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MARKET BORROWING AND MUNICIPAL READINESS IN INDIA

Context

- As India explores market-based urban financing through the Urban Challenge Fund, concerns have emerged over whether Urban Local Bodies (ULBs) possess the capacity required to manage debt responsibly.

Urbanisation and the Financing Gap

- India's urban population is expected to cross **600 million by 2030,** increasing pressure on civic infrastructure.
- **The 74th Constitutional Amendment Act (1992)** empowered Urban Local Bodies (ULBs) to perform 18 functions listed in the **12th Schedule**, including water supply, waste management, and public health.
  - However, the corresponding **financial devolution has been weak** and inconsistent across States, resulting in a situation where responsibility is decentralised but revenue is not.
  - Most ULBs depend heavily on State and Central transfers for routine expenditure.
- There is a significant gap between the funds required for urban infrastructure and the funds actually available.

What is the Urban Challenge Fund?

- The Urban Challenge Fund is a **reform-linked financing mechanism.** It seeks to reward cities that improve governance, financial transparency and service delivery.
- The objective is to **make cities more creditworthy** so that they can access loans and municipal bonds.
- It complements existing initiatives such as **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)** and **Smart Cities Mission,** which focus on improving urban infrastructure and governance.

Significance of Municipal Borrowing

- Borrowing from markets **allows cities to finance large infrastructure projects** without waiting for grants.
- Municipal bonds provide **long-term funds suitable for infrastructure** with long gestation periods.
- Greater borrowing capacity strengthens fiscal decentralisation envisaged under the **74th Constitutional Amendment.**

Structural Challenges Facing ULBs

- **Weak Administrative Capacity:** Many ULBs **do not have trained staff** for financial management and project preparation.
  - **Poor-quality project reports** reduce the chances of securing loans or investments. Further Delays in auditing and weak accounting practices reduce credibility.
- **Weak Own-Revenue Base:** Property tax, user fees, and local cesses form the backbone of ULB revenues but together constitute only 20–25% of potential municipal income.
  - Heavy reliance on State governments limits financial autonomy.
- **Transparency Issues:** Financial statements are usually delayed or incomplete. Also political considerations sometimes influence fiscal decisions.
- **Shallow Municipal Bond Market:** India's **municipal bond market is still small and underdeveloped**, favouring financially strong cities and raising the risk of unsustainable debt for weaker towns.

Way Ahead

- **Build Institutional Capacity:** Create professional municipal cadres in finance, planning and project management with strengthened digital accounting and timely auditing systems.
- **Strengthen Revenue Systems:** Modernise property tax using technology such as GIS mapping. Ensure reasonable user charges with safeguards for vulnerable groups. Implement State Finance Commission recommendations effectively.
- **Adopt a Phased Borrowing Strategy:** Allow borrowing only after meeting clear reform benchmarks. Promote pooled financing models for smaller cities along with providing credit enhancement mechanisms to reduce investor risk.

Concluding remarks

- The Urban Challenge Fund can become a **catalyst for stronger and financially independent cities.** However, borrowing should follow reforms, not precede them.
- Unless Urban Local Bodies build administrative capacity and stable revenue systems, expanded market access may create cities of debt rather than sustainable engines of urban growth.

Source: TH

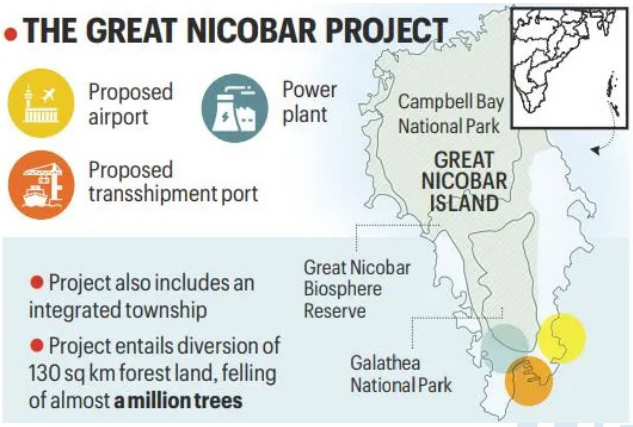
NGT UPHOLDS ENVIRONMENTAL CLEARANCE FOR GREAT NICOBAR MEGA PROJECT

Context

- Recently, a Bench of the **National Green Tribunal (NGT)** cleared the way for the **Great Nicobar Island mega-infrastructure project,** noting that 'considering the strategic importance' of it and 'other relevant considerations'.

