NEXT IAS

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 18-11-2024

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INDIA-JAPAN SIGN AGREEMENT FOR UNICORN MASTS

Context

- India and Japan signed a Memorandum of Implementation (MoI) for the "co-development" of **UNICORN (Unified Complex Radio Antenna) mast** for the Indian Navy.

About

- Japan-India has signed an agreement on defense equipment and technology transfer in **2015.**
- When implemented, this would be the first case of co-development / co-production of Defence Equipment between India and Japan.

What is the UNICORN mast?

- **The UNICORN mast** is a conical structure that houses antennas atop warships which will help improve the stealth characteristics of Naval platforms.
  - The system has numerous **antennas for tactical data links.**
- **TACAN (Tactical Air Navigation System) and communications** are integrated within the mast design, reducing signature and ship-building time and saving below-deck space.
- The Indian Navy is pursuing the induction of these advanced systems which will be co-developed by **Bharat Electronics Limited in India** with Japanese collaboration.

Benefits of UNICORN mast

- Unicorn's pathbreaking design brings improvements by way of
  - Reduction of the antennas' mutual interference,
  - Reducing the ship's overall Radar Cross Section (RCS),
  - Enhancing maintainability and lightning resistance.
- At present, the Indian Navy uses the BEL-supplied **Advanced Composite Communication System (ACCS),** a fourth-generation voice and data integrated system for the ship's external communication.

Defence Cooperation between India and Japan

- The year 2024 saw the first air visit by Japanese fighters to India and their participation at Tarang Shakti, the first multilateral exercise hosted by the Indian Air Force.
- **'Veer Guardian 2023',** the bilateral exercise, was conducted between the Japan Air Self Defence Force (JASDF) and the Indian Air Force (IAF).
- In 2024, Japanese fighter aircraft made their first air visit to India and participated in '**Tarang Shakti**,' the first multilateral air exercise hosted by the Indian Air Force.
- **Andaman and Nicobar Islands development Projects:** Japan has provided aid of **4.02 billion yen** for the development of these islands.
  - Aimed at enhancing maritime security and infrastructure.
  - Strengthens India's surveillance and logistical capabilities in the region.

Concluding remarks

- India-Japan defense cooperation reflects a robust partnership based on mutual interests and strategic needs.
- The agreement with Japan will pave the way for future collaboration between the two countries on new and critical technologies, including semiconductors, artificial intelligence, renewables, electric mobility, and more.

Source: TH

USE OF ELECTRONIC TRACKING DEVICES FOR UNDERTRIAL PRISONERS IN INDIA

Context

- Recently, the Supreme Court's Centre for Research and Planning has released a report advocating for the use of electronic tracking devices for **undertrial prisoners in India.**

Undertrial Prisoners in India

- Undertrial prisoners are those who are in judicial custody while awaiting trial. Despite being presumed innocent until proven guilty, many of these individuals spend years in prison due to prolonged legal procedures and their inability to afford bail.
- The Supreme Court of India, in various landmark judgments, has reiterated the need for timely trials and the release of undertrials who have served half of their maximum possible sentence.
- **Section 436A of the Code of Criminal Procedure (CrPC), 1973** mandates the release of undertrials

who have served more than half of the maximum sentence for their alleged offence.

Overcrowding Crisis in Indian Prisons

- As of December 31, 2022, Indian prisons had an occupancy rate of 131%, with 5,73,220 inmates against a capacity of 4,36,266.
  - Notably, 75.7% of these inmates are undertrial prisoners.
- This overcrowding not only strains the prison infrastructure but also hampers the rehabilitation and reformation processes.

Proposal of the Supreme Court

- **Electronic Tracking Devices:** A recent report by the **Supreme Court,** titled *'Prisons in India - Mapping Prison Manuals and Measures for Reformation and Decongestion'* suggests that electronic monitoring **could initially be implemented for low and moderate-risk UTPs** with good conduct, who may be released on prison leaves like parole or furlough.
  - This phased approach aims to assess community readiness and the feasibility of broader use of electronic tracking.

Global Practices and Legal Context

- Countries like the United States, Canada, the United Kingdom, Malaysia, and Australia have successfully implemented electronic tracking to manage prison populations.
- In India, the **Model Prisons and Correctional Services Act, 2023**, introduced the use of electronic tracking devices as a condition for granting prison leave.

