

IMPORTANT NEWS

GSI Discovers India's Biggest Natural Arch

Inside Story of the News:

- An important geographical formation was uncovered by a team from the Geological Survey of India while mining coal in the Kenduadihi block in the **Sundargarh district of Odisha**. The team discovered it while surveying the area, and it is **a natural arch**.
- According to GSI scientists, the creation took place between **184 and 160 million years ago**, during the early to middle Jurassic period.
- Given its aesthetic worth as well as its scientific and intellectual significance, the GSI team has emphasised that "efforts may be undertaken to preserve this place as a national geo-heritage site."
- The natural arch is flanked by cliffs and steep sloped hills and is situated in the dense Chhengapahar Reserve Forest close to the settlement of Brahmani.
- The natural arch has a maximum length of 30 metres at the base and maximum height of 12 metres. The alcove of the natural arch has maximum height and width of 7m and 15m respectively and geometrically the arch is oval shaped.
- This natural arch with a hole gives the hill its name. The name Chhengapahar or Chhenga Hill comes from the native word for "hole," chhenga.
- The rocks' physical characteristics reveal that the hill is made of ferruginous sandstone from the Upper Gondwana Group's Kamthi Formation, which is coarse to gritty in size, flesh red in colour, poorly sorted, and immature.
- It is a "structurally triggered weather eroded natural arch" that was "created by the fault system and associated joints," and the sandstone hastened the process by subaerial weathering, which includes temperature change and rainwater percolation.
- In addition to this arch, India has two others. While one is in Tirupati's Tirumala Hills, the other is on the Andaman and Nicobar Islands. Compared to the one in Sundargarh, both are smaller.
- As the arch is located in Chhengapahar Reserve Forest, it will be safeguarded under Indian Forest Act 1927.

A Unique Space Telescope to be Integrated with ISRO's First Space Observatory Dedicated to Studying the Sun

Inside Story of the News:

- The Inter-University Centre for Astronomy and Astrophysics (IUCAA) in Pune developed the **Solar Ultraviolet Imaging Telescope (SUIT)**, a unique space telescope, has been provided to the Indian Space Research Organisation (ISRO).
- The telescope will be integrated with the **ADITYA-L1 mission**, which is scheduled to launch in the middle of this year's August.
- ADITYA-L1 will be **ISRO's first space observatory dedicated to studying the Sun**.

- It will fly from Earth to the L1, or Lagrange point 1, one of the five ideal locations for monitoring the Sun, at a distance of roughly 1.5 million kilometres.
- The mission aims to provide regular images and updates on the Sun's surface phenomena and space weather.
- Seven distinct payloads for researching solar phenomena across the electromagnetic spectrum and solar wind will be carried by the Aditya-L1 mission.
- Aditya-L1 will make it possible to detect solar radiation continuously from Hard X-ray to Infrared, as well as to measure solar wind particles in real time and the magnetic field of the Sun at the L1 point.
- For the first time, SUIT will enable us to capture photographs in this wavelength that is essential for preserving the amount of ozone and oxygen in the Earth's atmosphere.
- Additionally, SUIT will measure UV rays that can cause skin cancer.
- It will take the Aditya-L1 mission about 100 days to get to the halo orbit surrounding the L1 point, where each of the seven distinct payloads will conduct scientific observations.
- The SUIT telescope will investigate fundamental issues such whether or if there is an atmosphere with a higher temperature above the Sun's cooling surface, as well as the source and variation of solar flares with high energy and near-ultraviolet radiation.
- Over the past ten years, the SUIT project involved 200–300 scientists.
- The creation of the payload was complicated by the need to establish an ultra-clean room along with designing special filters for capturing radiation, in addition to the initial allocation of Rs 25 crore from ISRO for the hardware.

CBIC Releases NTRS 2023 Report

Inside Story of the News:

- **The National Time Release Study (NTRS) 2023 report** was released by Shri Vivek Johri, Chairman of the Central Board of Indirect Taxes and Customs (CBIC), along with other board members.
- As a tool for measuring performance, Time Release Study (TRS) aims to provide a quantitative measure of the cargo release time, which is the period of time between the arrival of the cargo at the Customs station and its eventual release for domestic clearance in the case of imports and the arrival of the cargo at the Customs station and the carrier's departure in the case of exports.
- Based on the sample period of January 1–7, 2023 (both days included), NTRS 2023 gives port category-wise average release time for the current year. It compares this to performance during the corresponding periods of 2021 and 2022 to, among other things,
 - assess the progress made towards the National Trade Facilitation Action Plan targets;
 - identify the impact of various trade facilitative initiatives, notably “Path to Promptness”; and
 - identify the challenges to more expeditious reduction in release time.
- The study's ports include seaports, air cargo complexes (ACCs), inland container depots (ICDs), and integrated check posts (ICPs), which account for about 80% of the country's bills of entry and 70% of its shipping bills.
- The average import release time has become better over time, decreasing by 20 percent for ICDs, 11 percent for ACCs, and 9 percent for seaports in 2023 compared to 2022.
- The import release times for seaports, ICDs, ACCs, and ICPs are, in order, 85:42 hours, 71:46 hours, 44:16 hours, and 31:47 hours.

