

FORTUNE Prelims Precise

JUNE 2023



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Toppers in Top 100



History & Culture

Raja Parba

- » The Prime Minister greeted the people of **Odisha** on the occasion of Raja Parba festivities held across the state.
- Raja Parba, also known as **Mithuna Sankranti**, is a **4-day festival of womanhood** celebrated in **Odisha**.
- The word '**Raja**' is derived from a **Sanskrit word Rajaswala** means a **menstruating woman**.
- It is believed that the **mother Goddess Earth menstruates** and **prepares herself for future agricultural activities during the first 3 days** and the **4th day is called as Vasumati gadhua** or **ceremonial bath of Bhudevi**.
- During the three days, **women are given a break from household work** and time to play indoor games. Girls adorn traditional saree and apply alatha on foot. **All people abstain from walking barefoot on the earth.**

Rani Durgavati

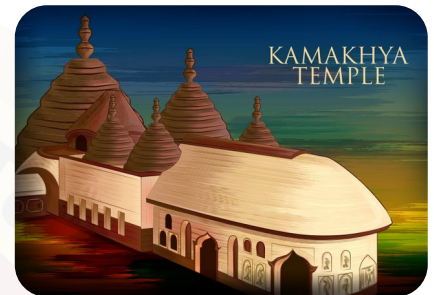
- » The **six-day Rani Durgavati Gaurav Yatra** was held in **Madhya Pradesh** from **June 24**.
- Rani Durgavati was born in **1524** in the **Chandela dynasty** (known for **Khajuraho Temples**) in present-day **Uttar Pradesh**, near the **border with Madhya Pradesh**.
- She was married into the **Garha Kingdom** (Gondwana) and later became its regent.
- She fought valiantly against the **Mughal invasion of Emperor Akbar** under command of Asaf Khan, but was outnumbered and killed herself on June 24, 1564 (now remembered as '**Balidan Divas**').
- **Abul Fazl**, the court historian of Akbar who chronicled **Akbarnama**, described Durgavati as a combination of "**beauty, grace and manlike courage and bravery**".

Ambubachi Mela

- » The **annual Hindu fair** was held at the historic **Kamakhya Temple**.
- Ambubachi Mela is celebrated during the **monsoon season** that happens to fall during the **Assamese month Ahaar**, around the **middle of June**.
- It is the celebration of the **yearly menstruation course of goddess Maa Kamakhya**.
- It is also known as **Ameti or Tantric fertility festival** since it is **closely associated with Tantric Shakti cult** prevalent in **eastern parts of India**.

Kamakhya Temple

- Kamakhya Temple is situated on **Nilachal Hill** along the **banks of the Brahmaputra River** in **Guwahati**.
- It is regarded as **one of the oldest of the 51 Shakti Peethas in India**.
- According to the legends, it was built by the **demon king Narakasura** but records are available only from **1565** when **Koch king Naranarayana** rebuilt the temple.



Architecture

- It is modelled out of a combination of **two different styles**, the traditional **nagara and Saracenic or Mughal style of architecture** known as the **Nilachala Style of Architecture**.
- It consists of **five chambers**, **garbhagriha or sanctuary**, **antarala or vestibule**, **Jagan Mohan or principal chamber**, **bhogmandir or ritual chamber** and **natmandir or opera hall**.
- The temple's sanctum sanctorum **houses the yoni (female genital) symbolised by a rock**.

Joha Rice



- » Recently, scientists at the **Institute of Advanced Study in Science and Technology (IASST)**, Guwahati explored the **nutraceutical properties** of **aromatic Joha rice**.
- IASST is an **autonomous institute** of the **Department of Science and Technology**.
- Joha Rice is an **indigenous Kharif rice of Assam** with **unique aroma** and **grain characteristics**.
- This rice is also **rich in several antioxidants, flavonoids, and phenolics**.
- The rice received the **Geographical Indication (GI) tag** in 2016.

Malcha Mahal



- » The Lieutenant Governor of Delhi, recently issued directions requiring revamping of the forest area around the **Malcha Mahal**.
- It was built in **1325** by the then **Sultan Firoz Shah Tughlaq** as a hunting lodge in **New Delhi**.
- A **peculiar feature** of this mahal is that there are **no doors**.
- Also known as the **“Wilayat Mahal”**, it later became the **residence of the descendants of Nawabs of Awadh**.
- The monument is **not protected by ASI** and no attention was given after the last heir to it passed away in 2017.

Gilgit Manuscripts

- » Recently, in an exhibition organised by the **National archives of India**, Gilgit manuscripts were exhibited.
- Gilgit manuscripts were discovered in the **Naupur village (Gilgit region), Pakistan Occupied Kashmir (PoK)** in 1931.
- These are the **oldest surviving manuscript collections** in the **Indian subcontinent, written between 5th and 6th centuries**.
- The **birch bark folios** documents **written on pieces of inner layer of the bark of birch trees** were found in **Kashmir region**.
- They contain both **canonical and non-canonical Jain and Buddhist works** that throw light on the **evolution of many religious-philosophical literature**.

Menhir and Megalithic burial sites

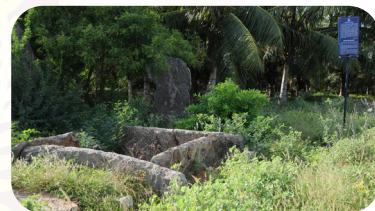
- » Recently, the **Tamil Nadu Department of Archaeology** has declared five ‘**menhir**’ and **megalithic burial sites** at **Kodumanal** in **Erode district** as **protected monuments**.

Menhir

- It is a **megalithic monument of prehistoric time**.

- A **tall, large upright stone** of which is erected and some of it is found in groups.

- These are mainly found in **Europe, Africa and Asia**.



Megalithic burial sites

- It is a **large stone** that was constructed as a prehistoric structure or monument, either alone or together with other stones.
- These were found **mainly underground** however some sites were on the surface.
- Megaliths were constructed either as **burial sites or commemorative memorials**.
- Such practices are believed to be started almost **3000 years ago** and it was considered common practice in the **Deccan, south India**.

Lavender festival



- » Recently, the Union Minister of Science & Technology inaugurated the **Lavender festival at Bhaderwah in Jammu & Kashmir**.
- It is celebrated to promote **lavender cultivation** and **nurturing agri-startups**.
- The festival, organized by the **Council of Scientific and Industrial Research-Indian Institute of Integrative Medicine (CSIR-IIIM)**.
- **Bhaderwah** is considered as the **Lavender capital of India**.

Aroma Mission

- It was launched in 2016 to boost the cultivation of plants like **lavender, Aloe Vera, Mehndi, Menthol, Mint** which have aromatic medicinal properties through new technology developed by the **Council of Scientific & Industrial Research (CSIR)**.
- It also seeks to provide **technical and infrastructure support** for distillation and value-addition to farmers all over the country.
- It aims to bring an additional area of **30,000 hectares under cultivation**.
- The **Purple or Lavender Revolution** was launched by the **Union Ministry of Science & Technology** through the **Council of Scientific & Industrial Research (CSIR)** which aimed at increasing lavender cultivation in Jammu and Kashmir.

Polity & Governance

New Parliament Building

- » The Prime Minister officially inaugurated India's new parliament building.
- The construction of the new parliament building is part of the **Central Vista Master Plan**, which includes building new facilities for India's novel **parliament building, the redevelopment of Kartavya Path and the central secretariat**.

Key features

Triangular Shape

- The new building is **triangular in shape** mostly because the plot of the land that is built on is a triangle.



- The design is influenced by **sacred geometry found in various religions**.

Environment Friendly

- Built using **green construction techniques**, the new building is supposed to **reduce electricity consumption by 30%** compared to the old one.

Lok Sabha

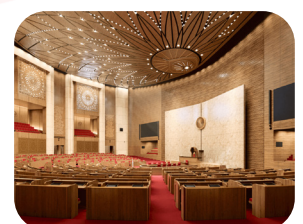
- New Lok Sabha chamber has a **peacock theme**, with designs drawn from the **national bird's feathers** carved on the walls, ceiling etc.



- The chamber will have **888 seats** with the **option of expanded seating up to 1272**.

Rajya Sabha

- The Rajya Sabha chamber has been decorated with the **lotus as its theme with red carpets**.



- It can accommodate **384 Members of Parliament**.

Constitution Hall

- It will have a constitution hall, where the **journey of Indian democracy** has been documented.



Materials from across India

- Construction materials have been brought in from across the country, including **sandstone from Sarmathura in Dholpur and granite from Lakha village in Jaisalmer** etc.
- **Bhadohi weavers from Uttar Pradesh** have made the **traditional hand-knotted carpets** for the building.

Golden Sceptre

- A **golden sceptre (Sengol)** given to Jawaharlal Nehru on the eve of independence will sit in the new Lok Sabha chamber near the speaker's podium.



Multidisciplinary Education and Research Improvement in Technical Education (MERITE) Project

- » The **World Bank** has approved a **USD 255.5 million loan** for **improving the quality of technical education** in government run institutions in India.
- MERITE is a **World Bank aided project** initiated by the **Ministry of Education** in the budget 2021-22. It is a continuation of the **Technical Education Quality Improvement Programme (TEQIP)**, which was also supported by the World Bank.
- The MERITE Project will support **improving student skills and employability** by focusing on **better research, entrepreneurship and innovation** and **improve governance in technical institutions**.
- Over the **next 5 years (2022-23 to 2027-2)**, the project will support around **275 government run technical institutions** in selected states across the country, **benefitting more than 350000 students each year**.

National Institutional Ranking Framework (NIRF) Ranking

- » The National Institutional Ranking Framework (NIRF) Ranking 2023 was announced.
- The **Indian Institute of Technology (IIT), Madras** secured the **top spot in the overall ranking** for the fifth consecutive year, while the **Indian Institute of Science (IISc), Bengaluru** was ranked as the **best university**.
- The NIRF is the **first-ever effort by the government to rank Higher Education Institutions (HEIs) in the country** which outlines a methodology to rank institutions.
- NIRF was approved by the **Ministry of Education** (Erstwhile Ministry of Human Resource Development) and launched on **29th September 2015**.



Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)

- » The PM-KISAN Mobile App with **face authentication feature** was launched to enhance the efficiency and accessibility of welfare schemes.
- PM-KISAN is also integrating with **Bhashini** (Government's **national public digital platform for languages**) to **provide farmers information in their native language**.
- The Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) is a **Central Sector scheme with 100% funding from Government of India** launched in **2019**.
- Under the scheme, **income support of Rs. 6,000 per year in three equal installments** is provided to all land-holding farmer families, providing them socio-economic security.
- It is one of the largest **Direct Benefit Transfer (DBT) schemes in the world**.
- **State Government and UT administration will identify the farmer families** which are eligible for support as per scheme guidelines.