Key Advantages of Electronic Tracking of Undertrial Prisoners

- **Reduction in Overcrowding:** One of the primary benefits of electronic tracking is the potential to significantly reduce prison overcrowding.
  - By allowing low and moderate-risk undertrials to be monitored electronically, prisons can free up space and resources.
- **Cost-Effective:** Implementing electronic tracking can be more cost-effective compared to the expenses incurred in maintaining a large prison population.
  - It reduces the need for additional prison infrastructure and the associated costs of housing and feeding inmates.
- **Improved Rehabilitation:** Undertrials who are released with electronic tracking can continue their education, work, and maintain family ties, which are crucial for their rehabilitation and reintegration into society.
- **Enhanced Monitoring:** Electronic tracking provides a reliable way to monitor the movements of undertrials, ensuring they comply with the conditions of their release.
  - It can help in reducing the risk of absconding and re-offending.

Key Concerns

- **Privacy Issues:** One of the major concerns with electronic tracking is the potential invasion of privacy.
  - Continuous monitoring can be seen as intrusive and may violate the fundamental rights of individuals.
- **Technical Challenges:** The effectiveness of electronic tracking depends on the reliability of the technology.
  - Issues such as device malfunctions, signal loss, and tampering can undermine the system's effectiveness.
- **Human Rights Concerns:** There is a risk that electronic tracking could be misused or overused, leading to human rights violations.
  - It is crucial to have clear guidelines and safeguards to prevent abuse.
- **Implementation Challenges:** The successful implementation of electronic tracking requires significant investment in technology and training for law enforcement personnel.
  - Additionally, there needs to be a robust legal framework to support its use.

Other Reforms Related To India's Undertrial Prisoner System

- **Bail Law Reforms:** The Supreme Court has highlighted the need for comprehensive bail law reforms. In the case of Satender Kumar Antil vs CBI, the Court provided guidelines for timely disposal of bail applications and emphasised the principle of 'bail not jail'.
  - However, effective implementation requires a deeper understanding of the socio-economic barriers that prevent undertrials from securing bail.
- **Legal Aid and Representation:** Ensuring adequate legal representation for undertrial prisoners is crucial.
  - The Supreme Court panel recommended having at least one lawyer for every 30 prisoners to expedite legal processes and reduce the number of undertrials.
  - Strengthening district legal service authorities can also play a significant role in providing timely legal aid.

- **Judicial and Administrative Efficiency:** Addressing the backlog of cases through judicial reforms is essential. Increasing the number of judges and improving court infrastructure can help expedite trials and reduce the duration of pretrial detention.
  - Additionally, implementing guidelines to prevent arbitrary arrests can minimise unnecessary detentions.

Conclusion

- The use of electronic tracking devices for undertrial prisoners in India represents a significant step towards modernising the correctional system and addressing the chronic issue of prison overcrowding.
- While there are challenges to be addressed, the potential benefits in terms of cost savings, improved prison conditions, and better rehabilitation outcomes make it a promising solution.
- As India moves forward with pilot programs, it will be crucial to balance security needs with the protection of civil liberties to ensure the success of this initiative.

Source: TH

JEDDAH COMMITMENTS TO ACCELERATE ACTION ON AMR

In News

- The Fourth Global High-Level Ministerial Conference on **Antimicrobial Resistance (AMR)** was held in Jeddah, Saudi Arabia.

Key Actions in the Jeddah Commitments

- Establish an Independent Panel for **Evidence on Action Against AMR by 2025.**
- Develop operational **national AMR coordination mechanisms**.
- Promote global data sharing through platforms like GLASS AMR/AMC, ANIMUSE, and INFARM.
- **Adhere to Codex Alimentarius Commission** guidelines for responsible antimicrobial use.
- **Launch the One Health AMR** Learning Hub for sharing best practices and building multisectoral capacities.
- **Create a Regional Antimicrobial Access** and Logistics Hub to ensure sustainable procurement and access to effective antimicrobials.
- **Increase investment** in research, innovation, and sustainable manufacturing of antimicrobials and diagnostics.

