RBI cancelled license of Few Urban Co-operative Banks (UCBs) for not complying

RBI cancelled the license of **City Cooperative Bank (Maharashtra) and Purvanchal Cooperative Banks (Uttar Pradesh).**

» These banks **lacked adequate capital** and **earning prospects** and **violated and Banking Regulation (BR) Act, 1949.**

» On liquidation of these UCBs, every depositor would be entitled to receive **deposit insurance claim of up to ₹5,00,000/** as per the **Deposit Insurance and Credit Guarantee Corporation Act, 1961.**

About UCBs

» **Definition:** UCBs, though not formally defined, refers to **Primary Cooperative Banks** located in **urban and semi-urban areas.**
  ⊕ They could be either **scheduled or non-scheduled.**

» **Legal status**
  ⊕ **Registered as cooperative societies** either under the **State Cooperative Societies Act** of the State concerned or the **Multi-State Cooperative Societies Act, of 2002.**
  ⊕ Banking activities are regulated by the RBI under **BR Act, 1949**

» **Lending**
  ⊕ Mandated to achieve **priority sector lending Target of 75% by March 2026.**
  ⊕ Allowed to lend money for **agricultural purpose.**

» **Challenges of UCB**
  ⊕ **High gross non-performing assets (GNPA)** which was 10.9% till September 2023 (RBI's Financial Stability report)
  ⊕ **Lack of professional management** and **acute market competition** with Small Finance Banks (SFBs), FinTechs, etc
  ⊕ **Concentrated in few states** (mostly in Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu).

Initiatives takes to strengthen UCBs

» **NUCFDC:** National Urban Cooperative Finance and Development Corporation Limited (NUCFDC) is an umbrella organisation of the UCBs.

» **Banking Regulation (Amendment) Act, 2020:** Gives RBI powers to supersede boards of the Cooperative banks

» **Ease of expansion:** Some UCBs are allowed to open new branches up to 10% (maximum 5 branches) of the existing number of branches in the previous financial year without prior approval from RBI.

PM inaugurates Nalanda University (NU) in Rajgir (Bihar)

The new Nalanda University, envisaged as a **centre of inter-civilisational dialogue, is also a 'Net Zero Green Campus'**

» It is located **near the ancient Nalanda ruins and was** established under the Nalanda University Act 2010 of Parliament.
  ⊕ The decision at **the 2nd East Asia Summit (EAS)** in the Philippines (2007) provided the basis to establish **NU.**

Ancient Nalanda University

» **Establishment:** Founded by **Kumargupta I in the 5th century CE** and remained a centre of learning till **the 12th century CE.**

» **Architecture**
  ⊕ It was a monastic University, a **Mahavihara (residential and educational buildings).**
  ⊕ It also includes **stupas, shrines,** and important artworks in **stucco, stone and metal.**

» **Educational Excellence**
  ⊕ It had students from **China, Tibet, Central Asia, Sri Lanka, Thailand, Burma,** and various other countries from the **southeastern parts of Asia.**
  ⊕ **Veda, fine arts, medicine, mathematics, astronomy, politics and the art of warfare** were major disciplines.
  ⊕ Admission to the university was **strictly by merit. Exams were conducted by trained gatekeepers.**

» **Foreign visitors**
  ⊕ In the **7th century CE,** Chinese scholars **I-Qing and Xuan Zang** visited Nalanda, then called **Nala.**
  ⊕ **Xuan Zang studied yogashastra** at Nalanda under Chancellor **Shilabhadra, the highest authority in yoga.**

» **Recognition:** It was declared a **UNESCO World Heritage site in 2016.**

Major institutions of learning in ancient India

» **Vikramshila (Bihar): Established** by Dharmpala (8th Century CE). Propagated **Vajrayana Buddhism.**

» **Nagarjunakonda(Andhra Pradesh):** Named after **Nagarjuna, a** master of **Mahayana Buddhism** who propounded the doctrine of **Sunyavada.**

» **Takshashila (Taxila):** Now located in northwestern Pakistan. **Panini** (wrote Ashtadhyayi) , **Jivaka** (physician) and **Chanakya (or Kautilya)** are some of the famous pupils from the university.