Smart Cities Mission (SCM)

- » The Government has decided to extend the Smart Cities Mission deadline by one year from **June 2023 to June 2024**.
- It is a **centrally sponsored scheme** under the **Union Housing and Urban Affairs Ministry**, launched in **2015** to **improve people's living quality in cities and towns** through best practices, information and digital technology and more public-private partnerships.
- The **mission will cover 100 cities** that have been distributed among the **states and union territories**.
- Four pillars: **Social Infrastructure, Physical Infrastructure, Institutional Infrastructure and Economic Infrastructure**.
- The **six fundamental principles** on which the concept of smart cities is based are:



Nyaya Vikas Portal

- » The **Department of Justice** has introduced the NyayaVikas Portal **for monitoring its Nyaya Vikas Program** for Judicial Infrastructure with technical assistance of **NRSC (National Remote Sensing Centre), ISRO**.
- Nyaya Vikas Program, the **Centrally Sponsored Scheme (CSS)** has been implemented for the **Development of Infrastructure Facilities for Districts and Subordinate Judiciary since 1993-94**.
- The funds **sharing pattern** under the Scheme for **Centre and State is 60:40** in respect of **States other than North Eastern and Himalayan States**.
- The fund's sharing pattern is **90:10** in respect of **North Eastern and Himalayan States and 100% in respect of Union Territories**.
- The portal will help in **empowering stakeholders** with **seamless access to information (enhanced transparency)** about **funding**, documentation and project monitoring.

UGC (Institutions Deemed to be Universities) Regulations 2023

- » The **Ministry of Education** released the **UGC (Institutions Deemed to be Universities) Regulations 2023**, which will replace the 2019 guidelines.

Key provisions of the 2023 Regulations

- » Any multidisciplinary institutions having:
 - » valid accreditation by **National Assessment and Accreditation Council (NAAC)** with at least 3.01 CGPA for 3 consecutive cycles,
 - » **National Board of Accreditation (NBA)** grading for two-thirds of eligible programmes for 3 consecutive cycles or
 - » In the top 50 of any specific category of **NIRF** for the last 3 years continuously, will be **able to apply for the deemed to be university status**.
- » It introduced the **Distinct Institution category**, where an institution engaged in several activities such as **addressing the strategic needs of the country** and engaged in the **preservation of Indian heritage, culture, language** etc, determined by the **Expert Committee of commission**, will be **exempted from eligibility criteria**.

- **University Grants Commission** is a **statutory body** created as per the **UGC Act of 1956** to supervise the **coordination, determination, and maintenance of standards of university education**.

Digital Publisher Content Grievances Council (DPCGC)

- » The DPCGC, an **independent self-regulatory body** for **Online Curated Content (OCC)** providers has for the first time recommended **punitive action** on an OTT platform for vulgar content
- It was established by the **Internet and Mobile Association of India (IAMAI)**, a private non-profit, in June 2021.
- It is recognized by the **Ministry of Information & Broadcasting** under **IT Rules (2021)**.
- With an advisory board comprising eminent figures, it also houses a **Grievance Redressal Board (GRB)** to handle complaints on DPCGC member platforms.

Fixed Dose Combination (FDC) Drugs

- » The **central government banned several FDCs** under the **Drugs and Cosmetics Act 1940**, following the recommendation of an expert committee that **there is no therapeutic justification for those FDCs** and they involve **risk to human beings**.
- Fixed Dose Combinations (FDCs) refers to **products containing one or more active ingredients used for a particular indication**.
- FDCs have shown to be particularly useful in the treatment of infectious diseases like **HIV, malaria and tuberculosis**.
- Pharmaceutical companies in India use these FDCs to escape liability under **multiple laws without much concern for public health**.
- **Drug Technical Advisory Board (DTAB)** is the **highest statutory decision making body on technical matters** related to drugs in India, established as per the **Drugs and Cosmetics Act 1940** and part of the **Central Drugs Standard Control Organisation (CDSCO)**.

National Indicator Framework (NIF) Progress Report 2023

- » Recently, the **Ministry of Statistics and Programme Implementation (MoSPI)** released the **Sustainable Development Goals (SDGs) National Indicator Framework (NIF) Progress Report 2023**.
- The **Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs)** of the **UN General Assembly** had developed the **Global Indicator Framework (GIF)**.
- In **India**, similar to GIF, the **National Indicator Framework (NIF)** was developed by the government in 2018.
- Presently, there are **306 indicators in the NIF developed** after extensive consultations. It will give appropriate direction to the policy makers and the implementers of various schemes and programmes.

State Food Safety Index

- » Recently, the **Union Health Minister** released the **fifth State Food Safety Index in New Delhi**.
 - The Index is an **annual assessment** released by the **Food Safety and Standards Authority of India (FSSAI)** (first launched in **2018-2019**).
 - It serves as a tool to **propel States and Union Territories** to enhance their **performance and establish robust food safety ecosystems** within their jurisdictions.
- This index is based on the performance of the **State/ UT on five significant parameters:**



Key Findings of 2022-23 report:

- Among the **large state category**: **Kerala** is the top-ranking state followed by **Punjab** and **Tamil Nadu**.
- Among the **small states category**: **Goa** is the top-ranking state followed by **Manipur**, and **Sikkim** in the Small States category.
- Among the **Union Territories category**: **Jammu and Kashmir**, **Chandigarh**, and **Delhi**.

Meira Paibis

- » Recently, the **Indian Army's Spear Corps** accused **women activists Meira Paibis** of deliberately blocking routes and interfering in the operations of security forces as the state struggles to contain weeks of rioting and unrest.
- Meira Paibi (**Women torch bearers**) is a **women's social movement** in Manipur dates to **1977** in the present **Kakching district**.
- The Meira Paibis, also known as **Imas or Mothers of Manipur**, are **Meitei women** who come from **all sections of society in the Imphal valley**.
- Its initial focus of **fighting alcoholism and drug abuse** has now **expanded to countering human rights** violations and the development of society at large.
- They were the **active support base of Irom Sharmila**, the activist who remained on a hunger strike in the state from 2000 to 2016 to protest against the **Armed Forces Special Powers Act (AFSPA)**.

Tele Law program

- » The Tele-Law programme has achieved a new milestone with **40 lakh beneficiaries** across the country.
- The Tele-Law programme comes under the **Department of Justice, Ministry of Law and Justice** and was launched in **2017**.
- It is an **e-interface mechanism** to seek legal advice and consultation at a **pre-litigation stage** with the aim of '**Reaching the Unreached**'.
- It uses **video conferencing facilities and telephone services** to connect lawyers to litigants who need legal advice, it can also be used via a **mobile app**.
- Helps in delivery of legal advice through a panel of lawyers stationed at the **State Legal Services Authorities and CSC (Common service centres)**.
- The **service is free** for those who are **eligible for free legal Aid under Section 12 of the Legal Services Authority Act, 1987**. For all others, a nominal fee is charged.

Law on Sedition

- » The Law Commission of India has recommended the retention of the **153-year-old colonial law** on sedition in India.
- **Section 124A** of the Indian Penal Code penalises a **crime against the state**.
- Sedition refers to any **act or attempt to bring hatred or contempt** towards the government established by law in India, or to incite disaffection or resistance against it.
- Sedition is a **non-bailable offence**. A person charged under this law **cannot apply for a government job**. They have to **live without their passport**.
- Upon conviction, the person can be punished with either **life imprisonment** and a fine, or imprisonment for up to three years and a fine, or just a fine.

Article 299

- » Recently, the Supreme Court gave judgement on the claims of immunity while entering into a contract in the **President's name under Article 299** of the Constitution.
- **Article 298** grants the Centre and the state governments the power to carry on trade or business, acquire, hold, and dispose of property, and make contracts for any purpose.
- **Article 299** delineates the manner in which these contracts will be concluded. It provides that all contracts made in the exercise of the executive power of the Union or of a State shall be
 - Expressed to be made by the President or by the Governor of the State.
 - Executed on behalf of the President or the Governor by persons in a manner as directed and authorised by them [**Article 299 (1)**].
- **Article 299(2)** states that the President or the Governor cannot be personally held liable for contracts, it does not grant immunity to the government from the legal provisions of the contract.

Zero FIR

- » Recently, in Manipur violence incidents nearly **30% of First Information Reports (FIRs)** were 'zero FIRs'.
- Zero FIR refers to an FIR that is **registered irrespective of the area** where the offence is committed.
- The police in such a case can no longer **claim that they have no jurisdiction**.
- Such an FIR is then later **transferred to the police station that has the actual jurisdiction** so that the investigation can begin.
- The **FIR number** is assigned only after the zero FIR is received by the relevant police station.
- It was introduced on the recommendation of the **Justice Verma Committee** formed at the backdrop of the **Nirbhaya gang rape** in Delhi in 2012.
- This puts a legal obligation on the police to begin an investigation and take quick action **without the excuse of the absence of jurisdiction**.
- It also **preserves the evidence and witnesses are not lost** due to delay in registering a complaint.

Central Bureau of Investigation

- The CBI is the **premier investigating police agency in India** that helps in **preventing corruption and maintaining integrity in administration**.
- CBI was established on **1st April 1963** by a resolution of the **Ministry of Home Affairs** and later transferred to the **Ministry of Personnel, Public Grievances and Pensions**, currently functioning as an **attached office**.
- The establishment of CBI was recommended by the **Santhanam Committee on Prevention of Corruption**.
- It operates under the **Delhi Special Police Establishment (DSPE) Act 1946**. It is **neither a constitutional nor a statutory body**.

Functions

- CBI was established with a view to investigate **anti-corruption crimes, major financial scams and serious economic frauds, serious and organised crimes etc.**
- It acts as the **National Central Bureau of Interpol in India**.
- CBI can **suo-moto take up investigation of offences only in the Union Territories**.

General Consent Principle for CBI

- According to the DSPE Act, the CBI needs to obtain the **consent of the state governments** before it can investigate a crime in a particular state.
- The consent of the state government to CBI can be either **case-specific** or **general**.
- When a state gives a **general consent** to the CBI for probing a case, the agency is not required to seek fresh permission every time it enters the state in connection with investigation or for every case.
- When a **general consent is withdrawn**, CBI needs to seek **case-specific consent** for investigation from the concerned state government.

Provisions of Prior Permission

- The CBI was required to obtain the **prior approval of the central government** before conducting any inquiry or investigation into an **offence committed by officers of the rank of joint secretary and above** in the central government and its authorities.
- In **2014**, Supreme Court held that **Section 6A of the DSPE Act** which granted protection to joint secretary and above officers was **violative of fundamental rights**.
- The recent SC judgement held that the **2014 judgement will have retrospective effect**.

Commission of Railway Safety (CRS)

- » Recently, CRS was appointed as the **investigating office** for the recent tragic train accident in Odisha.
- CRS is a **statutory body** and it deals with matters related to **safety of rail travel and operations**, as laid down in the **Railways Act, 1989**.
- Its headquarters is **Lucknow** and is headed by the **Chief Commissioner of Railway Safety**.
- Its major functions include **investigating train accidents, advising the union government** etc.
- CRS is under the **administrative control** of the **Ministry of Civil Aviation (MoCA)**.

National Pharmaceutical Pricing Authority (NPPA)

- » Recently, NPPA has fixed retail prices of **23 formulations**, including the medications to treat diabetes and high blood pressure.
- NPPA is an **independent regulator for pricing of drugs** and to ensure availability and accessibility of medicines at affordable prices.
- It was constituted in **1997** as an attached office of the **Department of Pharmaceuticals (DoP), Ministry of Chemical and Fertilisers**.
- NPPA regularly publishes **lists of medicines and their maximum ceiling prices**.

