

NEWS TODAY

Supreme Court (SC) expressed concern about states approaching court over fund disbursement by Centre

- Recently, Karnataka approached SC to seek relief against Centre in matters related to **release of financial assistance from National Disaster Response Fund (NDRF) for drought management.**
 - ⊕ Earlier, Tamilnadu also approached SC for **non-disbursement of funds** by centre under NDRF to deal with calamities of cyclone Michaung and unprecedented floods.
- **Status of State Finance**
 - ⊕ States finance **only 58 % of their revenue expenditure from their revenue sources.**
 - ⊕ **Debt-GDP ratio** of states stands at 27.5 % (March 2023).
- **Reasons for State's dependency on Centre**
 - ⊕ GST compensation for states ended in June 2022, and **revenue collected under SGST is lower** than revenue from taxes subsumed under GST.
 - ⊕ **Increased use of cesses and surcharge by Centre** which are not shared with states.
 - ⊕ Strained on states finances due to measures like farm loan waivers etc.
- **Measures taken to improve State Finance**
 - ⊕ **Scheme for Special Assistance to States for Capital Expenditure** provides 50-year interest-free loans to States.
 - ⊕ 15th Finance Commission recommended **performance-based additional borrowing space of 0.50%** of State GDP to States in power sector.
- **Way Forward**
 - ⊕ Foster **business-friendly tax administration**, to strengthen states revenue collection.
 - ⊕ **Revise user charges on electricity, water**, and other public services, etc. to increase non-tax revenue.

Constitutional Provisions related to States' finances

- **Article 275:** Parliament may by law provide to certain states, **grants-in-aid** charged on **Consolidated Fund of India.**
- **Article 282:** Enables Union (and states) to make **discretionary grants, for any 'public purpose'.**
- **Article 293:** Confers power on States to **borrow money within limits prescribed by State legislature.**

India adds record 18 GW renewable energy (RE) capacity in FY24

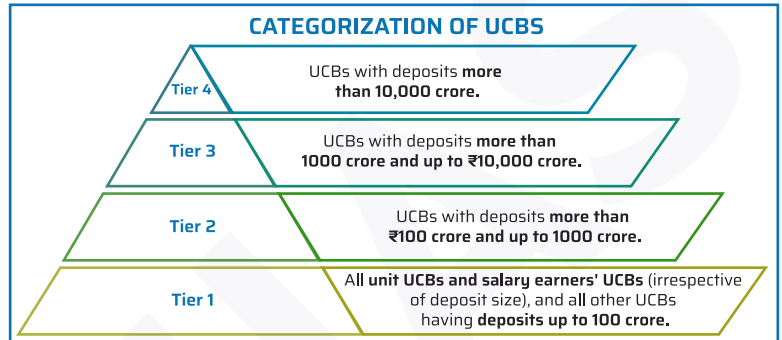
- India's RE increased **21% from previous year**, primarily driven by solar installations of 12.78 GW and wind energy of 2.27 GW.
 - ⊕ Installed RE capacity has increased from **76.37 GW in 2014 to 178.98 GW** in October 2023, i.e. an **increase of around 2.34 times.**
- **RE targets in India**
 - ⊕ India aims reaching a **non-fossil fuel energy capacity of 500 GW by 2030** and
 - ⊕ Fulfilling at least **half of its energy requirements via RE** by 2030.
- **Steps Taken**
 - ⊕ Setting up of **Ultra Mega Renewable Energy Parks**, to provide land and transmission to RE developers on plug and play basis.
 - ⊕ **Schemes:** PM-KUSUM, PLI Scheme under 'National Programme on High Efficiency Solar PV Modules, National Bioenergy Programme etc.
 - ⊕ Promoting RE through **Green Energy Open Access Rules 2022.**
 - ⊕ **Wind-Solar Hybrid Policy 2018.**
- **Challenges**
 - ⊕ Variability and unpredictability of RE sources.
 - ⊕ **High Costs.**
 - ⊕ Need to **develop new infrastructure.**
 - ⊕ **Poor financial condition** of power distribution companies.
 - ⊕ **Transmission and grid integration** issues.
 - ⊕ **Unequal geographical adoption** of renewables.