India's Contributions

- India highlighted the need for strengthening detection, surveillance, sustainable financing, and governance.
- India Supported the AMR Multi-Partner Trust Fund and the Independent Panel on Evidence for Action.
- India Stressed addressing barriers to affordable access to antimicrobials, diagnostics, and vaccines in low- and middle-income countries

Other suggestions

- There is an urge to conserve critically important antimicrobials by reducing reliance on them.
- There is a need to promote sustainable food production and livestock practices.
- There is a need to build food systems and improve water systems to reduce dependency on antimicrobials.
- There is a need to minimize waste and environmental contamination by antimicrobials.

Future outlook

- The Jeddah meeting concluded with a call on all Member States to commit to their pledges and work towards achieving the goals set out in the UN General Assembly Political Declaration on Antimicrobial Resistance by 2030.
- The next Ministerial Summit to take stock of implementable initiatives and progress made will be hosted by Nigeria in 2026.

Source : DTE

HYPERSONIC MISSILE

Context

- The Defence Research and Development Organisation (DRDO) conducted a **successful flight test of a long range hypersonic missile.**

About

- It is **indigenously developed** by the laboratories of Dr APJ Abdul Kalam Missile Complex, along with various other DRDO laboratories and Industry Partners.
- **Features:**
  - **Speed: Greater than Mach 5 (around 6,120 km/h).**
  - **Range: Over 1500kms.**
- This achievement places India among a **select group of nations**—alongside the United States, Russia, and China—that **possess advanced hypersonic technology.**

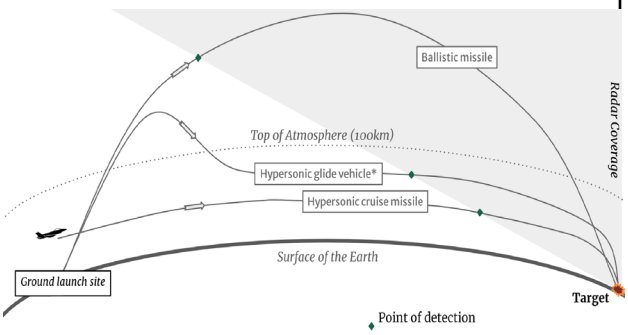
- France, Germany, Australia, Japan, Iran, and Israel, are also pursuing projects to develop hypersonic missile systems.

Hypersonic Missiles

- The term "Hypersonic" refers to a **speed at least five times the speed of sound** (also called Mach-5) i.e. **around a mile per second.**
- These missiles are also **more maneuverable**, which allows them to more easily evade air defence systems.
- **The two types of hypersonic weapons systems** are Hypersonic Glide Vehicles (HGV) and Hypersonic Cruise Missiles.
  - The HGVs are launched from a rocket before gliding to the intended target while HCMs are powered by air-breathing high-speed engines or 'scramjets' after acquiring their target.

Types of Missile Systems in India

- **Ballistic Missiles:** Ballistic missiles are designed to deliver a payload (usually a warhead) over long distances using a ballistic trajectory.
  - Short-Range Ballistic Missiles (SRBM) includes Prithvi I, II, III.
  - Medium-Range Ballistic Missiles (MRBM) are Agni-I, II, III, IV, V.
  - Intercontinental Ballistic Missiles (ICBM) is Agni-V.
- **Cruise Missiles:** Cruise missiles are guided missiles that use aerodynamic lift to travel through the atmosphere, typically at subsonic or supersonic speeds.
  - Long-Range Cruise Missile is Nirbhay.
  - BrahMos is a supersonic cruise missile.



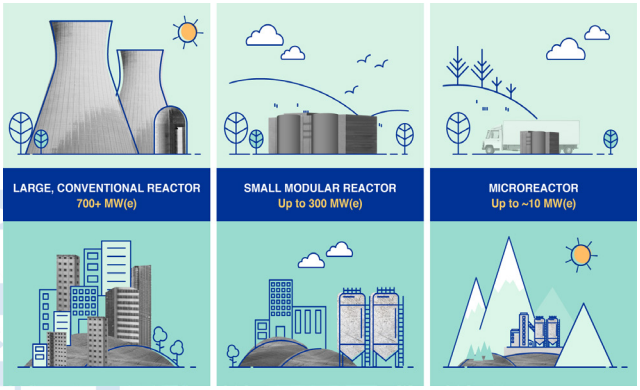
SMALL NUCLEAR REACTORS (SMRS)

Context

- India has announced plans to support the construction of up to 50 small nuclear reactors (SMRs) through public-private partnerships.

