UPSC Daily Current Affairs| Prelimbits 09-08-2025

BHUVAN Platform

Prelims: *Current events of national and international importance*

Why in News?

Recently, access logs of Bhuvan portal show that Jharkhand have accessed the Land Use Land Cover (LULC) data that was hosted on Bhuvan Panchayat portal.

- It is the **_Indian Geo-portal of ISRO._**
- **Objectives –** To provide a _platform to visualize remote sensing data_ and to download satellite data _free of cost_.
- To allow government departments to host customized applications to enable effective governance.
- **Working** – It _incorporates Natural Language Processing methods_, facilitating searches through both audio and text inputs.
- It _integrates location intelligence_ into their applications for mapping, visualization, analysis, and more.
- **Role** – It can _store, process, manage, visualize_, monitoring and generating data products originating from different data sources.

Operation of Bhuvan Portal	
Standard Mode	Seamlessly _navigate maps_, explore points of interest, and access basic natural resource information with added voice-based search.
Thematic Mode	It offers _visualization, analysis, and download_ options for various thematic datasets, prepared by NRSC in collaboration with stakeholders.
Data Hub & Analytics	Explore multi-sensor satellite data, conduct advanced analysis, and access scientific datasets for research, development, and applications.
Governance Mode	Access _sector-wise governance applications_ & _citizen-centric applications_ with user-friendly interfaces for efficient governance and decision-making.
Disaster Services Mode	Provide _near-real-time disaster alerts_, access emergency resources, and facilitate coordination and response efforts.

- **Know Your Resources (KYR)** – It provides for accessing detailed information about India's natural and man-made resources.
- **Bhuvan Store** – It serves as a vibrant catalouge for geospatial products, services, and applications, catering to diverse user needs and fostering innovation in the geospatial community.

- **Application** – Users can explore thematic data, such as 'waterbodies in Hyderabad,' 'builtup areas in Guntur,' 'forests in Pali,' and more.
- **Significance –** Planning and development, monitoring & evaluation, asset mapping and inventory creations, decision making, reporting & advisory, and resource management.

Reference

[PIB| BHUVAN GIS Platform](#)

Related News – [Bhuvan Panchayat Portal](#)

Global Centre for Nuclear Energy Partnership

> **Prelims:** *Current events of national and international importance| General Science.*

Why in News?

Recently, Global Centre for Nuclear Energy Partnership (GCNEP) established as 6th Research & Development Unit under the aegis of Department of Atomic Energy (DAE).

- **Established in** - 2010, in Haryana.
- **Aim –** To *encourage international collaboration* with countries and agencies like International Atomic Energy Agency (IAEA).

  > The **International Atomic Energy Agency** is the world's central intergovernmental forum for scientific and technical cooperation in the nuclear field.

- **Vision** – To promote *safe, secure and sustainable nuclear energy* research & development, and capacity-building.
- **Mission** - To conduct research, design and development of nuclear systems that are intrinsically safe, secure, proliferation resistant and sustainable.
- To organize training, seminars, lectures and workshops on topical issues by Indian and International experts.
- To promotes collaborative Research and Training Programs.

Five Schools Specializing under GCNEP
• School of Advanced Nuclear Energy System Studies (SANESS)
• School of Nuclear Security Studies (SNSS)
• School on Radiological Safety Studies (SRSS)
• School of Nuclear Material Characterization Studies (SNMCS)
• School for Studies on Applications of Radioisotopes and Radiation Technologies (SARRT)

Mandate of Global Centre for Nuclear Energy Partnership

- Promoting the development of advanced, more proliferation resistant nuclear power reactors.
- Development of enhanced nuclear safeguards and training manpower in the field of nuclear and radiological safety.
- Educating in the field of advanced nuclear energy systems, isotopes and radiation technologies, nuclear forensic.
- Establishing accreditation facilities for radiation monitoring.