Functions

- To implement and enforce the provisions of the **Drugs (Prices Control) Order**.
- To monitor **availability of drugs, identify shortages** and to take remedial steps.
- To collect or **maintain data** on production, exports and imports, market share of individual companies etc for bulk drugs and **undertake or sponsor relevant studies**.

Press Information Bureau (PIB)

- » PIB was established in **1919**, by the then British government. Recently, it marked its **centennial anniversary**.
- Currently, it is a **nodal agency of the Government of India** under the **Ministry of Information and Broadcasting**.
- Headquarters: **New Delhi**
- PIB publishes information to **print, electronic and web media on government plans, policies, programme initiatives and achievements**.
- It is available in **14 Indian official languages**, which are Dogri, Punjabi, Bengali, Oriya, Gujarati, Marathi, Meitei (Manipuri), Tamil, Kannada, Telugu, Malayalam, Konkani and Urdu, in addition to Hindi and English.
- The head of PIB is also the **Official Spokesperson of the Government of India** and **holds the rank of Principal Director General**.
- The Bureau has **information officers** attached to different Ministries, constitutional bodies and autonomous organizations of the Government of India.

Director General of Police (DGP) Appointment

- » Recently, Punjab assembly passed **Punjab Police Amendment Bill, 2023** which amends the procedure to select Director General of Police.
- Currently, appointments of DGPs are made on the basis of the **Supreme Court's judgement on police reforms in Prakash Singh vs Union of India, 2006**.
- As per the judgement, **DGP is to be selected by the state government from among the three senior most officers eligible for promotion to that rank**.
- State sends the names of eligible officers to UPSC, which appoints an empanelment committee **headed by the UPSC chairman**, and with the union **Home secretary, State chief secretary, state DGP, and the chief of a central police organisation** to pick the candidate for the post.

Modified Semicon India Programme

- » The government has decided to invite new applications for setting up **Semiconductor Fabs** and **Display Fabs** in India under the **Modified Semicon India Programme**.
- Government launched the **Semicon India Programme** in **December 2021** for the **development of semiconductors and display manufacturing ecosystems in India**.
- Under the **Modified Programme**, unveiled in **2022**, **fiscal incentive of 50% of the project cost** is available to companies/consortia/joint ventures for setting up of **Semiconductor Fabs and Display Fabs in India**.
- **India Semiconductor Mission (ISM)**, an **Independent Business Division within Digital India Corporation**, a not-for-profit company set up by the **Ministry of Electronics and Information Technology**, is the designated nodal agency entrusted with the responsibility of implementing the programme.

UNDP and DAY-NULM Partnership

- » The **United Nations Development Programme (UNDP)** and the **Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)** entered into a collaborative partnership.
- The UNDP and DAY-NULM partnership aimed at **empowering women to make well informed career choices in the field of entrepreneurship**.
- It will **provide support for women looking to start and expand their own enterprises**, particularly in sectors such as **care economy, digital economy, electric mobility, waste management** and more.
- The **3 year project**, extendable beyond **2025** will cover **8 cities in the initial phase**.
- The UNDP will also be developing **community business mentors** called **Biz-Sakhis** in selected project locations who possess valuable business knowledge.

Electronics Repair Services Outsourcing Initiative

- » Recently, the **Union Ministry of Electronics & IT** launched the **ERSO Pilot** initiative to make India the **‘Repair Capital of the World’**.
- It seeks to make **India the repair capital of the world**.
- The pilot will run for a period of **three months in Bengaluru**.
- Five companies namely, **Flex, Lenovo, CTDI, R-Logic & Aforeserve** have volunteered for the pilot.
- India’s **e-waste policy will be modified to enable repair companies** to domestically **recycle 5% of imported goods** by weight on a trial basis.

World’s Largest Grain Storage Plan in Cooperative Sector

- » The Union Cabinet has given its approval for the establishment of the **“world’s largest grain storage plan in the cooperative sector”** with an outlay of around **Rs 1 lakh crore**.
- Under the new plan, the **Ministry of Cooperation** aims to set up a network of integrated grain storage facilities through **Primary Agricultural Credit Societies (PACS)** across the country.
- Though the **plan does not have a separate Budgetary allocation**, it will be implemented by the **convergence of 8 schemes**. These schemes are -
 1. The **Ministry of Agriculture & Farmers Welfare’s Agriculture Infrastructure Fund (AIF)**, **Agricultural Marketing Infrastructure Scheme (AMI)**, **Mission for Integrated Development of Horticulture (MIDH)**, and **Sub Mission on Agricultural Mechanisation (SMAM)**.
 2. **Two schemes of the Ministry of Food Processing Industries**: **PM Formalisation of Micro Food Processing Enterprises Scheme (PMFME)**, and **PM Kisan Sampada Yojana (PMKSY)**.
 3. **Two schemes of the Ministry of Consumer Affairs, Food and Public Distribution**: **allocation of food grains under the National Food Security Act**, and **Procurement operations at Minimum Support Price**.

Financial Services Institution Bureau (FSIB)

- » The FSIB selected new chiefs for **General Insurance Corporation of India (GIC)** and **National Insurance Company (NIC)**.
- The Financial Services Institutions Bureau (FSIB) is set up under the **Department of Financial Services** for making recommendations for the **appointment of full-time directors and non-executive chairman of state run financial services institutions**.
- Constituted on **1st July 2022**, it replaced the **Bank Board's Bureau (BBB)** which was declared an incompetent authority by the Delhi High Court.

The FSIB will comprise:

- A chairperson nominated by the central government.
- The secretaries of the departments of financial services and public enterprises.
- The chairman of the IRDAI.
- Deputy governor of RBI.
- 3 members with knowledge of banks and other financial institutions and 3 members with knowledge of insurance.
- FSIB issues **guidelines for selecting general managers and directors of public sector general insurance companies** and is involved in **formulating and developing business strategies for state run banks**

Greedflation

- » Recently, there has been an increasing consensus in **Europe and US** that **greedflation is driving the rising cost of living rather than just inflation**.
- Greedflation simply means (corporate) **greed is fuelling inflation**.
- It is the phenomenon where **corporate greed** becomes a **significant factor in fueling inflation**, which implies that companies increase their prices not for just covering their increased costs, but to maximize their profit margins.
- Rather than a **wage-price spiral**, it is a **Profit-Price Spiral** where companies exploit inflation by raising prices excessively.

Lightweight Payment System

- » **RBI** has recently conceptualised a lightweight payment and settlements system.
- Lightweight Payment System, also a **“bunker” equivalent of digital payments** which can be operated from **anywhere by a bare minimum staff in emergencies** such as natural calamities or war.
- The infrastructure for this system will be **independent of the technologies that underlie the existing systems of payments** such as UPI, NEFT, and RTGS.
- The central bank has yet **not offered a timeline** for the launch of this payments system.
- Lightweight system provides a **portable and easily activated solution** that can be operated remotely with minimal resources.
- It serves as a **backup option for critical transactions**, maintaining **stability** and ensuring the **availability of essential payment services**.

CHAMPIONS 2.0 portal

- » Recently, on the occasion of **International MSME Day (June 28th)**, the **Ministry of Micro, Small & Medium Enterprises** launched 'CHAMPIONS 2.0 Portal'.
- The CHAMPIONS portal is a single-window grievance redressal portal for Micro, Small & Medium Enterprises launched in **2020**.
- The CHAMPIONS stands here for the **Creation and Harmonious Application of Modern Processes for Increasing Output and National Strength**.
- The revamped portal will now incorporate **AI-driven chatbots** and will be available in **11 languages, including Hindi, Gujarati, Bengali, and Kannada**.
- The portal will also have a **real-time feedback mechanism for its analysis**.

Duty-free quota-free (DFQF) scheme

- » According to a report by the **Least Developed Countries (LDC)** Group at the **World Trade Organisation (WTO)**, the **Duty-free quota-free (DFQF) scheme** remains unutilized by the LDC nations.
- The decision to provide duty-free quota-free (DFQF) access for **LDCs** was first taken at the **WTO Hong Kong Ministerial Meeting in 2005**.
- The duty-free quota-free (DFQF) scheme of the **World Trade Organisation (WTO)** is a trade preference program that allows LDCs to export their products to developed and developing countries without paying any tariffs or quotas.
- The scheme aims to enhance the **market access and competitiveness of LDCs** and to support their **economic development and poverty reduction**.
- **India became the first developing country** to extend this facility to LDCs in 2008, providing **market access to 85% of India's total tariff lines** later expanded to **98.2% of tariff lines**.

SANKALP Programme

- » The **Ministry of Skill Development & Entrepreneurship** certified 98 trainers trained under the Skill Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) Programme.
- The SANKALP Programme is a **World Bank loan assisted scheme** to strengthen **institutional mechanisms for skill development** and increase access to **quality and market relevant training** for youth across the country.
- **It has 3 result areas:**
 - Institutional strengthening at national, state and district level.
 - Quality assurance of skill development programmes.
 - Inclusion of marginalised population in skill development programmes.

Framework for Compromise Settlements and Technical Write-offs

- » The **Reserve Bank of India (RBI)** recently prescribed a comprehensive regulatory framework for **regulated entities (REs)** for compromise settlements and technical write-offs.
- The aim was to provide further impetus to resolving **stressed assets** and **rationalising and harmonising instructions**.
- **Banks and finance companies** can undertake **compromise settlements or technical write-offs** for accounts categorised as **wilful defaulters or fraud, irrespective of ongoing criminal proceedings against the debtors**.
- The RBI's circular enables these settlements while ensuring that **criminal proceedings remain unaffected**.
- The sole motivation behind such a decision should be to **maximise recovery, as speedily as possible**.
- Banks are required to impose a **minimum cooling period of 12 months** before **granting fresh loans to borrowers who have undergone compromise settlements**. The cooling period also applies to credits other than farm credit.

Antardrishti

- » The **Reserve Bank of India (RBI) Governor** launched a **Financial Inclusion Dashboard**, named Antardrishti.
- The dashboard will provide the required insight to **assess and monitor the progress of financial inclusion** by capturing relevant parameters.
- The dashboard, presently intended for internal use in the RBI, will further **facilitate greater financial inclusion** through a multi-stakeholder approach.
- It will also make it possible to assess the degree of financial exclusion **at a local level** across the nation so that such places may be addressed.

Sovereign Gold Bond

- » The Government of India has announced the issuance of Sovereign Gold Bonds (SGBs) for the financial year **2023-24**.
- SGB is a **government-backed scheme** that allows one to buy gold in the form of bonds and earn **interest on investment**. SGB also offers several benefits over physical gold, such as tax exemption, easy liquidity, and lower risk of theft or loss.
- These bonds are **denominated in grams of gold**.
- The bonds will be **issued in tranches by the RBI throughout the year**, based on the **demand and supply situation**.

