technology Innovation Hub (TIH) for IoT and IoE at IIT Bombay leading the project.

- BharatGen aims to cover all 22 scheduled Indian languages, creating AI models that are ethical, inclusive, and rooted in Indian values.

Source: Print

KRILL

Context

- The krill fishery in the Southern Ocean was shut down earlier than scheduled after the seasonal catch limit of 620,000 metric tonnes was surpassed, marking the first-ever breach of the quota.

About Krill

- Krill are small, shrimp-like **crustaceans** belonging to the order **Euphausiacea,** found in oceans worldwide.

- **Habitat:** Found across all oceans; Antarctic krill dominate the Southern Ocean ecosystem.

- **Krill are keystone species**. It acts as a **trophic bridge**, as they **feed on phytoplankton** and are in turn consumed by larger marine animals like; **Baleen whales, Seals, penguins, squid, seabirds, and fish.**

Significance

- Krill oil is a popular dietary supplement rich in **omega-3 fatty acids** like DHA and EPA, which krill obtain from their algae-rich diet.

- A study found that krill **removes 20 million tons of carbon** from the atmosphere each year.

Source: IE

STARFISH

Context

- Since 2013, **over 5 billion sea** stars have died along North America's Pacific coast due to **Sea Star Wasting Syndrome (SSWS)**. Scientists have now identified the bacterium **Vibrio Pectenicida** as the cause.

About

- **Starfish, also known as sea stars,** are star-shaped **marine invertebrates** belonging to the class **Asteroidea.**
    - **Not True Fish:** Despite the name, starfish are not fish as they **lack backbones, gills, and fins.**

- **Habitat:** Found in all oceans, from tidepools to deep-sea floors.

- **Regeneration:** They can regenerate lost arms, and in some cases, a severed arm can regenerate into a new starfish.

- **Carnivorous Diet:** Starfish are carnivorous, feeding on a variety of marine invertebrates, including bivalves, coral, and other small animals.

- **Unique Digestive System:** They can extend their stomach outside their body to digest food externally.

- **Water Vascular System:** A unique hydraulic system used for locomotion, feeding, and gas exchange.

Source: IE

PM SURYA GHAR: MUFT BIJLI YOJANA

Context

- The Minister of New and Renewable Energy has said that **around 16.51 lakh households** have benefited from **rooftop solar installations under the PM Surya Ghar: Muft Bijli Yojana (PMSG:MBY).**

PM Surya Ghar: Muft Bijli Yojana

- It was launched in **2024** and aims to **provide free electricity to households by facilitating the installation of rooftop solar panels.**

- The scheme has an outlay of Rs **75,021 crore and is to be implemented till FY 2026-27.**

- **Installation Targets:**
  - **By March 2025:** To exceed 10 lakh,
  - **By October 2025:** Doubling reaching 40 lakh,
  - **March 2027:** 1 crore households.

- The scheme offers a **subsidy of up to 40%** to households, making renewable energy more affordable and accessible.

- **Model Solar Village:**
  - An allocation of 800 crore has been designated for this component, with 1 crore provided to each selected Model Solar Village.
  - To qualify as a candidate village, it must be a revenue village with a population of over 5,000 (or 2,000 in special category states).
  - This initiative aims to promote solar energy adoption and empower village communities to achieve energy self-reliance.

Source: IE