What are Small Modular Reactors (SMRs)?

- Small modular reactors (SMRs) are advanced nuclear reactors with a power capacity of up to 300 MW(e) per unit, roughly one-third the generating capacity of traditional nuclear power plants.
  - **Small** – physically a fraction of the size of a conventional nuclear power reactor.
  - **Modular** – making it possible for systems and components to be factory-assembled and transported as a unit to a location for installation.
  - **Reactors** – harnessing nuclear fission to generate heat to produce energy.
- **There are four four main types** of SMR i.e., light water, high temperature gas, liquid metal, and molten salt.



Advantages of SMR

- **Enhanced Safety Features:** SMRs utilize passive safety mechanisms, such as natural convection and gravity-driven cooling, which help prevent overheating without relying on external power or human intervention.
- **Flexibility:** The modular nature of SMRs allows for incremental power additions, which is ideal for growing energy needs.
- **Suitability for Remote and Off-Grid Areas:** SMRs compact design makes them adaptable for smaller grid systems and applications like district heating and water desalination.
- **Cost-Effective Construction:** Prefabrication in controlled environments reduces on-site construction time and costs.

Concerns

- **Regulatory Challenges:** The current nuclear regulatory framework is primarily designed for large-scale reactors.
  - The possibility of using SMRs to produce materials for nuclear warheads and co-locating them with military sites raises **non-proliferation concerns**.

- **Legal Hurdles:** India's **Civil Liability for Nuclear Damage Act, 2010,** channels operators' liability to equipment suppliers, deterring foreign investors due to financial risk concerns.
- **High Initial Costs:** Although SMRs are designed to be more cost-effective in the long run, the initial capital investment is significant.
- **Waste Management:** Handling and disposing of nuclear waste remains a significant challenge.
- **Supply Chain and Manufacturing:** Developing a robust supply chain for the components of SMRs and ensuring quality manufacturing processes are critical for their success.

India's efforts

- According to a report by **NITI Aayog,** SMRs are seen as a critical technology for industrial decarbonization and energy transition.
- Research and development on SMRs are ongoing at the **Bhabha Atomic Research Centre (BARC)** in Mumbai.
- **The Bharat Small Reactor (BSR)** is a notable project under this initiative which aims to re-engineer existing reactors to incorporate additional safety features and enhance their efficiency.
- **India and France** have launched a cooperation program focused on SMRs and advanced modular reactors (AMRs).

Way Ahead

- The increased use of **renewable energy coupled with the SMRs** has the potential to fill energy gaps and contribute to a cleaner, more sustainable future.
- However, careful consideration and international cooperation will be necessary to ensure that this technology is developed and deployed responsibly.

Source: IE

INDIA'S SEMICONDUCTOR ECOSYSTEM

Context

- A Semiconductor Plant has been set up in Morigaon, Assam, projected for completion by mid-2025.

About

- The project is set to become one of the **premier manufacturing sites**, and aligns with the nation's broader goal of **establishing a self-sufficient semiconductor ecosystem.**
- It is expected to produce up to **48 million semiconductor chips per day**.
- It is designed to **cater to essential sectors** such as automotive, electric vehicles, telecommunications, and consumer electronics.
- It will **serve both domestic and international markets**, positioning India as a competitive force in the global semiconductor supply chain.

What are Semiconductors?