Benefits

- They pay a fixed interest rate of **2.5% per annum** on the **initial investment**, payable **semi-annually**.
- They have a **maturity period of 8 years**, with an option of **premature redemption after 5 years**.
- They are exempt from **capital gains tax** if held till maturity or transferred before maturity.
- They can be used as **collateral for loans** from banks and other financial institutions.
- They can be **traded on stock exchanges** and post offices, subject to market conditions and availability.

Eligibility and limits

- SGBs will be restricted for sale to **resident individuals, HUFs, Trusts, Universities and Charitable Institutions**.
- The **minimum investment is one gram of gold and the maximum limit is 4 kg for individuals and HUFs and 20 kg for trusts and similar entities per fiscal year**.

Price Support Scheme (PSS)

- Recently, the union government announced that it will procure **tur, urad and masur** from farmers at the **Minimum Support Price (MSP)** without any limit for the year 2023-24.
- The PSS is one of the components of the **Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA) scheme**, which was launched in 2018 to ensure that farmers get a **fair price for their crops**.
- It is implemented by the **Department of Agriculture & Cooperation** through **NAFED** which is the Central nodal agency and the Minimum Support Price (MSP) is declared by the government.
- The main crops covered under the scheme are Bajra, Jowar, Maize, Paddy, Cotton, Tur, Moong, Urad, Groundnut, Sesamum, Wheat, Gram, Mustard, Sugarcane etc.
- The procurement under PSS is done as per the specified **Fair Average Quality (FAQ) standards and guidelines**.

100 Days 100 Pays Campaign

- The **Reserve Bank of India (RBI)** has recently launched the '100 Days 100 Pays' campaign.
- It was launched to **trace and settle the top 100 unclaimed deposits of every bank in every district within a span of 100 days**.
- This campaign is part of RBI's efforts to reduce **unclaimed deposits** in the banking system and ensure their rightful return to owners or claimants.
- RBI also created a **centralised web portal using artificial intelligence (AI) tools** for the public to search for unclaimed deposits across multiple banks.

Investor Protection Fund (IPF) and Investor Services Fund (ISF)

- » Recently, **Securities and Exchange Board of India (SEBI)** released guidelines for **IPF** and **ISF** maintained by **stock exchanges** and **depositories**.

Investor Protection Fund

- All **stock exchanges and depositories** shall establish an **IPF**.
- The **objective of establishing an IPF** is to **protect the interests** of stockbrokers and investors.
- The **IPF** of the stock exchange and depository shall be administered through **separate trusts** created for the purpose.

Investor Services Fund

- Its primary objective is to **promote investor education and awareness programs**, information etc.
- The stock exchange shall set aside **at least 20% of the listing fees** received for **ISF** for providing services to the investing public.
- **ISF** is supervised by the **Regulatory Oversight Committee**.
- If a stock exchange or a depository is wound up or derecognized or exits, then the balance in the **IPF** or **ISF** lying un-utilised with the stock exchange and depository shall be transferred to **Investor Protection and Education Fund (IPEF)** of **SEBI**.

Investor Protection and Education Fund (IPEF)

- **IPEF** was established by **SEBI** in **2007** and it is regulated under the **SEBI (IPEF) Regulations 2009**.
- It is utilised for the **protection of investors and the promotion of investor education and awareness**.
- It is **funded through contributions made by SEBI, grants and donations by central government or state governments, security deposits** etc.

International Relations

Vienna World Conference on Human Rights

- To mark the **30th anniversary** of the Vienna World Conference on Human Rights, a high-level symposium entitled **“Vienna World Conference 30 Years on: Our Rights-Our Future”** took place in Vienna.
- The World Conference on Human Rights was held by the **United Nations in Vienna** in **June 1993**, which was the **first human rights conference** held since the **end of the Cold War**.
- The main result of the conference was the **Vienna Declaration and Programme of Action**, which was adopted on **June 25, 1993** and endorsed by the **United Nations General Assembly** on **December 20, 1993**.
- The declaration affirms the **commitment of all states to fulfil their obligations with respect to the principles of human rights**, reaffirms that **human rights are the birthright of all human beings** and emphasises on the **importance of international cooperation**.
- The **Indian delegation** participated in the **World Conference on Human Rights** and **signed the Vienna Declaration and Programme of Action**.

Bangkok Vision 2030

- » Recently, Thailand presented **“BIMSTEC Bangkok Vision 2030”** which aims to build a **Prosperous, Resilient, and Open BIMSTEC by 2030**.
- The Vision sets a clear direction and priorities as well as a goal for **BIMSTEC collaboration to tackle challenges and seize opportunities for the coming decade**.
 - It aims to **promote BIMSTEC** as a region of **peace, stability, and economic sustainability**.
 - Its objectives are in line with the **United Nations’ Sustainable Development Goals** and **Thailand’s bio-circular-green economic model**.

Artemis Accord

- » Recently, **India** became the **27th signatory to the Artemis Accords**.
- It is an **US led initiative** which aims to establish a common vision with a set of **principles, guidelines, and best practices to enhance the governance of the civil exploration and use of outer space**.
- It serves as a framework for **cooperation and collaboration in space exploration**, building upon the foundation of the **Outer Space Treaty of 1967**.
- The Artemis Accords were jointly launched by the **United States Department of State and NASA** along with seven partner countries (**Canada, Italy, Japan, Luxembourg, UAE, and the UK**) in October, 2020.
- India's entry into the accord would promote **knowledge-sharing and technology transfer** and enhance **ISRO's space exploration efforts**.



Hiroshima AI Process

- » The recently concluded **G7 Summit (Japan)** initiated the Hiroshima AI Process (HAP).
- The **G7 Leaders recognized the importance of inclusive AI governance** and set a vision of **trustworthy AI** aligned with **shared democratic values**.
- It also discussed the **growing prominence of Generative AI across countries** and sectors and emphasises the need to address the opportunities and challenges associated with it.
- HAP will **work in cooperation with the OECD and Global Partnership on Artificial Intelligence (GPAI)**.

Asia-Pacific Plant Protection Commission (APPPC)

- » The **Asia-Pacific Plant Protection Commission (APPPC)** unanimously elected **India** as **chair of the Standing Committee on Integrated Pest Management (IPM)**.
- The APPPC is an **intergovernmental organisation** that promotes **cooperation among countries in the Asia-Pacific region** to enhance **plant health and plant protection**.
- It was established in **1956** as a **regional body** approved by the **Food and Agriculture Organisation (FAO)**.
- The commission consists of **representatives of all the 25 member countries** and elects amongst them a **chairperson** who serves for a **period of 2 years**.
- The **Director General of FAO** appoints and provides the secretariat that coordinates, organises and follows up the work of the commission.

Centralised Laboratory Network (CLN)

- » The **Indian Council of Medical Research-National Institute of Virology (ICMR-NIV), Pune** has joined the Centralised Laboratory Network (CLN).
- The CLN is a part of the **Coalition for Epidemic Preparedness Innovations (CEPI)** and the largest global group which has standardised methods and materials for **testing vaccines**.
- It currently has **15 partner facilities** in **13 countries** that ensures that vaccine candidates are evaluated rapidly and accurately, identifying the most promising options for further development.
- CEPI is a global partnership launched in **2017** to develop **vaccines to stop future epidemics**. It was conceived at the **World Economic Forum (WEF) in Davos, Switzerland** and **co-founded by the governments of India and Norway**.

Mineral Security Partnership (MSP)

- » India was recently inducted into the **Mineral Security Partnership (MSP)**.
- Launched in **June 2022**, MSP is an ambitious new initiative to **bolster critical mineral supply chains**.
- The **US-led coalition partners** include Australia, Canada, Finland, France, Germany, India, Italy, Japan, Norway, the Republic of Korea, Sweden, the United Kingdom, the United States, and the European Union (represented by the European Commission).
- The partnership is focused on boosting both **public and private investments in global critical mineral supply chains**.
- The focus of the grouping would be on the supply chains of minerals such as **Cobalt, Nickel, Lithium** and also the 17 “rare earth” minerals.

India-UN SDG Cooperation Framework

- » Recently, **NITI Aayog** and the **United Nations in India** signed the **Government of India - United Nations Sustainable Development Cooperation Framework (GoI-UNSDCF) 2023-2027**.
- It is in line with the **national vision for development**, for the achievement of the SDGs, **promoting gender equality, youth empowerment and human rights**.
- It is built on **four strategic pillars** derived from the **2030 Agenda – People, Prosperity, Planet and Participation**.

The four interlinked pillars have six outcome areas focusing on

- 🎯 **Health and Well Being;**
- 🎯 **Nutrition and Food Security;**
- 🎯 **Quality Education;**
- 🎯 **Economic Growth and Decent Work;**
- 🎯 **Environment, Climate, WASH and Resilience; and**
- 🎯 **Empowering People, Communities, and Institutions.**
- To deepen cooperation in critical areas, for the first time there is specific focus on **SDG localisation** and **South-South cooperation**.

Supreme Audit Institutions - 20 (SAI20)

- » The **SAI20 Summit** under **India's G20 Presidency** began in **Goa**, led by the **Comptroller and Auditor General (CAG) of India**.
- The **SAI20 Engagement Group** of **G20 established in 2022** emphasis on **promoting the efficiency, accountability, and transparency** of public administration, and supporting SDG implementation.
- The group **aspires to support member SAIs to be future-ready** in the face of rapid changes in the audit environment.

Principles of SAI20:



International Organization of Supreme Audit Institutions (INTOSAI)

- The International Organization of Supreme Audit Institutions (INTOSAI) operates as an **umbrella organisation for the external government audit community** established in **1953**.
- It is a **non-governmental organisation** with **special consultative status** with the **Economic and Social Council (ECOSOC)** of the United Nations.
- It works to **promote auditing standards, good governance of SAIs**.
- The **International Congresses of Supreme Audit Institutions (INCOSAI)** is the **supreme organ of INTOSAI** and is **composed of all the members**.
- The **CAG of India** is a **member of the Governing Board of the INTOSAI**.

United Nations Office for Outer Space Affairs (UNOOSA)

- » Recently, **Indian-origin Aarti Holla-Maini** took over as Director of the United Nations Office for Outer Space Affairs (UNOOSA) in Vienna.
- It is the **UN office responsible for promoting international cooperation** in the peaceful uses of outer space.
- It works to establish or strengthen the **legal and regulatory frameworks** for **space activities** and **assists developing countries** in using **space science and technology** for **sustainable socio-economic development**.
- UNOOSA works primarily to implement the decisions of the **UN General Assembly** and of the **UN Committee on the Peaceful Uses of Outer Space**.
- **COPUOS** is also responsible for helping implement the **major international treaties, legal principles, and General Assembly resolutions about space law**.

Universal Postal Union

- » The Union Cabinet has granted approval for the establishment of a **Regional Office** of the Universal Postal Union (UPU) in **New Delhi**.
- The Universal Postal Union (UPU) is a **United Nations specialised agency** and the **postal sector's primary forum for international cooperation** established in **1874** by the **Treaty of Bern**.
- UPU is the **second oldest international organisation worldwide** after the **International Communication Union**.
- It is **headquartered in Bern, Switzerland**, currently has **192 members**.
- The **Congress** is the supreme authority of the UPU and **meets every four years**.
- It **coordinates postal policies among member nations, sets the rules for international mail exchanges**, and ensures a truly universal network of up-to-date products and services.