Installed capacity for Renewables (accounting 41.4% Of India's total energy mix):

- Wind power: 45.15 GW
- Solar Power: 75.57 GW
- Biomass/Co-generation: 10.2 GW
- Small Hydro Power: 4.99 GW
- Waste To Energy: 0.58 GW
- Large Hydro: 46.92 GW

RBI imposes restrictions on several Urban Cooperative Banks (UCBs)

- **RBI capped withdrawal limit of National Urban Co-operative Bank Ltd and Sarvodaya Co-operative Bank.**
 - ⊕ RBI said eligible depositors would be entitled to receive deposit insurance claim of Rs 5 lakh from **Deposit Insurance and Credit Guarantee Corporation (DICGC)**.
 - ⊕ Established under DICGC act, 1961, **DICGC ensures all commercial banks** including branches of foreign banks functioning in India, local area banks, and regional rural banks.
- **Urban Cooperative Banks (UCBs)**
 - ⊕ Refer to primary cooperative banks located in **urban and semi-urban areas**.
 - ⊕ Registered as **cooperative societies** under either respective State Cooperative Societies Act or Multi-State Cooperative Societies Act, 2002.
 - ⊕ RBI's regulatory framework categorizes **UCBs into 4 tiers**.
- **Issues regarding UCBs**
 - ⊕ **Inadequate capital base** and low capital adequacy ratios.
 - ⊕ **High gross non-performing assets** ratio of 8.7% in UCBs.
 - ⊕ **Lack of uniformity** in regulation.
 - ⊕ **Influence of political interests** in management.
- **Steps Undertaken for UCBs**
 - ⊕ **Banking Regulation (Amendment) Act, 2020** brought management, governance, winding up, etc. under RBI's purview.
 - ⊕ **Supervisory Action Framework** for expeditious resolution of financial stress faced by UCBs.
 - ⊕ **National Federation of Urban Co-operative Banks and Credit Societies Ltd.**, established as Umbrella Organization for UCB sector.

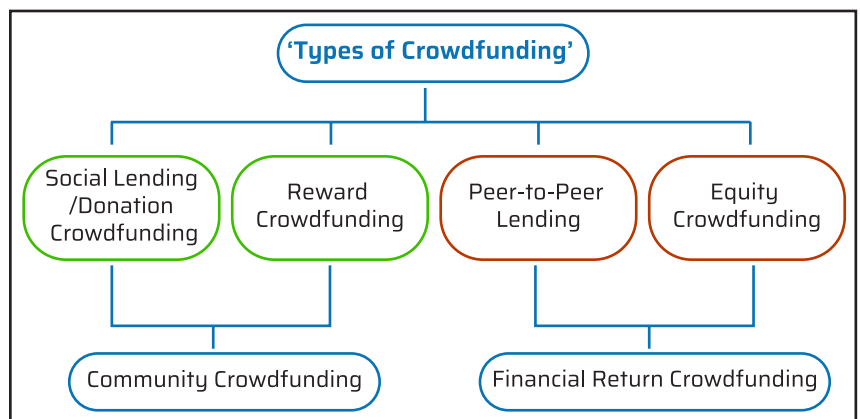


Dual Regulation of UCBs

- **RBI** regulates and supervises banking functions under the Banking Regulation Act, of 1949.
- **State/ Central Registrar of Cooperative Societies** supervises managerial, administrative, and, other matters.

Gujarat High Court sought details on regulations around Crowdfunding

- Crowdfunding is **solicitation of funds (small amount) from multiple investors** through web-based platform or social networking site for specific project, business venture or social cause.
 - ⊕ Traditional fundraising consists of asking for a sum from limited set of sources.
 - ⊕ **Securities and Exchange Board of India (SEBI)** regulates Crowdfunding in India.
- **SEBI guidelines on Crowdfunding**
 - ⊕ Only "Accredited Investors" may invest i.e.
 - ◆ **Companies incorporated under Companies Act, 2013** with minimum net worth of Rs 20 crore,
 - ◆ **High Net Worth Individual** with minimum net worth of Rs 2 crore,
 - ◆ **Eligible Retail Investors** who have a minimum annual gross income of Rs. 10 Lacs.
- **Benefits of Crowdfunding**
 - ⊕ Promoting funding to **new ideas** and encourages startups.
 - ⊕ Increases flows of **credit to Small, Medium Enterprises**.
 - ⊕ **Raising funds during natural calamities**.
 - ⊕ Arranging money for those poor people who can't afford **expenses of diseases like cancer** etc.
- **Risk of Crowdfunding**
 - ⊕ **Retail investors** may not be able to understand risk in investing start-ups and will be **unable to bear loss of investments**.
 - ⊕ Possibility of **genuine websites being used by fraudsters**.
 - ⊕ **Lack of monitoring of web based platforms** leads to risk like terror financing, money laundering etc.