» **Other Universities:** Valabhi (Gujarat), Odantapuri (Bihar,) and Jagaddala (now in Bangladesh).

Union Cabinet approved development of Greenfield Major Port at Vadhavan in Maharashtra

The port is to be **constructed through a Special Purpose Vehicle (SPV)** formed by Jawaharlal Nehru Port Authority and Maharashtra Maritime Board as an **all-weather Greenfield deep draft major port.**

- **Greenfield infrastructure** is the **infrastructure developed on empty land** or previously undeveloped land and a **project commissioning, planning and construction process is carried out from the scratch** and grassroots level.

About Vadhavan Port

- Project, aligned with objectives of **PM Gati Shakti program**
- Port is to come up in **Palghar District** and **will be built on a landlord-model** and through PPP.
  - **In Landlord model, port authority acts as a regulatory body as well as landlord** and private companies carry out port operations.
- Port is to be **constructed in 2 phases** with a total capacity of **23.2 million TEUs** (Twenty-foot equivalents) of container holding capacity.
- The port is to have a **draft of 20 meters allowing handling of mega vessels.**

Significance of the Project

- **Will aid Export Import (EXIM) trade flow through IMEC** (India Middle East Europe Economic Corridor) and **INSTC** (International North South Transportation Corridor).
- **Will reduce Turnaround time** of goods with State of art infrastructure and modern technologies.

Ports in India

- Ports in India are categorized in **2 categories – Major Ports** and **Non-Major Ports.**
- **Major Ports:** These are under the administrative control of **Union Ministry of Ports, Shipping, and Waterways.**
  - Currently, there are **12 functional Major ports.**
- **Minor Ports:** These are under the jurisdiction of respective State Maritime Boards/ State Government.
  - Currently, there are **200 non-major ports.**

World Economic Forum Releases "Fostering Effective Energy Transition 2024" Report

Report is based on the **Energy Transition Index (ETI)** that evaluates **120 countries** on their **energy system performance and readiness for secure, sustainable, and inclusive energy systems.**

- The **energy transition** (ET) refers to **shift from fossil fuels to renewable energy sources** to reduce CO_2 emissions

Key Findings

- **Investment Trends:** Clean energy infrastructure **investments reached $1.8 trillion in 2023,** with nearly **90% of the growth** since 2021 occurring in **advanced economies and China.**
- **Top Performers:** Sweden, Denmark, Finland, Switzerland and France are the top five performers.
  - **Six G20 countries** are among the top 20 performers: **France, Germany, Brazil, China, the UK, and the USA.**
  - **India** is ranked **63rd on the ETI.**
- **Net-Zero Emissions:** Eight countries (Bhutan, Comoros, Gabon, Guyana, Madagascar, Niue, Panama, and Suriname) reached net-zero emissions in 2022.
- **Digital Innovations:** Generative AI can enable energy companies to **save over $500 billion annually.**

Challenges in ET

- **Lack of incentives for private sector** investment in clean electricity.
- **Only 6% of G20 recovery funding** is directed towards clean energy.
- **Ongoing subsidies** for fossil fuels.
- Some **advanced economies and large energy companies are rolling back** critical energy transition commitments.

Initiatives in Energy Transition

- **Global Renewables and Energy Efficiency Pledge:** Signed by 133 countries CoP 28 of UNFCCC, calls for tripling the rate of renewables capacity by 2030.
- **Addressing Technology Gaps for Energy Transitions:** Initiatives of G20.
- **Just Energy Transition Partnerships:** Launched by the International Energy Agency & WEF in 2022 to support developing countries in their transition towards clean energy.
- **Carbon Border Adjustment Mechanism (CBAM):** It was launched by the EU in 2023.

AI creating false stories about World War II, Holocaust: UNESCO

A recent report by UNESCO cautioned that not only can Generative AI **enable malicious actors to seed disinformation and hate-fueled narratives,** but it can also **inadvertently invent false or misleading content** about historical records.

- **Generative AI** is an artificial intelligence technology that **automatically generates content in response to prompts** written in natural-language conversational interfaces.