- **Global collaborations** – It has _MoUs with 17 international agencies/ countries_ including IAEA.
- It has been conducting several on-campus international programs since 2017.
- **Importance** – It will help in capacity building, in association with the interested countries and the IAEA, involving technology, human resource development, education & training and giving a momentum to R&D in enlisted areas.

> _**Department of Atomic Energy (DAE)** was set up under the direct charge of the Prime Minister through a Presidential Order in 1954._

References

1. PIB| Global Centre for Nuclear Energy
2. Department of Atomic Energy| Vision of GCNP

Community Forest Resource Rights (CFRR)

Prelims: _Current events of national and international importance_

Why in News?

Recently, the Chhattisgarh forest department issued a letter designating itself as the nodal agency for implementing community forest resource rights which was withdrawn after protests.

- **CFRR** - Community forest resource rights is a transformative provision of the Forest Rights Act (FRA), 2006.

> The **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006,** commonly called the FRA recognize the community's rights to protect, regenerate, conserve and manage forest.

- **Aim** – To _recognise the right of gram sabhas_ to manage their customary forests.
- **Need** – To rectify the injustices of colonial forest consolidation which dispossessed local communities and supplanted their traditional management institutions with centralised state control.
- **Implementation** – Over 10,000 gram sabhas have received CFRR titles in India.
- **CFR management plans** – Once communities have received such CFR rights, they are supposed to make a plan for managing such areas.
- **Challenges** - Less than 1,000 have prepared their CFR management plans and their implementation is constrained by the refusal of forest departments to recognise their legitimacy and support gram sabhas.

Dharti Aaba Janjatiya Gram Utkarsh Abhiyan

- **Launched in** – 2024, by the _Ministry of Tribal Affairs_.
- **Objective** - To transform the _socio-economic landscape of around 63,000 villages of tribal residents_.
- **Focus** – To attain a saturation of critical gaps in infrastructure, health, education, livelihood through 25 interventions implemented through 17 different ministries and departments.
- **Role** – It introduced an _indicative framework for CFR management plans_.

Reference

[The Hindu| Community Forest Reserve Rights](#)

Multi-fungal Tolerant Pineapple

Prelims: _Current events of national and international importance_

Why in News?

Recently, Scientists from Bose Institute have identified a gene in pineapple that can provide defence to the fruit against devastating fungal attacks.

> **Bose Institute** _is an autonomous institute of the Department of Science and Technology (DST) under Ministry of Science and Technology_

- **Pineapple** - It is the most economically significant fruit of the Bromeliaceae family.
    - **Scientific name** - _Ananas comosus_ L. Merr.
- **Uses** - It provides various health benefits alongside a delicious juicy flavour, resulting in a _nutritious diet_ including all vital components.
- **Threats to pineapple farming** – **_Fusariosis infection_**, caused by the aggressive _fungus Fusarium moniliforme_.

- It _warps the plant's stem, blackens the leaves and rots the fruit_ from the inside out.
- **Self defence mechanism** – A newly identified _gene 'AcSERK3' can activate host defences_ against plant diseases.
- AcSERK3 gene, which is a part of the pineapple's genetic code is known for _helping plants both reproduce and survive stress._
- This gene is behind the _Somatic Embryogenesis Receptor Kinase (SERK)_ which induces the self defence mechanism in Pineapple.

    Somatic embryogenesis (SE) _is defined as a process in which embryos that can develop into whole plants are produced from somatic cells (body cells) instead of through gamete fusion._

- **Research work** - AcSERK3 gene was enhanced or overexpressed which enhanced the plant's natural defences, allowing it to fight off the _Fusarium_ fungus than ordinary varieties.
- **Significance of the study** – _AcSERK3_-overexpressed pineapple lines were more resilient to _Fusarium_ infection due to increased stress-associated metabolites and scavenging enzyme activity.