Space weather behind unprecedented loss of 38 Starlink satellites: study

- Study by **IISER Kolkata**, found following factors for loss of satellites.
 - ⊕ **Space weather** conditions,
 - ⊕ Satellites in **high-density low Earth orbit**,
 - ⊕ **Enhanced drag** due to orientation changes of satellites.
- **Space Weather**
 - ⊕ Space weather is **environment around Earth, other planets, and celestial objects** in our galaxy which is largely **controlled by Sun's activities**.
 - ⊕ It is influenced by **solar flares, coronal mass ejections (CMEs), and other particles** and emissions emanating from Sun.
 - ◆ Solar flares are **sudden and intense explosions of energy** on surface of Sun, often associated with sunspots. These are **caused by release of magnetic energy** stored in Sun's atmosphere.
 - ◆ **CMEs** are **large expulsions of plasma and magnetic field** from Sun's corona.
- **Impact of Space Weather on Earth:**
 - ⊕ **Radio blackout storm:** Electromagnetic energy released in flares disrupts **radio signals in earth's upper atmosphere** impacting Navigation system.
 - ⊕ **Geomagnetic storms** (major disturbances in earth's magnetic field) affect **power grids, pipelines, and railways, and cause auroras**.
 - ⊕ **Solar radiation storm:** Fast-moving **charged particles from sun** can permeate magnetosphere and endanger **astronauts and spacecraft/satellites/aircraft**.

Starlink

- It is a **constellation of satellites in LEO** (Created by **SpaceX**, American space start-up) providing global internet coverage, particularly for remote regions.
- It plans to have as many as **42,000 satellites** at altitude of about 550 km.
- It offers **reduced latency and increased bandwidth** due to satellite's proximity to Earth.

Acidification may strip Indian Soils of 3.3 billion tonnes of essential carbon: Study

- **Key findings**
 - ⊕ Over **30% of cultivable land in India** is said to carry **acidic soil**, impacting plant growth.
 - ◆ Acidic soils are those that have a **pH value of less than 5.5**.
 - ⊕ Soil acidification might lead to **loss of Soil Inorganic Carbon (SIC)** from topsoil.
 - ◆ SIC includes **mineral forms of carbon like calcium carbonate** produced by weathering of parent material or from reaction of soil minerals with atmospheric carbon dioxide (CO₂).
- **Soil Acidification** is a process by which **soil pH decreases** over-time.
- **Factors Accelerating Soil Acidification**
 - ⊕ **Leaching of nitrogen** released from ammonium-based fertilizers.
 - ⊕ **Organic residues** on decomposition release organic acids.
 - ⊕ **Roots, during active growth stages**, release CO₂ into soil resulting in formation of carbonic acid.
- **Impacts of Soil Acidification**
 - ⊕ **Loss of SIC:** SIC is mostly carbonate. Low pH levels dissolve carbonate and remove it either as CO₂ gas or release it directly into water.
 - ⊕ **Loss of Microbes:** Bacteria cannot survive in acidic conditions.
 - ⊕ **Aluminium Toxicity:** When soil pH drops, aluminium becomes soluble, and its amount in soil solution increases which is toxic to roots of sensitive plant species.
 - ⊕ **Other Impacts:** Rise in Pathogenic fungi, Decreased Nutrients availability etc.

Managing Acid Soils

- **Liming:** Incorporation of Lime, Gypsum, or dolomite into upper cultivable soil layer.
- **Using Industrial By-products:** Press mud from sugarcane industry, basic slags from iron and steel industries, flue dust from cement plants can be used.
- **Growing acid-tolerant crops** e.g. Sugarcane and bananas.

Also in News



Pink Bollworm (PBW)

- Cotton farmers in North India may shift to **paddy, maize, and guar** due to severe PBW infestation.
- **About PBW (Pectinophora gossypiella)**
 - ⊕ The disease is common in **cotton crops**.
 - ⊕ PBW **larvae burrow into developing fruits (bolls) of cotton plants**, and damage affects both weight and quality of harvested bolls.
- **Issue:** Pink bollworms have developed **resistance to genetically modified pest-resistant Bt cotton** over time.
- **Management Strategies**
 - ⊕ **Adoption** of highly productive **short-duration hybrids** that would escape PBW.
 - ⊕ **Crop rotation** to break lifecycle of PBW.
 - ⊕ **PB Knot technology** disrupts mating prospects of pest.



Jiadhal River

- The flow of Jiadhal River is being **disrupted due to climate change**.
- **About Jiadhal River**
 - ⊕ It is a **north-bank tributary of Brahmaputra**.
 - ⊕ **Originates** in lower Himalayan ranges in Arunachal Pradesh.
 - ⊕ Flows through Assam and meets Brahmaputra near **Majuli Island**.
 - ⊕ It is example of **flashy river** and produces floods with sudden, high discharge over short time interval and with high sediment load and debris.
 - ⊕ It frequently **changes its course** during flash floods.