- It is discovered that the standard deviation measure is reduced, indicating a higher degree of certainty regarding the swift discharge of imported cargo.
- The results of NTRS 2023 confirm the three-fold "Path to Promptness," which includes pre-arrival processing enabled by advance import document filing, risk-based cargo facilitation, and benefits associated with trusted client programmes like Authorised Economic Operators.
- Cargoes wherein all the three features under the Path to Promptness are combined, achieve the NTFAP release time target across all port categories.
- Furthermore, NTRS 2023 has given measurement of export release time considerably more attention in keeping with the significant priority given by the Indian government to export promotion.
- The distinction between regulatory clearance (also known as customs release), which is accomplished with the issuance of a Let Export Order (LEO), and the broader aspect of physical clearance, which takes place after the logistics processes are finished and the carrier departs with the goods, is recognised by NTRS 2023.
- It has been noted that by using regulatory clearance as a baseline, nearly all port category NTFAP release time targets have been met.
- The extent of certainty regarding the bettered average release time has improved.
- The improved release time involves the efforts of various stakeholders, including Customs, port authorities, Customs Brokers and Participating Government Agencies (PGAs), in implementing various trade facilitation measures. This collaboration is encouraged to continue in order to speed up cargo clearance and increase trade efficiency.

Centre Unveils "Dugdh Sanakalan Sathi Mobile App"

Inside Story of the News:

- The revolutionary "**Dugdh Sanakalan Sathi Mobile App**" was recently launched at Mussorie, Uttarakhand, by Union Minister of Heavy Industries Mahendra Nath Pandey.
- By tackling major issues with the milk collecting process, the app—which was created by Rajasthan Electronics and Instruments Limited (REIL), a "Mini Ratna" Central Public Sector Enterprise under the Ministry of Heavy Industries—aims to significantly improve the Indian dairy industry.
- The objective of this smartphone app is to raise the standard of milk, promote stakeholder transparency, and streamline operations at the grassroots village level, including milk cooperative societies.
- By creating this app, the Ministry of Heavy Industry has made a ground-breaking contribution to the government of India's goal of digitising the procedure and facilitating Direct Beneficiary Transfer to milk producers.
- The "Dugdh Sankalan Sathi Mobile App" will increase efficiency, transparency, and empowerment for every stakeholder engaged in the milk collection process, ultimately helping milk producers and fostering the development of the dairy industry.
- Milk Collection Partner Mobile App will inform all services to milk producers in English, Hindi, Punjabi, Telugu and other languages.

- Every stakeholder involved in the milk collection process, such as milk producers, cooperative societies, milk unions, and state federations, are anticipated to gain considerable advantages from the "Dugdh Sanakalan Sathi Mobile App".
- Increased stakeholder transparency, online milk collection monitoring at Milk Cooperative Societies, real-time milk price updates, direct beneficiary beneficiary transfers of payments and government subsidies to milk producers' bank accounts, push notifications for milk collection, and multilingual support are just a few of the app's key features and advantages.

Gandhi Peace Prize for 2021 to be Conferred on Gita Press, Gorakhpur

Inside Story of the News:

- **Gita Press, Gorakhpur**, is being awarded the **Gandhi Peace Prize for 2021**.
- In 1995, on the occasion of the 125th anniversary of Mahatma Gandhi's birth, the Government of India established the Gandhi Peace Prize as a yearly honour in his memory.
- The award is open to all persons regardless of nationality, race, language, caste, creed or gender.
- One crore rupees, a citation, a plaque, and a priceless traditional handicraft or handloom item are included with the award.
- Recent awardees include Sultan Qaboos Bin Said Al Said, Oman (2019) and Bangabandhu Sheikh Mujibur Rahman (2020), Bangladesh.
- Gita Press, Gorakhpur has been selected as the recipient of the Gandhi Peace Prize for the year 2021, in recognition of its outstanding contribution towards social, economic and political transformation through non-violent and other Gandhian methods.