- Semiconductors are **materials with electrical properties** that fall between those of conductors (like metals) and insulators (like rubber).
  - They have a unique ability **to conduct electricity** under certain conditions while acting as insulators under others.
- They are sometimes referred to as **integrated circuits (ICs) or microchips** made from pure elements, typically **silicon or germanium.**
- In a process called **doping**, small amounts of impurities are added to these pure elements, causing large changes in the **conductivity** of the material.
- **Applications:** Semiconductors are used in a vast range of **electronic devices.**
  - **Transistors**, which are fundamental components of modern electronic circuits, rely on semiconductor materials.
  - They act as **switches or amplifiers** in everything from computers to cell phones.
  - Semiconductors are also used in **solar cells, LEDs, and integrated circuits.**

Semiconductor Market

- Industry estimates place the Indian semiconductor market at approximately **$38 billion in 2023,** with projections indicating growth to **$109 billion by 2030.**
- This growth is driven by **strong demand and government initiatives** like the production-linked incentive scheme.
- According to a report by the India Electronics and Semiconductor Association and Counterpoint Research, **mobile handsets and IT sectors** are leading the market by contributing over **75 percent of revenues.**

Need to Focus on Semiconductor Manufacturing

- **Strategic Significance:** Given their importance to the economy, **semiconductors have become**

a key strategic industry sector for many countries, with governments and companies alike investing heavily in **research and development** to maintain competitiveness and innovate.

- **Dependence on Global Supply Chain:** A **serious shortage of those chips in 2021**, underlined how dependent the global industry is on a few key suppliers.
  - **Taiwan** is currently the world's largest chipmaker, holding approximately **44%** of global market share, followed by China (28%), South Korea (12%), the U.S. (6%) and Japan (2%)
  - In an **effort to cut that dependency** governments are spending huge sums to **create stronger domestic chip industries.**

Government Support

- **Semicon India:** The initiative is for the development of semiconductor and display manufacturing ecosystem in the country.
  - The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem.
- **India Semiconductor Mission:** It functions as a dedicated division within the Digital India Corporation.
  - Its main goal is to nurture a strong semiconductor and display ecosystem to position India as a prominent global player in electronics manufacturing and design.
- **The government offers incentives for manufacturing setup in India:**
  - Under the Semiconductor Fab Scheme, fiscal support of 50% of the project cost on an equal footing for all technology nodes.
  - Under the Display Fab Scheme, fiscal support of 50% of the project cost on an equal footing basis.
  - Under the Compound Semiconductor Scheme, fiscal support of 50% of the capital expenditure on an equal footing basis, including support for discrete semiconductor fabs.
- **Under the Chips to Startup (C2S) Programme** being implemented at 113 academic institutions/ R&D organizations/ Start-ups/ MSMEs, 85,000 number of high-quality and qualified engineers are being trained in several areas.
- In February 2024, the government approved the **establishment of three semiconductor plants, two in Gujarat and one in Assam.**

Way Ahead

- With the **rise of digital technologies**, AI, IoT, and 5G, the demand for semiconductors is skyrocketing. India, with its burgeoning tech industry, is well-positioned to capitalize on this trend.
- **Foreign Investment:** Major global players like Intel, TSMC, and others are exploring opportunities in India. This influx of foreign investment will help develop local expertise and infrastructure.
- **Startup Ecosystem:** India has a vibrant startup ecosystem focused on semiconductor design and related technologies, fostering innovation and contributing to the overall growth of the sector.
- **Infrastructure Development:** Improved infrastructure, including special economic zones (SEZs) for electronics manufacturing, is being established to facilitate the growth of the semiconductor industry.
- **Talent Pool:** India boasts a large pool of engineering graduates and skilled professionals, which can support the workforce needs of the semiconductor sector.

Source: PIB

EXEMPTION FROM DUAL ECO-CLEARANCE

Context

- The Environment Ministry **exempted the certain categories of industries** from dual approvals for **environmental clearance (EC) and consent to establish (CTE)**, aims to r**educe bureaucratic hurdles and promote ease of doing business.**

Background: Brief

- Previously, industries were required to **obtain both EC and CTE**, which often led to **delays and increased compliance costs**.
- The MoEFCC has **exempted 39 categories of non-polluting "white category" industries** from the requirement of obtaining both EC and CTE. These industries, which include solar cell and module manufacturing, wind and hydel power units, and leather cutting and stitching, will now only need to obtain an EC.
- **There are four categories of industries as per this classification and they are colour-coded as:** Red, Orange, Green and White.

- 'Red' category industries fall under the strictest scrutiny as the goods being manufactured result in toxic effluents.

- **State Pollution Control Boards (SPCBs)** will play a crucial role in ensuring that the exempted industries comply with environmental regulations.
- The **Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974** mandate **dual approvals** to prevent pollution from industrial operations.