UN Peacekeeping forces

- » Recently, the **Indian Army commemorated the 75th anniversary of United Nation Peacekeepers**.
- The theme for 2023 is **"Peace begins with me"**.
- The UN Charter gives the Security Council primary responsibility for the **maintenance of international peace and security**.
- The UN Peacekeeping Forces were established when the UN Security Council approved the deployment of **UN military observers to the Middle East in 1948**.
- UN peacekeeping forces assist nations in transitioning from war to peace, carrying out missions approved by the **UN Security Council (UNSC)** and the **UN General Assembly**.

Guiding principles of UN peacekeepers includes

- ★ **Consent of the parties**
- ★ **Impartiality**
- ★ **Non-use of force except in self-defence and defence of the mandate**
- India has deployed **more than 2,75,000 troops**, including a significant number of women peacekeepers. It has also deployed significant civilian and police personnel, including an **all-women contingent** (since 2007).
- **India** is the **3rd largest manpower** contributor to UN peacekeeping, while **Bangladesh and Nepal** are the first and second contributors respectively
- **Dag Hammarskjold Medal** is a **posthumous award** and the highest honour awarded to U.N. Peacekeepers established in **1997**.

Environment & Ecology

Myristica Swamps

- » Naturalists warn that Myristica swamps, considered “live fossils” and a



biodiversity hotspot dominated by ancient evergreen trees, face threats from climate change and human intervention.

- These swamps, belonging to the **Myristicaceae family**, are among the **oldest flowering plants on Earth** and are primarily located in the **Western Ghats of India**, including the **Uttara Kannada district in Karnataka** and the **southern parts of Kerala**.
- Recently, they’ve been discovered in **Bambarde village, Sindhudurg district, Maharashtra**.
- Myristica swamps, **crucial for maintaining perennial stream flow** and with a **high carbon storage capacity**, are endangered due to climate change and the depletion of essential water bodies vital for sustaining the habitat.

Bonn Climate Meet

- » Recently, Delegates to the **Paris Agreement met in Bonn, Germany**, paving the way to some key decisions for the **UN Climate Conference (COP 28) in Dubai in 2023**.
- Bonn Climate Change Conference, the **session of Subsidiary Bodies** under the **United Nations Framework Convention on Climate Change (UNFCCC)** took place in Bonn, Germany.
- The summit’s objective was to **prepare for the upcoming COP28**.
- The conference was attended by representatives from over **190 countries** and **facilitated discussions and negotiations** among delegates on various climate change-related topics, encompassing mitigation, adaptation, finance, and technology transfer.

Coalition for Disaster Resilient Infrastructure (CDRI)

- » The Union Cabinet has approved the categorisation of the Coalition for Disaster Resilient Infrastructure (CDRI) as an **International Organisation**, headquartered in **New Delhi**.
- The cabinet also decided on signing of the **Headquarters Agreement (HQA)** for granting it the exemptions, immunities and privileges as contemplated under the **UN (Privileges & Immunities) Act 1947**.
- Launched by the **Indian Prime Minister at the 2019 UN Climate Action Summit**, CDRI aims to enhance infrastructure resilience to climate and disaster risks, with 31 member countries and 8 member organisations.

CDRI’s strategic priorities are:

- Technical Support and Capacity-building
- Research and Knowledge Management
- Advocacy and Partnerships



Short Lived Halogens

- » A new study reveals that **oceans play a crucial role in cooling the planet** by releasing short-lived halogens, including chlorine, bromine, and iodine.
- Short-lived halogens refer to **chlorine, bromine, and iodine compounds** that have a **relatively short lifespan in the atmosphere, typically less than six months**.
- They are **naturally produced in the ocean** by **phytoplankton and algae**.
- These halogens currently contribute **8-10% of cooling**, projected to increase to **18-31% by 2100**.

Global Environment Facility

- » During the **64th Global Environment Facility (GEF) council meeting** in **Brazil**, **\$1.4 billion was approved for disbursement to address climate, biodiversity, and pollution issues.**
- The Global Environment Facility was set up under the **World Bank in 1991** as a **multilateral financial mechanism** and later became a **permanent, separate institution in 1995.**
- It provides **grants to developing countries** for projects that **benefit the global environment** and **promote sustainable livelihoods in local communities.**
- It addresses **six designated focal areas:** biodiversity, climate change, international waters, ozone depletion, land degradation and Persistent Organic Pollutants.

It also serves as financial mechanism to 5 Conventions:

- 📁 Convention on Biological Diversity (CBD)
- 📁 United Nations Framework Convention on Climate Change (UNFCCC)
- 📁 Stockholm Convention on Persistent Organic Pollutants (POPs)
- 📁 UN Convention to Combat Desertification (UNCCD)
- 📁 Minamata Convention on Mercury.

Desiccation-Tolerant Vascular (DT) Plants

- » A new study discovered **62 desiccation-tolerant vascular plant species** in **India's Western Ghats.**
- Desiccation-tolerant vascular (DT) plants are able to **withstand extreme dehydration**, losing up to **95% of their water content**, and they **revive themselves once water is available again.**
- This unique ability allows them to **survive in harsh, arid environments** that would be uninhabitable for most other plants.



LEED Certification

- » Recently, **US Green Building Council (USGBC) and Green Business Certification Inc** said in a statement that **India has emerged as the top country with LEED Zero green building projects.**
- **India ranked first globally in LEED Zero certified green building projects surpassing the US and China.**

About LEED Certification

- Leadership in Energy and Environmental Design(LEED) is the **world's most widely used green building rating system** in the world.
- It is available for **virtually all building types.**
- This certification provides a framework for **healthy, highly efficient, and cost-saving green buildings**, which offer **environmental, social and governance benefits.**
- It is a globally recognized **symbol of sustainability achievement and leadership.**

Global Biodiversity Framework Fund (GBFF)

- » Recently, the Global Environment Facility(GEF) approved GBFF at the **64th GEF council meeting (Brazil).**
- GBFF is designed to **mobilise and accelerate investment** in the **conservation and sustainability of wild species and ecosystems.**
- GBF Fund is primarily dedicated to support the implementation of the **Kunming-Montreal Global Biodiversity Framework**, its goals and its targets.
- The Fund also provides the opportunity for the participation of **Multilateral Development Banks and Development Finance Institutes**, which will facilitate the mainstreaming of biodiversity necessary to implement the Framework.
- GBFF will receive funds from **governments, private sector, and philanthropic organisations.**
- It focuses on **eight thematic Action Areas** - Biodiversity conservation, restoration, land/sea-use and spatial planning, etc.

Mission on Advanced and High-Impact Research (MAHIR)

- » Recently, the **Ministry of Power** and the **Ministry of New and Renewable Energy** jointly launched MAHIR.
- MAHIR mission aims to identify **emerging technologies in the power sector** and to **develop them indigenously**.
- It is planned for an initial **period of five years from 2023-24 to 2027-28**.
- It also aims to **facilitate indigenous research, development and demonstration of the latest and emerging technologies** in the power sector.
- The Mission will be funded by pooling financial resources of the **Ministry of Power, Ministry of New and Renewable Energy** and the **Central Public Sector Enterprises** under the two Ministries.

Environmental Information, Awareness, Capacity Building and Livelihood Programme (EIACP)

- » Recently, the **Ministry of Environment, Forest and Climate Change (MoEF&CC)** celebrated **World Environment Day 2023** with a thrust on the **Mission LiFE**.
- It is one of the **Central Sector sub-scheme being implemented in alignment with Mission LiFE**.
- The **Environmental Information System (ENVIS)** was later renamed to **EIACP**.
- EIACP serves as a one-stop platform for the **dissemination of environmental information, informed policy formulation** on various facets of the environment and facilitation of alternate livelihoods through green skilling.

Mission LiFE (Lifestyle for Environment)

- Mission LiFE was proposed by the Prime Minister of India at **COP 26**.
- It aims to be a **global mass movement led by India**, encouraging individual and collective action to **protect and preserve the environment**.

Geography

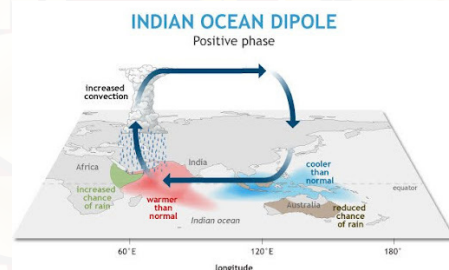
Indian Ocean Dipole, El Nino, El Nino Modoki

- With the El Nino phenomenon almost certain to affect the Indian monsoon this year, high hopes are pinned on the development of a positive Indian Ocean Dipole (IOD) and its ability to counterbalance the El Nino effect.

Indian Ocean Dipole

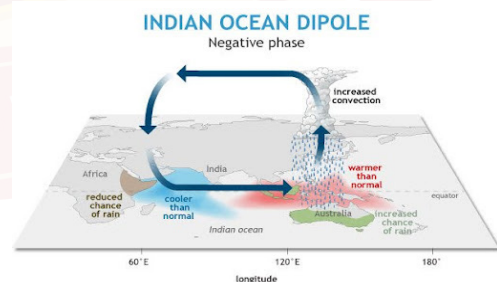
- IOD is the **difference in sea surface temperature** between two areas (or poles, hence dipole)- a **western pole in the Arabian Sea** (western Indian Ocean) and an **eastern pole in the eastern Indian Ocean south of Indonesia**.
- It is a significant **contributor to rainfall variability** in this region.
- IOD has **3 phases**;

1. Positive IOD



- **Warmer sea surface temperatures in the western Indian Ocean relative to the east.**
- Leads to **more than normal rainfall** in the Indian subcontinent.

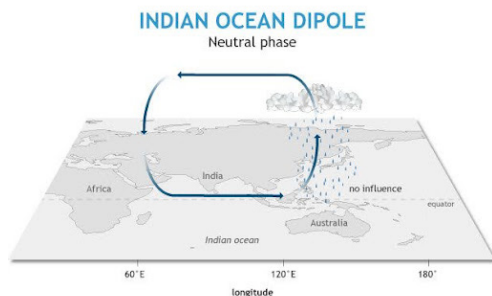
2. Negative IOD



- **Cooler sea surface temperatures in the western Indian Ocean relative to the east.**
- Creates **drought-like conditions** in India.

3. Neutral Phase

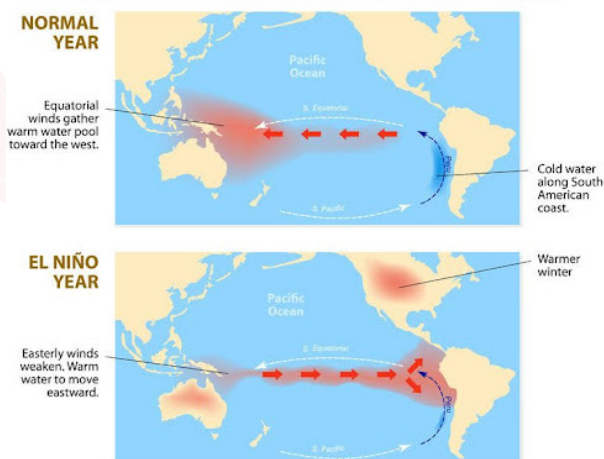
- Water from the **Pacific ocean** flows through the **Indonesian islands**, keeping the oceans warmer to **Australia's north-western direction**.
- Very less impact on Indian monsoon.