About Gita Press:

- Gita Press, one of the largest publishers in the world, was founded in 1923 and has produced 41.7 crore books in 14 languages, including 16.21 crore copies of the Shrimad Bhagavad Gita.
- The institution has never relied on publishing advertisements to generate income.
- Together with its affiliated organisations, Gita Press works to improve people's lives and ensure everyone's wellbeing.

India Tops Globally in LEED Zero Certifications of Green Building Projects

Inside Story of the News:

- According to US Green Building Council (USGBC) and Green Business Certification Inc (GBCI), **India ranks first globally in LEED Zero certified green building projects** surpassing the US and China.
- Projects that have achieved net zero or net positive status in the categories of carbon, energy, water, or waste are recognised by LEED Zero.
- In India, realty firm DLF and FMCG player ITC are leading in the LEED Zero green certification initiative.
- A variety of industries are served by the LEED Zero projects, which include office spaces, hospitality facilities, retail malls, industrial manufacturing projects, and data centres.

- India has 73 LEED Zero certified projects, comprising 45 per cent of the more than 150 total LEED Zero certifications.
- Haryana and Tamil Nadu are leading the way in certifications.
- The US and China have the second and third most LEED Zero certifications, with 47 (30%) and 15 (10%) certifications, respectively.
- With 45 certifications, Indian real estate developer DLF leads the world in total LEED Zero certifications. ITC Group ranks second with 15 certifications.
- While the private sector is assisting India in achieving net zero certifications, the building and construction sector is responsible for around one-third of all carbon emissions in India.
- India is a global leader in LEED Zero projects, demonstrating its dedication to sustainability and uptake of innovative green building practices.
- The achievement, according to USGBC and GBCI, is also consistent with India's ambitious goal of achieving net zero GHG emissions by 2070.
- More than 35 million square feet of LEED Zero projects have been certified to date.

Indian Army Contingent Participates in “Ex Khaan Quest 2023”

Inside Story of the News:

- Recently, the multinational joint exercise "**Ex Khaan Quest 2023**" for peacekeeping, in which military contingents and observers from over 20 countries are participating, began in Mongolia.
- At a ceremony held at the exercise site in Mongolia, Mr. Ukhnaagiin Khurelsukh, the Hon. President of Mongolia, inaugurated the exercise.
- The exercise is co-sponsored by Mongolian Armed Forces (MAF) and United States Army Pacific Command (USARPAC).
- The Indian Army is represented by a contingent from the GARHWAL RIFLES.
- The 14-day exercise's goals include improving participant countries' interoperability, exchanging knowledge, and preparing uniformed personnel for UNPKO (United Nations Peacekeeping Operations).
- The exercise will prepare participants for future UN Peacekeeping missions, develop peace operations capabilities and enhance military readiness.
- The exercise includes Command Post Exercise (CPX), Field Training Exercises (FTX), combat discussions, lectures and demonstration.
- The military drill will improve defence cooperation between the Indian Army and other participating nations, particularly with the Mongolian Armed Forces, which will improve bilateral ties between the two nations.

IPS Officer Ravi Sinha Appointed as New RAW Chief

Inside Story of the News:

- **A senior IPS officer** from the Chhattisgarh cadre named **Ravi Sinha has been named the new R&AW, or Research and Analysis Wing, chief of India's external intelligence.**
- When incumbent Samant Goel's term ends on June 30, Sinha will take over and serve a two-year term.
- Sinha, an Indian Police Service (IPS) officer from the 1988 batch, is currently working as the Cabinet Secretariat's special secretary.
- The appointment of Sinha as secretary, R&AW, for a two-year term, has been approved by the Cabinet's Appointments Committee.

Scientists from GERMI Develop Biodegradable Paper Supercapacitor

Inside Story of the News:

- **The thinnest, lightweight, and biodegradable paper-based supercapacitor has been created** by scientists at the Gujarat Energy Research and Management Institute (GERMI).
- A supercapacitor is an electrochemical charge storage device with a fast charging/discharging cycle, high power density and a longer lifecycle.
- This supercapacitor, made from seaweed (marine macroalgae), can fully charge a device in just 10 seconds.
- The device is of high tensile strength and performance, as well as cost-effective.
- The invention holds great commercial potential because it can be utilised in electronics, memory backup systems, airbags, heavy machinery, electric vehicles, etc.
- The researchers published their findings in the peer-reviewed journal BioNanoScience (Springer publications) and successfully patented them.
- The flexible and thinnest paper supercapacitor was created using a marine cellulose-based material that may be employed in practically all smart devices.
- Additionally, it can be a source of income for coastal communities that cultivate seaweed, a necessary component in the production of paper supercapacitors.
- Green seaweeds were collected from the Porbandar coast of Gujarat.
- Making paper supercapacitors was a quick and easy operation.