Reference

[PIB| Research work on Fungal Resistant Pineapple](#)

One Liners 08-08-2025
Social Issues
National Narcotics Helpline 'MANAS' • **MANAS –** Madak-Padarth Nished Asoochna Kendra. • It is a _National Narcotics Helpline Platform under Narcotics Control Bureau._ • **Launched in –** 2024, by _Ministry of Home Affairs._ • **Objectives –** To establish a user-friendly platform for every citizen to conveniently _report drug-related matters 24x7_. • To create awareness and empower individuals to play an active role in combating drug-related crimes. • **Accessibility –** Any citizen can report or seek help via _Helpline – 1933, web portal, email and UMANG mobile app._
Polity & Governance

Electronic Evidence in Criminal Proceedings
• It refers to any information that is _stored, retrieved, or transmitted in electronic form,_ which can be used in a legal proceeding.
• **Legal provision –** Section 254 (Evidence for Protection), 265 (Evidence for Prosecution) and section 266 (Evidence for Defence) of _Bhartiya Nagarik Suraksha Sanhita (BNNS), 2023._
• **Other applications used –** _Sankalan of Criminal Laws, e-Sakshya, e-Summon and Nyaya-Shruti, Nyaya setu._

Sankalan of Criminal Laws
• **Launched in –** 2025.
• **Launched by –** National Crime Records Bureau (NCRB).
• **Nodal ministry -** Ministry of Home Affairs.
• **Purpose –** To work as a _comprehensive guide on new criminal laws_ or the benefit of all stakeholders.

eSakshya
• It is a mobile application.
• **Launched in –** 2024, by _Ministry of Home Affairs._
• **Objectives –** To _assist police in recording and managing evidence_ in criminal cases.
• To Enables lawful, _scientific and tamper-proof collection, preservation_ and electronic submission of digital evidence.
• To maintain authenticity and minimize delays.
• **Significance –** It complies with the Bharatiya Nagarik Suraksha Sanhita (BNSS) requirements for _audiovisual recording and forensic examination_ in serious offenses.

e-Summon
• It is a mobile application.
• **Launched in –** 2024, by _Ministry of Home Affairs_.
• **Objective –** It allows _summons to be delivered through electronic means_, making the process faster, time-bound and easily trackable.

Nyaya- Shruti
• It is a mobile application.
• **Launched in –** 2024, by _Ministry of Home Affairs._
• **Objective –** To facilitate _virtual appearance of accused persons, witnesses, police officials, prosecutors, scientific experts, prisoners_ etc. through video conferencing.
• It involves the digitization and online availability of court judgments and proceedings.
• **Purpose –** It will make it easier for legal professionals and the public to access legal information and track case statuses.

Nyaya Setu
• **Launched in –** 2024, by _Ministry of Home Affairs._
• It focuses on providing _accessible legal aid, legal advice, and connecting people_ with legal services.
• **Aim –** To bridge the gap between the legal system and the common people, particularly _in rural and underserved areas._

Science

G20 Pandemic Fund Project

Recently, Department of Animal Husbandry & Dairying secured a grant under G20 Pandemic Fund Project.

• It finances investments to *strengthen pandemic prevention, preparedness, and response capacities* at national, regional, and global levels.
• **Launched in –** 2022, in Bali, Indonesia.
• **Focus on –** Low- and middle-income countries.
• **Fund's Trustee & Secretariat –** World Bank.
• **Aims –** To reduce the risk of pathogens emerging from both domesticated and wild animals and spilling over into human populations.
• **India's project –** "Animal Health Security Strengthening in India for Pandemic Preparedness and Response".

SPMEPCI

• It stands for *Scheme for Promotion of Manufacturing of Electric Passenger Cars in India.*
• **Launched in –** 2024.
• **Launched by –** Ministry of Heavy Industries.
• **Aim –** To promote the manufacturing of electric cars in India.

Miscellaneous

11th National Handloom Day

• **Celebrated on –** 7th August, by *Ministry of Textiles.*
• **Launched in –** 2015.
• **To commemorate –** *Swadeshi Movement* launched on 7th August 1905.
• **Awards presented –** *Sant Kabir Handloom Award and National Handloom Award*.