El Nino

- In a **normal year**, the **eastern side of the Pacific Ocean**, near the **northwestern coast of South America**, is **cooler than the Western side** near the islands of **Philippines and Indonesia**.
- This happens because the **prevailing wind systems from east to west** sweep the **warmer surface waters** towards the Indonesian coast and **cooler water from the bottom** comes up to replace the displaced water.
- An **El Nino event** is the result of a **weakening of wind systems** that leads to **lesser displacement of warmer waters** and the **eastern side becoming warmer than usual**.
- During **La Nina**, the opposite happens and both these conditions, together called **El Nino Southern Oscillation or ENSO**, affect the weather events across the world.

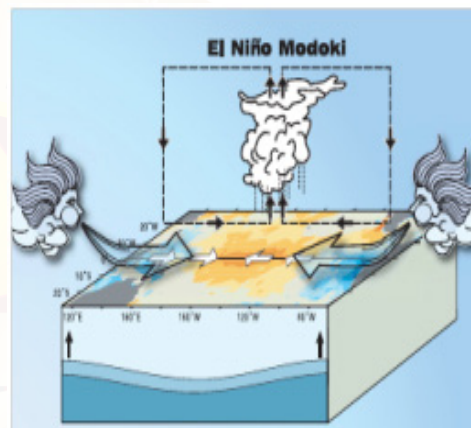
THE EL NIÑO PHENOMENON



- A **positive IOD** is often seen developing at times of an **El Nino**, while a **negative IOD** is sometimes associated with **La Nina**.
- Compared to ENSO events, the **impacts of IODs are much weaker**.

El Nino Modoki

- El Nino Modoki is a **coupled ocean-atmosphere phenomenon** in the **tropical Pacific**.
- It is associated with **strong anomalous warming in the central tropical Pacific** and cooling in the **eastern and western tropical Pacific**.
- Increasing frequency of the El Nino Modoki phenomenon **makes conditions conducive for cyclone formation over Arabian Sea**.



Coronal Mass Ejections (CME)

- » Recently, Scientists from **Aryabhata Research Institute of Observational Sciences (ARIES)**, Nainital found that core of CME that occurred in 2017 had maintained a constant temperature.
- They are **large-scale eruptions of charged particles (plasma) and magnetic fields** from the solar atmosphere into space.
- They can disrupt a range of **ground- and space-based technologies** and satellites on Earth.
- CMEs are typically caused by the **Sun's magnetic fields** becoming unstable.
- Geomagnetic storms** can occur as a result of the interaction of the CME's magnetic fields with the Earth's magnetosphere. They might interfere with satellite communications, navigation systems, and even power grids.

India's Biggest Natural Arch



- » A team of the **Geological Survey of India** recently discovered **India's biggest natural arch** during their survey of coal in **Kenduadihi block in Odisha**.
- The **Sundargarh natural arch** in **sandstone** of the **Upper Kamthi formation** **dates back to about 184 to 160 million years** in the **lower to middle Jurassic age**.
- It is an **oval-shaped arch** with a length of 30 metres at the base and is 12 metres high.
- The formation of the natural arch could be due to **fault activities** and the **nature of rock materials** have enhanced the process of **sub-aerial weathering** over a long period.
- The state unit of the **Geological Survey of India (GSI)** has proposed to declare the 'Natural Arch' as a **Geo Heritage Site tag**.
- Apart from the arch at Sundargarh, India has two others- one at **Tirumala hills** in Tirupati and another at **Andaman and Nicobar**.

Blue Ocean Event

- » A new study suggests that the **Arctic Ocean** could be **ice-free in summer by the 2030s**, even with efforts to reduce emissions.
- A "blue ocean event" refers to a situation in which the **Arctic Ocean becomes ice-free during the summer**, with the sea ice area dropping below 1 million square kilometres.
- It signifies the **absence of sea ice at the top of the world** and is considered a significant and alarming consequence of climate change.
- The event represents a **critical tipping point in the Arctic system**, as more sea ice melts, it **reduces the amount of sunlight reflected into space**, leading to further **warming and ice loss**.

Nutri garden project

- » Recently, PM Modi appreciated the Nutri Garden Project, which turned out to be a big success in **Lakshadweep**.
- Nutri garden is a method of **planting and harvesting nutrient-rich crops in residential houses** or in their vicinity to meet the requirements of the family all year round.
- It is a **cost-effective model** to grow nutrient-rich crops for personal or community consumption to promote good health and well-being.
- The project was launched by the **Ministry of Women and Child Development** in **2021**, with the **objective of self-reliant India** with vegetable seeds distributed to 1000 farmers.

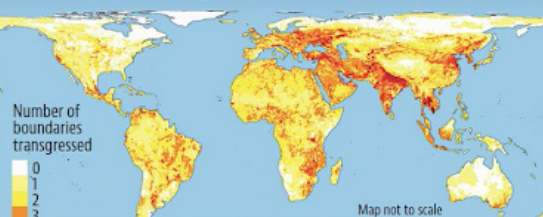
Earth System Boundaries (ESBs)

- » Recent reports suggest that seven of eight Earth system boundaries (ESBs) that are **critical for the stability of the planet's health and survival of species** have already been crossed.
- Earth System Boundaries (ESBs) are **scientifically measured limits for climate, freshwater, biodiversity and different kinds of pollution**.
- Operating within these limits, can help **maintain a stable and resilient planet**.
- These are **hard limits and even temporary overshooting of some of the boundaries can permanently damage the planet's critical systems**.

A dire warning for the planet

The report concludes that numerous of the safe boundaries for climate, biodiversity, freshwater and different kinds of pollution to air, soil and water have already been crossed

1. Safe and just climate (1.0°C): **BREACHED**
2. Functional integrity: **BREACHED**
3. Levels of surface water: **BREACHED**
4. Groundwater: **BREACHED**
5. Nitrogen: **BREACHED**
6. Phosphorus: **BREACHED**
7. Aerosols: **PARTLY BREACHED**
8. Safe but not just climate (1.5°C): **NOT BREACHED**



"The Earth system is an interconnected set of biophysical processes that operate across regions and scales. Interference in one part of the world can have enormous impacts in other regions."
— WENDY BROADGATE, Earth Commission executive director

Pet Coke

- » The Government recently permitted the import of **needle pet coke as a raw material for lithium ion batteries**.

Pet Coke



- **Petroleum coke (pet coke)** is a **carbon-rich solid material derived from oil refining**.
- The primary usage of pet coke in India is **cement production**, nearly **75% of domestic consumption**.
- As the **world's largest consumer of pet coke**, India imports over half its annual petcoke consumption, **mainly from the USA**.

Criteria for imports

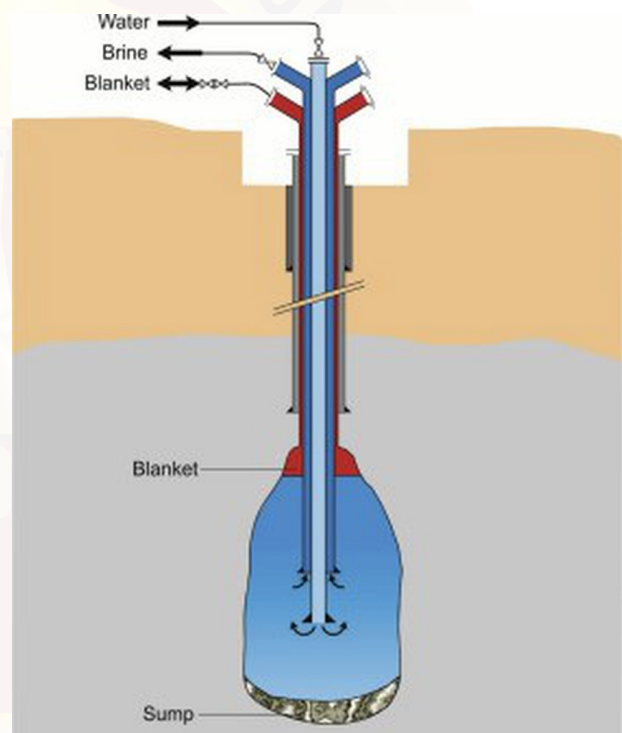
- Import of **pet coke for fuel purposes is completely banned**.
- The **sulphur content in the NPC should be less than 0.8%**, which would be **monitored by state pollution control boards**.

Needle Pet Coke (NPC)

- Needle pet Coke differs from **regular petroleum Coke** in its **unique physical and chemical properties**. It is called "**needle**" coke because of its **needle-like structure**, which is formed during the **refining process**.
- Primarily used in **production of graphite electrodes used in electric arc furnaces for steelmaking**.
- They are also used in other applications that require **high-performance carbon materials**, such as in the production of **lithium-ion batteries, aerospace components** etc.

Salt Caverns-based Oil Reserves

- » **Engineers India Limited (EIL)**, a government-owned engineering firm, is assessing the feasibility of creating salt caverns-based strategic oil reserves in Rajasthan.
- Salt caverns are formed through **solution mining**, where water is pumped into geological formations with substantial salt **deposits**, dissolving the salt.
- Once the **brine (water with dissolved salt)** is removed, the caverns can be used for **crude oil storage**. This method is simpler, faster, and less costly than developing excavated rock caverns.
- The **low oil absorbency of the caverns' salt lining serves as a natural impermeable barrier** against liquid and gaseous hydrocarbons, making Rajasthan, with ample salt formations, an ideal location for such strategic storage facilities.

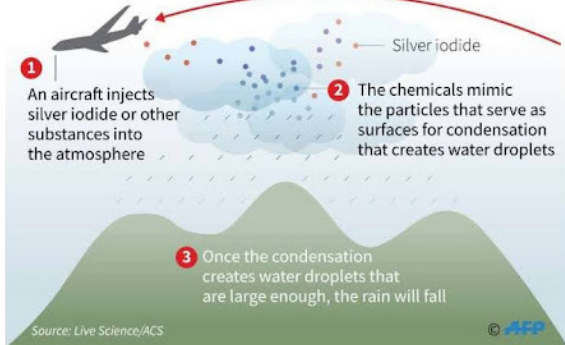


Science & Technology

Cloud Seeding

Cloud seeding

Traditional method of rainmaking, in use since the 1940s



- » **Indian Institute of Technology (IIT) Kanpur** has successfully conducted a test flight for cloud seeding.
- Cloud seeding refers to the **introduction of condensation nuclei and water droplets into the cloud**, with the objective to **induce more precipitation**.
- Clouds are generally injected with salts like **silver iodide, potassium iodide, sodium chloride or solid carbon dioxide (dry ice)** that are expected to **provide additional nuclei around which more cloud droplets can form**.
- They are dispersed into the cloud either using **aircraft** or through **generators on the ground**.
- The results of cloud seeding are not **predictable or reliable**. It works only when there are enough **pre-existing clouds** in the atmosphere.

