

Prelim Bits 31-05-2023 | UPSC Daily Current Affairs

Lightweight Payment and Settlement System (LPSS)

RBI is planning to use the lightweight payment system for emergencies and as an alternative to UPI, NEFT, and RTGS.

- In its annual report 2023-23, RBI has mentioned conceptualising this new lightweight and portable payment system.
- The RBI has conceptualised a lightweight payment and settlements system, which it is calling a bunker.
- The bunker is an equivalent of digital payments, which can be operated from anywhere by a bare minimum staff in exigencies such as natural calamities or war.
- The lightweight and portable payment system is expected to operate on minimalistic hardware and software, and would be made active only on a need basis.
- 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 system is expected to process transactions that are critical to ensure the stability of the economy, including government and market related transactions.
- The central bank has not offered a timeline for the launch of this payments system yet.
- **The difference** - Existing conventional payments systems such as RTGS, NEFT, and UPI are designed to handle large volumes of transactions while ensuring sustained availability.
- As a result, they are dependent on complex wired networks backed by advanced IT infrastructure.

References

1. [The Indian Express | Alternative to UPI, NEFT, RTGS](#)
2. [Economic Times | RBI plans new payment system](#)

Global Plan of Action for the Health of Indigenous People

Member states of the World Health Organization accepted a draft resolution that proposed developing a Global Plan of Action for the Health of Indigenous People during the World Health Assembly.

The plan

- The plan will be up for consideration at the 79th World Health Assembly in 2026.
- It should be executed in consultation with indigenous peoples, with their free, prior and informed consent, a document presented at the assembly emphasised.
- The document also stated that the global plan should be done in consultation with member states along strategic lines of action for the improvement of the health of

Indigenous People.

- The draft resolution was proposed by Australia, Bolivia, Brazil, Canada, Colombia, Cuba, Ecuador, the European Union and its Member States, Guatemala, Mexico, New Zealand, Panama, Paraguay, Peru, the United States of America and Vanuatu.

The status of Indigenous people

- The world presently has 476 million indigenous people across the world in about 90 countries, according to the United Nations.
- They speak 7,000 languages and come from 500 different cultures.
- They are marginalised individuals without access to basic infrastructure and oftentimes cannot claim titles over their land and surrounding natural resources.
- However, over the last few decades representation for them has improved on the world's stage.
- The life expectancy of indigenous people is 20 years lower than that of an average person.

The United Nations Permanent Forum on Indigenous Issues established in 2000, provides advice and recommendations on indigenous issues to the Economic and Social Council.

References

1. [WHO | Seventy-sixth World Health Assembly](#)
2. [Down To Earth | Global Plan of Action for the Health of Indigenous People](#)

Shenzhou-16

China launches Shenzhou-16 mission to Chinese space station.

- The spacecraft, Shenzhou-16, or Divine Vessel, and its three passengers lifted off atop a Long March-2F rocket from the Jiuquan Satellite Launch Centre in the Gobi Desert in northwest China.
- China has already announced plans to expand its permanently inhabited space outpost, with the next module slated to dock with the current T-shaped space station to create a cross-shaped structure.
- Beijing is expected to launch one more crewed mission to the orbiting outpost this year.
- **Xuntian** - By the end of 2023, China is due to launch space telescope the size of a large bus.
- Known as Xuntian, or Surveying the Heavens in Chinese, the orbital telescope will boast a field of view 350 times wider than that of the Hubble Space Telescope, which was launched 33 years ago.
- **Tiangong** - Tiangong is China's permanent space station that will operate in low-Earth orbit at an altitude from 340 km to 450 km.
- [Tiangong Space Station](#) is named after the Chinese word for 'heavenly palace' or 'celestial palace'.

- The station has a designed lifespan of at least 10 years.

References

1. [The Indian Express | China launches Shenzhou-16 mission](#)
2. [Telegraph | China launches Shenzhou-16 mission](#)

Solar Power Plant in Space

Japan is aiming to launch solar panels into orbit and transmit electricity to the ground using microwaves.

- Countries around the world are in a race to set up solar power plants in space and beam energy back to Earth.
- The United Kingdom and China have already displayed interest in building such a technology and now, Japan seems to be the latest member to join the bandwagon.
- **Space Energy Initiative** - The UK-based Space Energy Initiative proposed building such a plan to beam back energy from space.
- Its reasoning was that a space-based plant would produce so much more electricity than one of a similar size on Earth.
- According to the organisation, if there were two plants with the exact same size, one on Earth in the UK and one in space, the one in space would be able to generate over 13 times the energy.
- Space-based power plant will not face any intermittence problems.
- The Sun will always be shining on it in space.
- On Earth, the Sun will not always shine on a solar plant.
- Due to this, solar energy plants will have to be complemented with battery storage systems to prevent power loss during unfavourable weather.

Japan's plans to build a solar power plant in space

- A Japanese public-private partnership aims to launch solar panels into space at an altitude of 36,000 kilometres above our planet.
- The power generated by the solar facility will be converted into microwave radiation and sent down to ground-based receiving stations.
- **U.K.** - In UK over 50 British organisations, including Airbus, Cambridge University and satellite maker SSTL have joined the UK Space Energy Initiative to work towards such a technology.
- The initiative has a plan to have a demonstrator plant in orbit as early as 2035.
- **China** - The country plans to launch a solar power plant in space by the year 2028.
- However, the Chinese satellite will be launched to an altitude of 400 kilometres.



References

1. [The Indian Express | Japan wants to beam solar energy back to Earth from space](#)
2. [ESA | ESA developing Space-Based Solar Power plant plans](#)

Purana Qila or the Old Fort

The excavations at Purana Qila reveal pre-Mauryan era settlement.

- The Purana Qila is a timeless monument that stands on the South Eastern part of the present city of New Delhi.
- The Purana Qila, built by Sher Shah Suri and Mughal emperor Humayun, is believed by many to be the site of Indraprastha, as mentioned in the Mahabharat.
- Humayun built it as a part of his new city of Dinpanah in the 16th century.
- A strong local tradition believes that the area in which the Purana Qila stands today is the site of Indraprastha, the capital of the Pandavas of the great epic Mahabharata.
- It is for the same reason that the Purana Qila is often called the Pandavon ka Qila.

The excavations

- The findings include shards of Painted Gray Ware pottery which are usually dated to around 1200 BC to 600 BC.
- The new excavations have found:
 - Remains of a 900-year-old Vaikuntha Vishnu from the Rajput period
 - A terracotta plaque of Goddess Gaja Lakshmi from the Gupta period
 - Structural remains of a 2,500-year-old terracotta ring well from the Mauryan period
 - A well-defined 4 room complex from the Sunga-Kushan period dating back to 2,300 years ago, besides beads, seals, copper coins and a bone needle.
- This was the third round of excavations at the site, beginning from January.
- Earlier excavations had been carried out in 2013-14 and 2017-18.

References

1. [The Hindu | Purana Qila excavations](#)
2. [Times of India | Delhi's Purana Qila excavation to be preserved](#)