Concerns highlighted in the report

- **AI automated content may invent facts:** Generative AI risks spreading **distorted and offensive representations of facts** which can impede public understanding of historical events.
- **AI models can be manipulated to spread hate speech:** AI systems may inherit **human biases,** potentially misrepresenting information about specific events or societal groups, reinforcing prejudices.
- **Violation of privacy:** AI limits individuals' ability to control what information about their past is retrieved.
- **Lack of transparency and algorithmic biases:** It is often unclear which data AI systems have been trained on or how algorithms decide what content to retrieve, generate, or prioritize.

Key Recommendations

- **Monitoring and evaluating standards for AI systems' management of information:** Emphasize on preventing prioritized retrieval or generation of content that may be damaging to rights and reputations of individuals.
- **Integrating ethical values into AI design:** Integrate ethical impact assessment – fairness, non-discrimination and diversity – in AI system design.

'State of Global air-2024' Report released

Report, published by **Health Effects Institute,** a US-based research organization, in partnership with **UNICEF,** presents information on exposures to and health impacts of exposure to common air pollutants including fine **particulate matter, ozone, and nitrogen dioxide,** from 1990–2021.

Key highlights of the report

- Globally, air pollution accounted for the **2nd largest risk factor of death** (8.1 million deaths) in 2021, after High blood pressure.
- **99% of the world's population** lives in places with **unhealthy levels of PM2.5 pollution.**
  - PM2.5 refers to **airborne particles measuring less than 2.5 micrometers (μm)** in diameter.
- Populations from **low- and middle- income countries** are exposed to **1.3—4 times higher levels of ambient PM2.5.**
- Air pollution also worsened the **COVID-19 outcomes** by compromising immune systems, causing inflammation and oxidative stress in lungs, etc.

Health risks of Air pollution in India

- **India and China** together accounted for 54% of the total global disease burden linked to air pollution.
- **Nearly 50%** of all ozone-related **Chronic Obstructive Pulmonary Disorder (COPD) deaths** were in India in 2021.

Initiatives to Combat Air Pollution in India

- **National Clean Air Programme:** To Improve air quality in **131 cities (non-attainment cities and Million Plus Cities) in 24 States.**
- **Leapfrogging from BS-IV to BS-VI fuel standards** since April 01, 2018 in NCT of Delhi and from April 01, 2020 for the rest of the country.
- **National Air Quality Index:** For dissemination of information to public about daily air quality.

Also in News

MAVEN orbiter

NASA's Mars Atmosphere and Volatile Evolutionm (MAVEN) orbiter **captured stellar display of purple-coloured lights on the Mars planet.**

- Launched in 2013, MAVEN is the **first mission devoted to understanding the Martian upper atmosphere.**
- It was envisaged to explore **how the sun may have stripped Mars of most of its atmosphere**, making it a cold and barren desert from potentially habitable to microbial life.

National Monetisation Pipeline (NMP)

NMP has **monetised Rs 3.85 lakh crore of assets in 3 years.**
About NMP

- **NMP is an initiative for the asset** monetisation by the Government of India
  - Asset monetisation is when the government is **basically transferring revenue rights to private parties** for a specified transaction period **in return for upfront money** (a revenue share) and commitment of investments in the assets.
- It was announced in the **Union budget 2021-22 as** for monetization of **assets worth an estimated Rs 6 lakh crore.**

Minimum Support Prices (MSP)

Cabinet approved MSP for Kharif Crops.
About MSP

- MSP is the **minimum rate** at which f**armers sell their crops to the government.** It is aimed at preventing farmers from distress selling.
- **MSP covers 22 crops:**
  - **14 Kharif Crops:** Paddy, jowar, bajra, maize, ragi, arhar, soyabean, sunflower, sesamum, nigerseed, cotton, etc.
  - **6 Rabi Crops:** Wheat, barley, gram, masur (lentil), rapeseed/mustard and safflower.
  - **2 Commercial Crops:** Jute and copra
- Announced at the **beginning of the sowing season.**
- **Commission for Agricultural Costs and Prices (CACP)** recommends MSP.
  - **Cabinet Committee on Economic Affairs** chaired by Prime Minister takes the final decision.
- **Food Corporation of India** is the nodal Central procuring agency for wheat and paddy.

Superhydrophic catalyst

A team of scientists developed a Superhydrophobic **(water-repellent) catalyst** that can reduce the cost of producing biodiesel.