Higgs Boson Decay

- » Scientists at the **European Organisation for Nuclear Research (CERN)**, which hosts the **Large Hadron Collider (LHC)** found the first evidence of the rare process of **Higgs boson decay**.
- The **Higgs boson** (also called by the media as '**God Particle**') is the **fundamental force-carrying particle of the Higgs field**, a field that **gives mass to other fundamental particles**.

- The **Higgs boson decay** is the process by which the **Higgs boson decays into a Z boson** (electrically neutral carrier of the weak force) and **photon** (carrier of the electromagnetic force).
- This decay could provide **indirect evidence of the existence of particles beyond the Standard Model of particle physics**, which is the current best theory that can explain all phenomena associated with elementary particles.

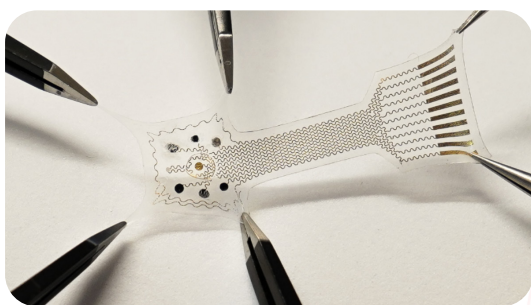
Chytridiomycosis

- » Researchers from the **CSIR-Centre for Cellular and Molecular Biology (CCMB)** in collaboration with scientists in **Australia and Panama** have established a new test for successful diagnosis of **Chytridiomycosis**.
- Chytridiomycosis is an **infectious disease in amphibians** caused by **two fungal pathogens Batrachochytrium dendrobatidis (Bd) and Batrachochytrium salamandrivorans (Bsal)**.
- It has driven more than 90 amphibian species to extinction globally and hence the disease is referred to as the **driver of 'amphibian apocalypse'**.
- The new multinational study has developed a **method to detect all strains of this disease**, which will advance the ability to detect and research the disease, working through a widely available cure.

Distributed Denial-of-Service (DDoS) Attack

- » **Microsoft** acknowledged that the series of service disruptions experienced by users of Microsoft Azure, OneDrive and Outlook were the result of a major DDoS attack.
- The Distributed Denial-of-Service (DDoS) attack is a cybercrime that involves **multiple connected online devices**, collectively known as a **botnet**, which are used to **overwhelm a target website with fake traffic**.
- Unlike other kinds of cyberattacks, **DDoS assaults will not attempt to breach the security parameter**. Rather, it aims to make the **website and servers unavailable to legitimate users**.
- DDoS attack is a **subcategory of the denial-of-service (DoS) attack**, where a **single system can target the victim system**.

Smart Bandage



- » Researchers have developed a smart bandage which can help treat **chronic wounds**.
- Smart Bandage is a **soft stretchable polymer** that helps the bandage maintain contact with and stick to the skin.
- It is developed by researchers at the **California Institute of Technology (Caltech)**, integrates biosensors, drug-loaded hydrogels, electrical stimulation modules, and wireless communication.
- The bandage includes **biosensors** that **monitor wound biomarkers** in the exudate, which is the fluid that leaks from blood vessels into nearby tissues, providing real-time information about the wound's status.
- **Data collected** by the bandage is **wirelessly transmitted to a smartphone or tablet** for review by healthcare professionals.
- It also **includes electrodes** that **control drug release from a hydrogel layer** and **stimulate tissue regeneration**.

GEMCOVAC-OM Vaccine

- » The **Department of Biotechnology (DBT)** announced that the GEMCOVAC-OM vaccine has got a nod from the office of the **Drug Control General of India (DGCI)** for **Emergency Use Authorisation (EUA)**.
- GEMCOVAC-OM is **India's first Omicron-specific mRNA based Booster vaccine** developed using the **indigenous platform technology by Gennova Biopharmaceuticals Limited** in collaboration with the **DBT**.

- It is a **thermostable vaccine**, which **does not require ultra cold chain infrastructure** used for other approved mRNA based vaccines, making it easy for deployment pan India.
- The vaccine is **delivered intradermally using a needle-free injection device system**.
- The project is supported under the **Mission COVID Suraksha** which is implemented by **Biotechnology Industry Research Assistance Council (BIRAC)**, a not-for-profit public sector enterprise set up by the DBT

Virgin Birth

- » Scientists have documented the first-known instance of a **Facultative parthenogenesis** also referred to as "**virgin birth**" by a crocodile.
- Parthenogenesis is a **reproductive process** in which an **organism develops** from an **unfertilized egg**.
- It **occurs naturally in certain species, primarily invertebrates**, such as insects, reptiles, and some fish. However, it is extremely rare in mammals, including humans.
- **Facultative parthenogenesis** refers to a **form of reproduction** in which an organism has the **ability to reproduce either sexually or asexually** through **parthenogenesis**, depending on the circumstances.
- The **female retains the ability to reproduce sexually** and produce offspring through the union of sperm and egg. However, if **mating opportunities are limited or absent**, the **female can switch to asexual reproduction** by producing viable offspring from unfertilized eggs.
- This phenomenon has been documented in several reptile species, including certain **snakes, lizards, and Komodo dragons**.

Sickle Cell Disease

- » Prime Minister Modi is expected to launch the **National Sickle Cell Anaemia Elimination Mission** on **June 27** from Madhya Pradesh.
- Sickle cell disease (SCD) is an **inherited group of blood disorders** that is genetic in nature.

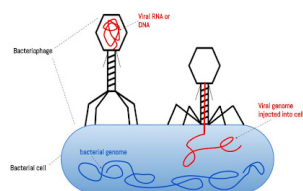
- It is caused by a **mutation in the haemoglobin- β gene** found on chromosome
- This mutation results in defective haemoglobin (Hb). After **giving up oxygen**, these **defective Hb molecules** cluster together resulting in **formation of rod like structures** and assume sickle shape.
- It is usually transferred from the **parents to the child during birth** i.e. both parents can be carriers of SCDs.
- The **sickle cells die prematurely**, resulting in a chronic lack of red blood cells (anaemia), often called **sickle-cell anaemia**.
- The treatment for the disease includes **medication, blood transfusions and rarely a bone-marrow transplant** are done.

National Sickle Cell Anaemia Elimination Mission

- The National Sickle Cell Anaemia Elimination Mission was **introduced** as part of the **Union Budget 2023**.
- It aims to **improve all Sickle Cell Disease patients** for their better future and to lower the prevalence of the disease through a multi-faced coordinated approach towards screening and awareness strategies.
- National Sickle Cell Anaemia Elimination Mission aims to **eliminate sickle cell disease** as a public health problem in **India before 2047**.

Phage Therapy

- » A study conducted by the **University of Exeter** shows that the public is aware of and accepts the use of **bacteria-killing viruses**, known as phage therapy, as an **alternative to antibiotics**.
- Phage therapy is a **treatment approach** that uses **bacteriophages**, which are **viruses that infect and kill specific bacteria**.
- It involves using these **viruses to target and destroy bacterial infections**, serving as an alternative to antibiotics.
- **Bacteriophages** are **viruses that infect bacteria and use them as hosts for their replication**. They are highly diverse and can **target different types of bacteria**.



Leptospirosis

- Leptospirosis has **emerged as an important infectious disease in the world** which tends to have large outbreaks after **heavy rainfall or flooding**.
- It is a potentially **fatal zoonotic bacterial disease** caused by a **bacterium** called **Leptospira interrogans, or Leptospira**.
- The transmission cycle usually starts from the **urine of infected animals**, where carriers can be both **wild and domestic animals**.
- It is a **contagious disease** in animals but is **occasionally transmitted to humans**, more prevalent in **warm, humid countries both in urban and rural areas**.
- **People with cuts and abrasions** are more likely to contract the disease.
- The treatment consists of **regular antibiotic intake**.

Varunastra



- » The Navy test-fired an **indigenously designed and developed heavyweight torpedo**, Varunastra, with a live warhead against an undersea target.
- Varunastra is an **indigenously designed and developed heavyweight, ship-launched anti-submarine torpedo**.
- It is designed and developed by the **Naval Science and Technological Laboratory** in Visakhapatnam under the **Defence Research and Development Organisation**.
- It will **replace the older torpedoes** on all naval ships which can fire a heavyweight torpedo.

Special Features

- It is powered by an **electric propulsion system** with multiple **250 KWs silver oxide zinc (AgOZn) batteries**.
- It can achieve **speeds in excess of 74 km/h**, weighs around **1.5 tonnes** and can carry 250 kg of conventional warhead.
- It is the **only torpedo in the world** to have a **GPS-based locating aid**.

Tactical Airborne Platform for Aerial Surveillance-Beyond Horizon-201 (TAPAS BH-201)



- » The indigenously developed **TAPAS BH-201** was demonstrated for the first time at Aeronautical Test Range in Chitradurga, Karnataka.
- TAPAS BH-201 (formerly referred to as **Rustom-II**) is a **Medium Altitude Long Endurance (MALE) unmanned aerial vehicle (UAV)**.
- It is being developed by **Aeronautical Development Establishment (ADE)**, a laboratory of **DRDO**.

Features

- It is capable of operating at altitudes of up to **28000 feet** with an endurance of over **18 hours**
- It can carry a variety of payloads up to a maximum of **350 kg including certain weapons**.
- It can be controlled remotely and also has the ability to execute **pre-programmed flight plans** autonomously.

Agni Prime

- » New Generation Ballistic Missile 'Agni Prime' was successfully flight-tested by **Defence Research and Development Organisation (DRDO)** from Dr APJ Abdul Kalam Island off the coast of Odisha



- It is a **medium-range ballistic missile** that will have a range of **1000 km to 2000 km**.
- The Agni Prime is a **two-stage canisterized solid propellant ballistic missile** with dual redundant **navigation and guidance systems**.
- It is a **surface-to-surface, road-mobile and solid-fueled missile** that is transported by truck and launched via a canister.
- Agni-Prime incorporates upgrades such as **propulsion systems**, composite rocket motor casings, and advanced navigation and guidance systems.