Chagas Disease (American trypanosomiasis)

- World Chagas Disease Day was observed by World Health Organisation on April 14.
- **About Chagas Disease**
 - ⊕ Life-threatening illness caused by protozoan parasite **Trypanosoma cruzi**.
 - ⊕ Found mainly in **Latin American countries**, where it is mostly **vector-borne**.
 - ⊕ Transmitted by **triatomine bug (vector-borne)**, and **orally (food-borne)**, during pregnancy or birth (congenital), through blood/blood products, organ transplantation.
 - ⊕ Often called "**silent disease**" because of no symptoms either during **acute or chronic phases of infection until damage is too advanced to be reversed**.
 - ⊕ Disease is **clinically curable if treatment is initiated at early stage**.



Gray Slender Loris

- Gray slender Loris rescued in North Goa.
- **About Gray Slender Loris (Loris lydekkerianus)**
 - ⊕ **Geographic Range:** Found in India and Sri Lanka.
 - ⊕ **Habitats:** Tropical rainforests, scrub forests, semi-evergreen forests, swamps.
 - ⊕ **Characteristics**
 - ◆ **Nocturnal animal.**
 - ◆ **Lean and lanky appearance, with longer and slender limbs, larger ears, pointed snout and eyes circled with black or dark brown.**
 - ◆ **Slow movers** and foragers, they **nest near large insect colonies** for easy meals.
 - ◆ They are **Viviparous** (producing living young instead of eggs).
 - ⊕ **Threat:** Habitat Loss, Electrocutation on power lines etc.
 - ⊕ **Conservation Status**
 - ◆ IUCN: Near Threatened.



Exercise Dustlik

- It is joint military exercise between **Indian and Uzbekistan Army**, conducted every year.



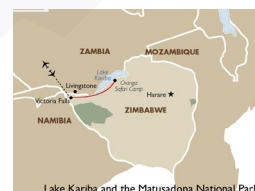
Bohag/Rongali Bihu

- Assam celebrates Rongali Bihu.
- **About Rongali/Bohag Bihu**
 - ⊕ Celebrated in **middle of April**, it marks the **beginning of Assamese New Year** and onset of spring.
 - ◆ There are **3 Bihu festivals in Assam**. Other two- **Kati Bihu** and **Magh Bihu** are celebrated in **October** and **January**, respectively.
 - ⊕ It is a 7 day festival, where first day is called **Goru Bihu** followed by **Manuh Bihu, Guxai Bihu** etc.
- Similar festival in other states - **Baisakhi** (Punjab), **Puthandu** (Tamil Nadu), **Vishu** (Kerala), and **Pohela Baisakh** (West Bengal).



Lake Kariba

- Water levels have dropped to **13% of its capacity in Lake Kariba**, due El Nino induced drought.
 - ⊕ **El Niño** is a climate pattern characterized by unusual warming of surface waters in eastern tropical Pacific Ocean.
- **About Lake Kariba**
 - ⊕ It lies between **Zambia and Zimbabwe**.
 - ⊕ It was formed by damming **Zambezi River** in 1955.
 - ⊕ It provides **electric power** to both Zambia and Zimbabwe.



Meningitis

- **Nigeria** became **first country** in world to introduce **Men5CV vaccine**, recommended by WHO.
 - ⊕ It offers protection against five strains of **meningococcus bacteria** in a single shot.
 - ⊕ **Meningococcal ACWY Vaccine** is the one available in India.
- **About Meningitis**
 - ⊕ It is **inflammation** of surrounding **tissues of brain and spinal cord**.
 - ⊕ Caused by **bacteria, viruses, fungi and parasites**.
 - ⊕ Mostly transmitted from **person to person**.
 - ⊕ Although it affects all ages, **young children are most at risk**.
 - ⊕ **Symptoms** are neck stiffness, fever, confusion, headaches, nausea.

Personality in news



Kandukuri Veeresalingam (16 April 1848 - 27 May 1919)

- He was remembered on his birth anniversary.
- **About**
 - ⊕ Born in **Rajahmundry, Andhra Pradesh**, He was social reformer and nationalist, considered as **Father of Telugu Renaissance movement**.
- **Contribution:**
 - ⊕ Worked for **upliftment of Harijans, remarriage of widows** etc.
 - ⊕ Started a **girl's school in Dowlaiswaram**.
 - ⊕ Constructed temple known as '**Brahmo Mandir**' and '**Hithakarini School**' in Andhra Pradesh.
 - ⊕ His novel **Rajasekhara Charitramu** is considered to be **first novel in Telugu literature**.
 - ⊕ Started **Viveka Vardhini** journal.
- **Values:** Compassion, Justice, Courage, Humanism etc.