- **Biodiesel** is a **renewable, biodegradable** fuel made from vegetable oils, animal fats, etc.

About Superhydrophobic Catalysts

- They are derived from **biomass (cellulose),** and are **eco-friendly, abundant,** reusable, and **affordable.**
- Can withstand the **water by-product** obtained during biodiesel production, preventing the poisoning of active sites by water.
- Can provide a **sustainable method for biomass waste disposal** and expand the utility of **biochar** as an alternative to graphene and carbon nanotubes.

Purpurogallin

A study revealed that **evolution of the purple pigment** named Purpurogallin was probably **vital for several adaptations in glacier algae.**

- **Glacier Algae** grow on **melting glacier** and **ice sheet surfaces** across the cryosphere (i.e., **the frozen water part of the Earth system).**
  - **Example:** Ancylonema alaskanum and Ancylonema nordenskiöldii

Purpurogallin

- These are **phenolic pigments.**
- Acts like **sunscreen** and protects algal cells from **damage of ultraviolet (UV)** and **visible light.**
- Also linked with **tolerance of low temperatures and desiccation.**
- Possesses **antioxidant, anticancer, and anti-inflammatory effects.**

AlphaFold-3

Google's DeepMind and Isomorphic Labs have developed a **new AI model, AlphaFold-3,** that can **predict structure of proteins, DNA, RNA, ligands,** etc., and how they interact.

About Alphafold-3

- It can **computationally predict the structure and interactions of all life's molecules** with unprecedented accuracy and speed.
- Given an input list of molecules (proteins, DNA, etc.), it **generates their joint 3D structure,** revealing how they all fit together.
- It **can model chemical modifications** to the molecules which control the healthy functioning of cells, that when disrupted can lead to disease.

Capsaicin

Noodles containing chilli peppers having capsaicin were banned in Denmark.

About Capsaicin

- It is the **main pungent (causing strong flavour and smell) ingredient** of chilli peppers (genus Capsicum).
- It is an example of **secondary plant metabolite** (substance made during metabolism) produced through cell and tissue cultures and **can dissolve in fat.**
- It exhibits broad potent biological characteristics at low doses - **antioxidant, anti-obesity, pain-alleviation, and anti-inflammation effects.**
- However under high doses, it can have side effects like gastrointestinal issues, heartburn, etc.

Revenue Sharing Model (RSM)

Coal India has awarded 23 abandoned mines to private companies on a revenue sharing basis.

- The **minimum revenue to be shared is 4% .**
- The contract period is for a **maximum of 25 years**

About RSM

- It is a method **for Public Private Participation (PPP) projects.**
- Here the **private entity shares its revenue with the government**
- Contrary to this in **Production Sharing Contracts (PSCs)** the private entity shares its **profit** with the government.
- Government of India brought **Hydrocarbon Exploration Licensing Policy (HELP) in 2016** that replaced **PSC for RSM for hydrocarbons** (oil and gas, coal-bed methane, shale oil and gas and gas hydrate).

National Forensic Infrastructure Enhancement Scheme

Union Cabinet has approved a **new central sector scheme (CSS) National Forensic Infrastructure Enhancement Scheme (NFIES).**

About NFIES

- Aims to **ease the workload on forensic laboratories** in line with requirements of **reformed criminal laws** that will come into force w.e.f. **July 01, 2024.**
  - **New criminal laws mandate forensic investigation for offences involving punishment of 7 years or more.**
- Provisioned **under Union Ministry of Home Affairs from 2024-25 to 2028-29.**
- **Components**
  - **Establishment of Campuses** of National Forensic Sciences University (NFSU).
  - **Establishment of Central Forensic Science Laboratories.**
  - **Enhancement of existing infrastructure** of NFSU-Delhi.

Excessive-deficit Procedure

European Commission (EC) is expected to put France into Excessive-deficit Procedure (EDP) Due to it's higher budgetary deficit.

About EDP

- It ensures that EU member **States adopt appropriate policy responses to correct excessive deficits.**
- **EC can launch an EDP against an EU country** not respecting the **Stability and Growth Pact (SGP).**
  - **SGP** is a body of rules governing the coordination of EU countries' fiscal policies.
- It can be launched if the EU country has **breached or is about to breach the deficit threshold** or have **violated the debt rule.**