Solar Ultraviolet Imaging Telescope (SUIT)

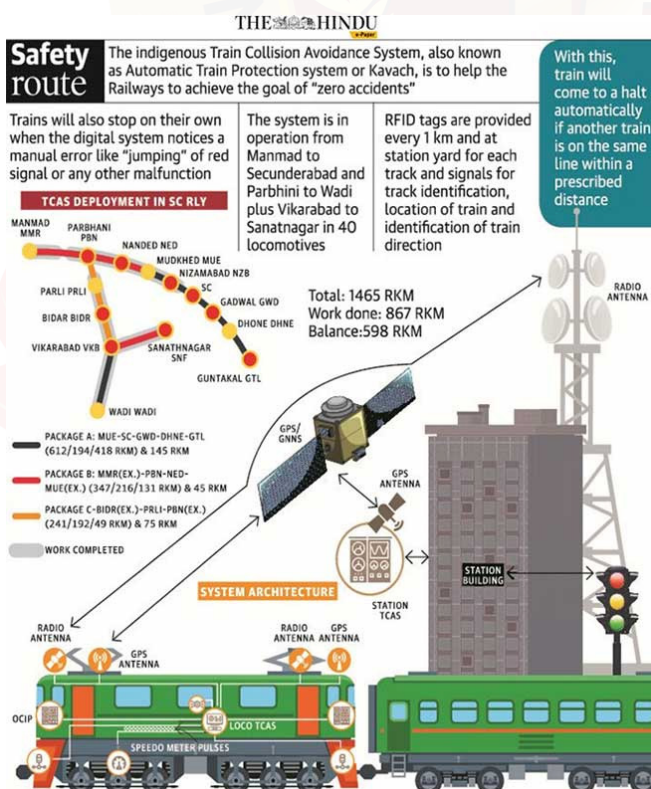


- » A unique space telescope called Solar Ultraviolet Imaging Telescope (SUIT) is now ready and has been delivered to **ISRO**.
- The telescope is developed by **Pune's Inter-University Center for Astronomy and Astrophysics (IUCAA)**.
- This unique space telescope is **integrated with ISRO's ADITYA-L1 mission**.

- It will provide **full disk images of the Sun** in the **2000 - 4000 Å wavelength range**.
- SUIF will also **measure the UV radiation hazardous for skin cancer**.
- It will help in the **measurement of solar radiation** from Hard X-ray to Infrared, as well as in-situ **measurements of particles in the solar wind**, including the **Sun's magnetic field at the L1 point**.

Kavach System

- » The railways recently confirmed that there was no 'Kavach' system installed on the trains involved in the accident in Odisha's Balasore district.
- Kavach is an **indigenously developed Automatic Train Protection (ATP) system**.
- Kavach was developed by the **Research Design and Standards Organisation (RDSO)** under **Indian Railway**, in collaboration with **Medha Servo Drives Pvt Ltd, HBL Power Systems Ltd and Kernex Microsystems**.
- It is meant to provide **protection by preventing trains to pass the signal at Red** (which marks danger) and avoid collision.
- The implementation is done in a **phased manner**, first priorities are the High-Density Routes and the New Delhi-Mumbai and New Delhi-Howrah Sections.



Project Taara

- » Recently, **Google parent company Alphabet** started delivering internet service to remote areas by using **Laser beams of light**.
- The **project is known as Taara** which is a part of **Alphabet's innovation called X or Moonshot Factory**.
- It was initiated in **2016** initially as a part of **project Loon**.
- Project Loon's objective was to **deliver the internet using stratospheric balloons**.
- Project Taara is helping to link up **internet services in 13 countries** so far including **Australia, Kenya and Fiji**.
- Google committed **\$10 billion** for digitising India. It invested **\$700 million** for a **1.28% stake in Bharti Airtel last year**. X and Google are sister companies under Alphabet, while Taara's partnership with Bharti Airtel is separate from the Google investment.

Dimethyl Ether

- » **Researchers at IIT Kanpur** have developed **India's first 100% Dimethyl Ether (DME)-fuelled tractor/vehicle**, marking a significant step towards a sustainable **alternative fuel-based transport system**.
- Dimethyl Ether (DME) is a **renewable and clean-burning alternative fuel** that can be used in various applications, including transportation.
- It is **produced from natural gas, coal, biomass, or renewable sources** through a **synthesis process**.
- Under **normal atmospheric conditions**, DME is a **colourless gas**.
- It has a **very high cetane number**, which is a measure of the fuel's ignitability in compression ignition engines.
- It is used extensively in the **chemical industry** and as a **solvent, fuel, and refrigerant**.
- DME has properties similar to **liquefied petroleum gas (LPG)** and can be **easily stored and transported**.

Genetic Engineering Appraisal Committee (GEAC)

- GEAC is a **statutory committee** constituted under the Rules, 1989 framed under the **Environment (Protection) Act, 1986**.
- It functions under the **Ministry of Environment, Forest and Climate Change (MoEF&CC)**.

The functions of GEAC include:

1. It is responsible for the **appraisal of activities** involving large scale use of **hazardous microorganisms** and recombinants in research and industrial production.
 2. To approve proposals relating to **release of genetically engineered (GE) organisms and products** into the environment.
 3. To keep a **check on the use, import, and export of genetically modified (GM) organisms** and crops.
 4. To **prohibit the manufacture and use of certain recombinants** as they are hazardous for commercial use.
- The GEAC comprises **24 members** chaired by the Special Secretary/Additional Secretary of MoEF&CC and co-chaired by a representative from the **Department of Biotechnology (DBT)**.

Unnat Takniki Pradarshan Kendra (UTPRERAK)

- » Recently, the **Union Minister of State for Power** inaugurated UTPRERAK.
- UTPRERAK is the **centre of Excellence to accelerate adoption of energy efficient technologies** and aims to play a significant role in **improving the energy efficiency** of the Indian industry.
- It is also named as **Advanced Industrial Technology Demonstration Centre (AITDC)**.
- It is a joint initiative of the **Bureau of Energy Efficiency (BEE)**, the **Energy Efficiency Services Limited (EESL)**, and the **National Productivity Council (NPC)**.
- It will demonstrate and showcase energy-efficient technologies in **key industry sectors**.
- It will act as an **exhibition cum information centre and knowledge repository**.

Miscellaneous

Modern Slavery

- The **Global Slavery Index 2023** shows the **world's 20 richest countries account for more than half the estimated 50 million people living in modern slavery**.
- According to the index, modern slavery refers to **situations of exploitation that a person cannot refuse or leave** because of threats, violence, coercion, deception or abuse of power.
- It is an umbrella term and includes a whole variety of abuse such as **forced labour, forced marriage, debt bondage, sexual exploitation, human trafficking, slavery like practices and the sale and exploitation of children**.
- **Target 8.7 of the Sustainable Development Goals** calls on all to take immediate and effective measures to **eradicate forced labour, end modern slavery and human trafficking**.

- **Global Slavery Index** presents a global picture of modern slavery and is constructed by **Walk Free**, a human rights organisation. The index is based on data provided by the **Global Estimates of Modern Slavery**, which is produced by **International Labour Organisation (ILO)**, **Walk Free** and **International Organisation for Migration (IOM)**.

Digi Yatra

- » Over one million passengers have installed the Digi Yatra app for **contactless airport processing using Facial Recognition Technology (FRT)**.
- The project, led by the **Digi Yatra Foundation** under the **Ministry of Civil Aviation**, enables paperless and contactless travel at **13 airports**, covering 85% of domestic air passenger traffic.
- Travellers register once with **Aadhaar validation and a self-image capture** to link facial features to their boarding pass for seamless identity verification.

NOC Approval for New Drug and Inoculation System (Nandi) Portal

- » Recently, the **Union Minister of Fisheries, Animal Husbandry & Dairying** launched NANDI Portal.
- It is developed by the **Department of Animal Husbandry and Dairying (DAHD)** in collaboration with the **Central Drugs Standard Control Organization (CDSCO)** through the **Centre for Development of Advanced Computing (CDAC)**.
- The NANDI portal aims to facilitate the process of granting **No Objection Certificates (NOC)** for **veterinary drugs and vaccines** in India.

Electronics Repair Services Outsourcing (ERSO) initiative

- » Recently, the **Union Ministry of Electronics & IT** launched the ERSO Pilot initiative.
- It aims to promote India as a hub for **repairing electronic goods** and to assess the feasibility and potential of **capturing 20% of the global repair service market** within five years.
- The pilot program for ERSO was conducted in **Bengaluru**.
- India's e-waste policy will be modified to **allow repair companies to domestically** recycle 5% of imported goods by weight on a trial basis.
- The **Ministry of Electronics and Information Technology** is the nodal ministry.

SIGHT Programme

- » The **Ministry of New and Renewable Energy (MNRE)** has issued scheme guidelines for implementation of Strategic Interventions for Green Hydrogen Transition (SIGHT) programme.
- The Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme is a sub component under the **National Green Hydrogen Mission** launched in **2022**, with the goal of making **India energy independent** and **decarbonising major sectors** of the economy.
- It aims at **providing electrolyser manufacturing incentives** with a total outlay of **INR 4440 crore**.
- The **Solar Energy Corporation of India (SECI)** would be the implementing agency responsible for the scheme's execution.

Gandhi Peace price 2021

- » Recently, the Gandhi Peace Prize 2021 was conferred to **Gita Press, Gorakhpur**.
- It is an **annual award** instituted by the **Government of India in 1995**, and is announced by the **Ministry of Culture**.
- It was instituted on the occasion of the **125th Birth Anniversary of Mahatma Gandhi** as a tribute to the ideals espoused by Mahatma Gandhi.
- The award is **open to all persons** regardless of **nationality, race, language, caste, creed or gender**.
- The award carries an **amount of Rs. 1 crore**, a **citation**, a **plaque** and an **exquisite traditional handicraft/handloom item**.
- The prize can be **given to institutions, individuals and organisations**.
- Recent awardees include **Sultan Qaboos Bin Said Al Said, Oman (2019)** and **Bangabandhu Sheikh Mujibur Rahman (2020)**, Bangladesh.

Project Akashteer

- » **Automated Air Defence Control & Reporting System 'Project Akashteer'** to automate the **air defence systems** was launched.
- Project Akashteer is a **new automation initiative** under which a **range of new systems**, mostly **indigenous**, are being inducted, with new technologies factoring in the new realities.
- **Bharat Electronics Limited (BEL)** and **Ministry of Defence** had signed a contract for the procurement of **Automated Air Defence Control & Reporting System 'Project Akashteer'** worth **Rs 1,982 crore** for the Indian Army in April 2023.
- It will build a comprehensive air defence plan to **link all the radars and control centres of AAD** and consolidate the air defence picture, removing duplications or overlaps and also integrate all the weapons.
- It will enable **monitoring of airspace over the battle areas** of the Indian Army and effectively control the **Ground Based Air Defence Weapon Systems**.

Sagar Samriddhi

- » The **Union Minister of Ports, Shipping and Waterways** recently launched an online dredging monitoring system called “Sagar Samriddhi”.
- It will help to tighten the **monitoring regime for dredging contracts** and also **focus on monetising dredged material**.
- It is part of the government’s efforts to expedite the **‘Waste to Wealth’ initiative**.
- It is developed by **National Technology Centre for Ports, Waterways and Coasts (NTCPWC)** the technological arm of MoPSW.
- It will **bring in synergy among multiple input reports** like daily dredging reports, and the **pre and post-dredging survey data** before processing and producing real-time dredging reports.

JATAN Virtual Museum Builder

- A MoU has been signed between the **MeitY and Union Culture Ministry** to complete 3D digitisation of all museums (under central control) by the year-end for better conservation of artefacts.

About JATAN Virtual Museum Builder

- JATAN is a **digital collection management system** for Indian museums designed and developed by **Human Centres Design and Computing Group, Centre for Development of Smart Computing, Pune**.
- It can create **3D virtual galleries** and provide public access through web, mobile or touchscreen kiosks.
- 3D scanning means **analysing a real-world object or environment to collect three-dimensional data** on its shape and possibly its appearance. The collected data is then used to construct digital 3D models.

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