About Seaweeds:

- **Seaweeds** are macroalgae that are typically found in coastal areas adhering to rock or other substrata.
- Based on their pigmentation, they are classified as chlorophyta (green), rhodophyta (red) and phaeophyta (brown).
- Among these, the cell wall of chlorophyta contains more potential components, including carbohydrates, lipids, proteins, and bioactive compounds.
- In the cell walls of green seaweed, there is a significant concentration of a particular type of cellulose.

About Cellulose:

- For making paper-based electrode materials, such as paper supercapacitors or batteries for energy storage applications, **cellulose** is proven to be the most suitable biopolymer material.
- To create a paper-based energy storage device, cellulose, which is an insulating material by nature, must be coated with conductive material.

How Joining MSP can Help India Harness Critical Minerals Potential

Inside Story of the News:

- Two significant events that will help India utilise its important mineral potential occurred in June.
- First, **India joined the Minerals Security Partnership (MSP), a US-led alliance of 14 developed countries.**
- India is now the sole developing nation that has joined the MSP, an elite club for critical minerals that was established in June 2022 to protect critical mineral supply chains.
- **India released a thorough list of 30 essential minerals** as the second development that occurred.
- The two moves, along with a myriad of other suggested policy reforms, might provide India a boost in terms of ensuring its independence and addressing vulnerabilities in the supply chain for minerals at a time when the globe is frantically trying to secure essential minerals.
- India depends on China and other nations to supply it with important minerals, such as Rare Earth Elements (REE), which serve as the building blocks of modern day technologies.
- Critical minerals and REE are utilised in a wide range of industries, including those in the aerospace and defence sectors, electronics (mobile phones, laptops), electric vehicles, solar panels, semiconductors, wind turbines, high-tech industries, telecommunications, and security technologies.
- They are referred to as critical because their scarcity or even concentration of existence, extraction, or processing in a small number of geographical regions may result in supply chain vulnerability and disruption, endangering both national security and economic growth.
- Since this is a group of nations with strong technological capacities in geology and mining, mineral processing, and metallurgy, experts have deemed India's admission into the MSP "significant."
- India's inclusion also gives the group, which has had developed countries as members till now, an international balance.

About MSP:

- The Minerals Security Partnership was only recently announced by the US and its key partner countries, including Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, the United Kingdom, the United States, and the European Commission, at the Prospectors and Developers Association of Canada convention, the largest mining event held in Toronto, Canada.
- Italy joined the group this year in February.
- The MSP seeks to "ensure that critical minerals are produced, processed, and recycled in a manner that supports countries' ability to realise the full economic development benefit of their geological endowments".

- The MSP will aid in stimulating government and private sector investment for strategic opportunities that uphold the highest environmental, social, and governance standards along the whole value chain.
- 60% of the rare earth elements in the world are produced in China. It has also emerged as a key participant in the processing and refinement of critical minerals that it does not produce.

About India's Partnership with Australia:

- MSP is not the only global alliance that India has joined.
- In April of this year, **India and Australia partnered to spend \$3 million each in five critical mineral exploration projects in Australia.**
- This was done in response to the government's emphasis on safeguarding the supply chain for these critical minerals.
- Nearly half of the world's lithium is produced in Australia, which is also the second-largest cobalt and rare earth element producer.

Taxation of India's Outbound Remittances: LRS Scheme and Increased Tax Rate

Inside Story of the News:

- According to the amended Income-tax Act, 1961, the Indian government would **increase the tax on outbound remittances from 5% to 20% beginning of October 1, 2023.**
- With the exception of educational and medical expenses, funds sent abroad for vacations, investments, and gifts will now be subject to the new tax rate if the total exceeds INR 700,000 per financial year.
- Originally, this provision was supposed to take effect on July 1; however, the federal government extended the date by a notification sent out on June 28, 2023.
- The Indian federal government has clarified the tax implications of outbound remittances for small transactions under INR 700,000 (US\$8,500) earlier on May 19, 2023.
- The most recent notification states that individuals who use their international debit or credit cards to make payments will be free from the Liberalised Remittance Scheme (LRS) restrictions up to INR 700,000 per financial year. As a result, no Tax Collected at Source (TCS) will be applied to these transactions.
- Concerns about procedural ambiguity have recently been addressed by the release of this explanation. It was previously stated in the Finance Act 2023 that all outbound remittances, regardless of the amount, would be subject to tax.
- The move, in the opinion of financial experts, is intended to ensure that high-net-worth individuals (HNIs) pay their fair contribution prior to permanently leaving India. Around 30,000–35,000 HNIs have migrated in the last five years to places including the US, UK, UAE, Canada, Australia, Singapore, and Europe. There were 8,000 of them in 2022 alone.