Benefits of Granting Exemption

- **Reduced Compliance Burden:** By eliminating the need for dual approvals, the government aims to reduce the administrative burden on industries.
- **Accelerated Project Implementation**: The streamlined process will expedite project timelines and encourage investment.
- **Improved Ease of Doing Business:** This reform aligns with the government's broader goal of improving India's business climate.

Source: TH

CIVIL SERVANTS AND SOCIAL MEDIA: ETHICS AND IMPLICATIONS

In News

- Recently, the Kerala government has suspended two IAS officers for alleged **violations of the All-India Services (Conduct) Rules, 1968**.

What Do the Conduct Rules Specify?

- The **All-India Services (Conduct) Rules, 1968 (AIS Rules)** provide a code of conduct for IAS, IPS, and Indian Forest Service officers, ensuring high standards of ethics, integrity, and accountability.
- **Key provisions include:**
  - **Ethical Standards:** Officers must maintain political neutrality, uphold constitutional values, and demonstrate honesty and integrity.
  - **Public Communication:**
    - Officers may participate in public media only for bona fide purposes related to their duties.
    - Criticizing government policies on public platforms is prohibited.
    - Officers need prior government sanction before approaching courts or media for vindication of official acts.
  - **Omnibus Rule:** Officers must not act in a manner deemed "unbecoming of a member of the service."
  - **Amendments Over Time:** The rules have been updated but lack explicit provisions for social media conduct.

Pros of Social Media Use by Civil Servants

- **Enhanced Public Engagement:** Civil servants can directly interact with citizens, addressing their concerns and providing timely updates.
- **Improved Transparency and Accountability:** Social media can be used to share information about government policies and programs, fostering transparency and accountability.
- **Positive Public Perception:** Effective social media use can enhance the public's perception of government institutions.
- **Knowledge Sharing and Collaboration:** Platforms like Twitter and LinkedIn enable knowledge sharing and collaboration among civil servants.

Cons of Social Media Use by Civil Servants

- **Erosion of Anonymity:** The traditional anonymity of civil servants can be compromised, potentially affecting their ability to provide impartial advice.
- **Risk of Misuse:** Social media can be misused for personal gain, political lobbying, or spreading misinformation.
- **Cybersecurity Threats:** Civil servants are vulnerable to cyberattacks and online harassment.
- **Distraction from Core Duties:** Excessive social media use can divert attention from core responsibilities.

Way Ahead

- **Clear Guidelines:** Establish social media usage protocols, ensuring civil servants maintain neutrality and avoid conflicts of interest.
  - Specify acceptable content, methods of engagement, and boundaries for public discourse.
- **Training and Awareness:** Provide training on ethical social media practices, emphasizing the balance between accessibility and anonymity.
- **Avoiding Self-Promotion:** Discourage personal branding on official platforms. Focus on showcasing institutional achievements rather than individual contributions.
- **Strengthening Accountability Mechanisms:** Promote accountability through established channels like RTI and public grievance redressal mechanisms rather than social media alone.
- **Fostering Digital Bureaucracy:** Reflect on best practices from countries like the UK, where digital platforms are used effectively without compromising neutrality.

Source: TH

NEWS IN SHORT

SUEZ CANAL & ITS ECONOMIC IMPORTANCE

Context

- The Suez Canal is one of the busiest waterways in the world through which 12% of global commerce passes.

About

- The Suez Canal is a **193-km artificial waterway** that connects the **Mediterranean Sea to the Red Sea,** making it the shortest maritime route between Europe and Asia.
  - It was officially opened to ships in **1869.**
- The Canal **does not have locks** and it is essentially a sea-level waterway.
  - This characteristic allows for a **smoother, more efficient passage of vessels**, thus supporting a high volume of maritime traffic.

Importance of Suez Canal

- **Reduced Transit Time:** The Suez Canal reduces the maritime distance between Europe and Asia by approximately **7,000 kilometers**.
- **World trade:** It's a major factor in the world's economy, with roughly 12% of global trade, 7% of the world's oil, and 30% of daily container traffic passing through it.
- **Revenue Generation:** The Suez Canal is one of **Egypt's** primary sources of revenue.
- **Global Supply Chain Impacts:** The canal's uninterrupted functioning is crucial for the global supply chain.
  - **The blockage** of the Suez Canal in **2021** caused a major loss to international trade. The blockage cost an estimated **US$90 million** in the first week.