About India's Liberalised Remittance Scheme:

- The Reserve Bank of India introduced the **Liberalised Remittance Scheme, or LRS**, as a step to make it simpler for residents to send money abroad.

- The LRS scheme permits outward remittance of up to US\$250,000 for any permitted current or capital account transaction, or a combination of both, per financial year (April to March).

PM Modi Conferred with Egypt's Highest State Honour

Inside Story of the News:

- Egyptian President Abdel Fattah al-Sisi recently conferred visiting Prime Minister Narendra Modi with the country's highest state honour, '**Order of the Nile**'.
- In the past nine years of tenure, PM Modi received many international awards.
- This is the 13th such highest state honour that PM Modi has received from different nations throughout the globe.
- During his two-day state visit to Egypt, the Prime Minister met with Dr. Shawky Ibrahim Allam, the Grand Mufti of Egypt.
- The Grand Mufti remembered his most recent trip to India and emphasised the close ties between the two countries' peoples.
- The Grand Mufti praised Prime Minister Modi for taking the initiative to promote inclusivity and pluralism.
- Along with these topics, discussions centred on preventing radicalisation and extremism and promoting social and religious harmony in society.
- PM Modi conveyed that India would establish a Centre of Excellence in IT at the Dar-al-Ifta under the Ministry of Social Justice of Egypt.

Indian-origin Aarti Hola-Maini appointed UNOOSA Director

Inside Story of the News:

- United Nations Secretary-General António Guterres recently announced the **appointment of Indian-origin Aarti Holla-Maini of the United Kingdom as Director of the United Nations Office for Outer Space Affairs (UNOOSA) in Vienna**.
- Aarti is a satellite industry expert.
- She will take over from Simonetta Di Pippo of Italy.
- She is an expert in space science and technology in addition to having over 25 years of expertise in the administrative and legal domains.
- UN Secretary-General Antonio Guterres made the news on Aarti's appointment.
- As Executive Vice-President of North Star Earth and Space Stability, Policy and Effect Department, Aarti, according to Guterres, played a significant role.
- For around 18 years, she also served as the Global Satellite Operators Association's General Secretary.
- Aarti Hola-Miani was a member of the World Economic Forum's Global Future Council on Space, member of the Advisory Group of the Space Sustainability Rating managed by eSpace at Ecole Polytechnique Federale de Lausanne (EPFL) Space Centre, member of the Advisory Board of Satellite Industry Association of India, Senior Space Policy Advisor to Forum Europe and as Expert Advisor on Space Traffic Management for European Union Studies 2021-23.

- She was instrumental in creating the Crisis Connectivity Charter, which was launched in 2015 and aimed to streamline satellite-based emergency communications.
- Aarti has a law degree from Kings College in London and a business administration master's degree from HEC in Paris.
- She is fluent in English, French, German, Punjabi, and has a basic understanding of Dutch.

Shri Parshottam Rupala Launches Nandi Portal

Inside Story of the News:

- **Nandi (NOC Approval for New Drug and Inoculation System) portal** was recently launched at Krishi Bhawan in New Delhi by Union Minister of Fisheries, Animal Husbandry and Dairying, Shri Parshottam Rupala.
- Through seamless integration with the SUGAM portal of the Central Drugs Standard Control Organisation, this portal will enable Department of Animal Husbandry and Dairying (DAHD) to simplify the regulatory approval process with transparency to evaluate and study veterinary product proposals.
- Shri Rupala emphasised the initiative as an important step forward for Digital India and for the welfare of livestock and the livestock industry.
- Following the initiative to increase animal vaccination coverage and the Mobile Veterinary Units (MVUs), the establishment of the NANDI portal is a noteworthy endeavour.
- From a commercial standpoint, this project would also give researchers and industries vital support.
- There would be a rise in drug use as a result of increasing livestock farmers' awareness and enhancing logistical infrastructure.
- Through CDAC, the department created the NANDI portal.
- The introduction of NANDI (NOC Approval for New Drug and Inoculation System) shows that DAHD is making progress towards implementing the treatments outlined in its Animal Pandemic Preparedness Initiative (APPI).