Source: IE

PM VISIT TO NIGERIA

Context

- Prime Minister Narendra Modi is on a **State Visit to Nigeria.**

About

- This visit is the **first** by an Indian prime minister to Nigeria in **17 years.**
- PM Modi was also conferred with **Nigeria's second highest national honour**, the **'Grand Commander of the Order of the Niger'.**
  - He is the **second foreign dignitary** to receive the distinction.
  - **Queen Elizabeth** is the only foreign dignitary who has been awarded with GCON in **1969**.
- The two leaders also agreed to work together to meet the **development aspirations of the Global South.**
- Additionally, India announced it would send **20 tons of humanitarian aid to support Nigeria's flood relief efforts.**

Source: PIB

MĀORI GROUP

In News

- New Zealand's parliament was briefly suspended after a protest haka by **Māori Party legislators** against the Treaty Principles Bill.

About Māori

- **Arrival and Early Life:** Mori ancestors arrived from Pacific islands before 1300 CE, settling on coasts and forests.
  - They hunted seals and moas, cultivated food, lived in tribal groups, and valued oral traditions, natural gods, and warfare.
- **European Arrival:** Europeans arrived in the early 1800s, introducing Christianity, literacy, and trade (e.g., pigs and potatoes).
- **The 1840 Treaty of Waitangi**: Signed in 1840 between the British Crown and Mori chiefs, the Treaty of Waitangi is New Zealand's foundational document.
  - It promises Mori rights to their lands and interests while ceding governance to the British.
  - Over decades, courts and governments have developed principles from the treaty focusing on participation, partnership, protection, and redress.

- **Cultural Revival:** Early 20th-century leaders like Apirana Ngata and Te Puea Harangi worked to improve Maori life and revive traditions, language, carving, and weaving.
  - Protests in the 1970s and 1980s emphasized land rights, language preservation, and cultural promotion, including key events like the 1975 North Island march and Bastion Point occupation.

The Haka

- The haka is a **Māori ceremonial dance** symbolizing cultural pride, strength, and unity.
- It is performed during battles, greetings, funerals, and other significant events.
- The **Ka Mate haka**, composed by Te Rauparaha in the 19th century, celebrates life over death and was performed during the protest.
- The All Blacks rugby team also performs the haka before matches to showcase strength and unity.

Source : IE

COMMEMORATIVE POSTAGE STAMP ON SICKLE CELL ERADICATION - 2047

Context

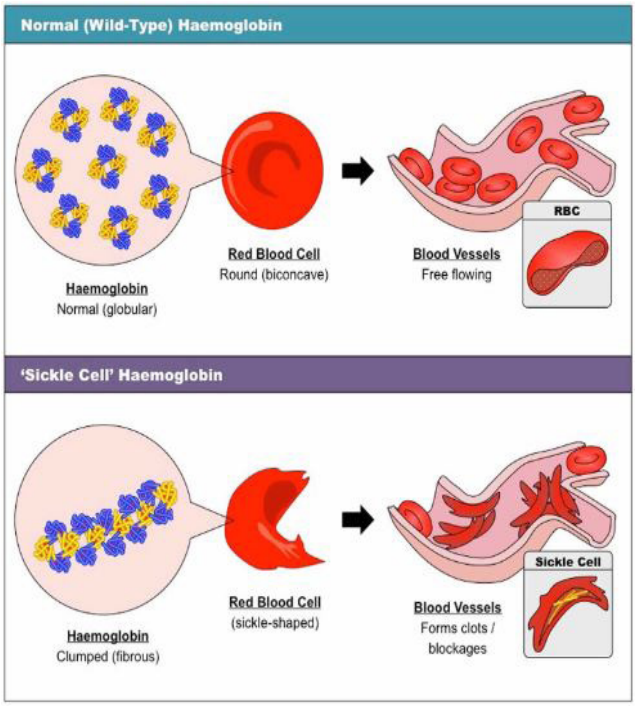
- Governor of Madhya Pradesh has unveiled a commemorative postage stamp dedicated to **"Sickle Cell Eradication - 2047".**

About

- This commemorative stamp honors the State's initiative to combat the high prevalence of sickle cell anemia in tribal regions and highlights the commitment to **eradicate this hereditary disease by 2047.**

Sickle Cell Anemia

- Sickle cell disease (SCD) is a group of **inherited (genetic) red blood cell disorders.**
- It is transmitted by parents carrying a **defective 'beta globin' gene (HBB)**.
- In SCD, the hemoglobin is abnormal, which causes the **RBCs to become hard and sticky and look like a C-shaped farm tool called a "sickle."**
  - When they travel through small blood vessels, they get stuck and clog the blood flow.
  - The **sickle cells die early,** which causes a constant shortage of RBCs.



- **Treatment:** SCA is a genetic disorder, making complete "elimination" a challenge that requires a major scientific breakthrough.
  - The only cure comes in the form of gene therapy and stem cell transplants — **both costly and still in developmental stages.**

Source: PIB

AYUSHMAN VAY VANDANA CARD

Context

- More than 10 lakh senior citizens have enrolled for the newly launched Ayushman Vay Vandana Card.

Ayushman Vay Vandana Card

- It enables all senior citizens aged 70 and above to access free healthcare benefits under the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)**.
- Eligible beneficiaries covered under **Private health insurance policies or Employees' State Insurance Corporation (ESIC) scheme** will also be eligible to avail benefits under PMJAY.
  - Those already availing benefits of Central Government Health Scheme (CGHS) and Ex-Servicemen Contributory Health Scheme (ECHS) may have to either choose their existing scheme or opt for PMJAY.

Ayushman Bharat Scheme

- It was launched in **2018**, by the Government of India with the aim of achieving universal health coverage. It has two key components;
- Ayushman Bharat Pradhan Mantri- Jan Arogya Yojana (AB PM-JAY)
- Ayushman Arogya Mandir

Ayushman Bharat Pradhan Mantri- Jan Arogya Yojana (AB PM-JAY)

- **AB PM-JAY** is the largest publicly funded health assurance scheme in the world which provides health cover of **Rs. 5 lakhs per family per year** for **secondary** and **tertiary care** hospitalization.
- **Coverage:** It covers up to **3 days** of pre-hospitalization and **15 days** of post - hospitalization expenses such as **diagnostics and medicines.**
  - The beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.
  - There is **no restriction** on the **family size, age or gender.**
- **Eligibility:** The inclusion of households is based on the deprivation and occupational criteria of the Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas, respectively.
  - This number also includes families that were covered in the **Rashtriya Swasthya Bima Yojana (RSBY)** but were not present in the **SECC 2011** database.
- **Funding:** The funding for the scheme is shared by the Centre and the state in a **60:40 ratio.**
  - However, for North-Eastern states, Himalayan states (such as Uttarakhand, Himachal Pradesh), and Union Territories, the **ratio is 90:10.**

Source: PIB

SPACEX TO LAUNCH INDIA'S GSAT-20

Context

- SpaceX's Falcon-9 is set to launch **GSAT-20**, one of India's heaviest communication satellites, from Cape Canaveral in the United States.

About: GSAT-20

- Owned and operated by **New Space India Ltd** (ISRO's commercial arm), GSAT-20 is also known as **GSAT N-2**.
- Weighing **4,700 kg**, GSAT-20 is too heavy for India's own rocket, **LVM-3**—popularly known as 'Bahubali'—which can carry satellites weighing up to **four tonnes** to the geostationary transfer orbit (GTO).
- The satellite has a mission life of **14 years** and will provide vital services across India, including internet connectivity for remote areas.

Do you know?

- NewSpace India Limited (NSIL), established on **March 6, 2019, under the Companies Act, 2013**, is a **wholly-owned Government of India** company operating under the administrative control of the Department of Space (DoS).
- As the commercial arm of the Indian Space Research Organisation (ISRO), NSIL's primary responsibilities include:
  - **Enabling Indian Industries:** Facilitating Indian industries to undertake high-technology space-related activities, thereby enhancing the nation's space capabilities.
  - **Commercial Exploitation:** Promoting and commercially exploiting products and services derived from India's space programs, contributing to the global space market.

Source: AIR