About the Great Nicobar Project

- It is a large-scale infrastructure initiative conceived by **NITI Aayog**, formally called as the **Great Nicobar Island Development Project**.



- It is implemented through the **Andaman and Nicobar Islands Integrated Development Corporation (ANIIDC)**.
- It aims to transform Great Nicobar into a strategic economic and maritime hub.
- The project involves diversion of forest land and large-scale infrastructure development, raising environmental concerns.
- **Key Components:**
  - **International Container Transshipment Terminal (ICTT)** at Galathea Bay;
  - **Greenfield international airport** (civil and military use);
  - **Integrated township** for phased population growth;
  - **450-MVA gas and solar-based power plant.**
- **Strategic Significance:**
  - Located near the **Malacca Strait**, a key global shipping route.
  - Intended to strengthen India's **maritime trade capacity**.
  - Enhances India's **defence and geopolitical presence** in the Indo-Pacific region.

About Great Nicobar

- It is the **southernmost island of India**, part of the **Nicobar group of islands** in the Union Territory of **Andaman and Nicobar Islands**.
- It lies close to the **Malacca Strait**, one of the world's busiest maritime trade routes.
  - **Indira Point**, India's southernmost tip, is located here.
- It is a part of a **UNESCO-recognized Biosphere Reserve**.
- It is ecologically fragile and **seismically sensitive (Zone V).**

Petitions and Allegations Before NGT

- The project relied on limited baseline data, violating the **Island Coastal Regulation Zone (ICRZ) Notification, 2019.**
- Around **700 hectares** allegedly fell within ecologically sensitive or prohibited ICRZ areas.
- There was **non-compliance with the NGT's 2023 order** directing a revisit of the **Environmental Clearance (EC).**
- **Other Concerns:**
  - Potential impact on **coral reefs, turtle nesting sites, and biodiversity**.
  - Risks due to **seismic and tsunami vulnerability** (2004 tsunami impact).
  - Concerns over rights and livelihoods of **Shompen and Nicobarese communities**.
- The **NGT disposed of these petitions** with its latest ruling.

Issues Examined by the Tribunal & Its Environmental Clearance

- **Protection of Coral Reefs:** The NGT concluded that **no coral reefs exist within the core project area,** based on submissions from the **Zoological Survey of India (ZSI).**
  - Scattered coral formations, if present, will be **translocated** as per scientific recommendations.
  - MoEF has been directed to ensure **coral protection and regeneration using proven scientific methods**.
- **Baseline Environmental Data:** NGT relied on findings from a **High-Powered Committee (HPC)** headed by former Environment Secretary, which **revisited the clearance in compliance** with the NGT's April 2023 order.
- **Compliance with ICRZ Norms:** The NGT concluded that **'no part of the project'** falls within **prohibited ICRZ areas**.

- Portions of port infrastructure that may fall **within CRZ-1A and CRZ-1B areas** under the proposed master plan would be **excluded in the revised plan**.
- The Tribunal stressed that the conditions of the ICRZ Notification cannot be ignored and must be strictly adhered to.

- **Environmental Safeguards and Conditions:** The NGT noted that the environmental clearance contains specific safeguards, including protection measures for **Leatherback sea turtles, Nicobar megapode, saltwater crocodiles, robber crabs, Nicobar macaques** and other endemic bird species.
- **Shoreline and Coastal Protection Measures:** The Tribunal directed the MoEF to ensure that:
  - Construction activities, including foreshore development, do not cause **erosion or adverse shoreline changes**.
  - Sandy beaches are preserved, as they are crucial nesting sites for turtles and birds.
  - The island's shoreline is protected to prevent ecological degradation.

About National Green Tribunal (NGT)

- It is a **specialized judicial body** to handle **environmental disputes** related to environmental protection, conservation of forests, natural resources, and enforcement of legal rights relating to the environment in India.
- **Establishment:**
  - Created under the **National Green Tribunal Act, 2010**
  - Replaced the **National Environment Appellate Authority**
- **Headquarters:** New Delhi
- **Zonal Benches:** Pune (West), Bhopal (Central), Chennai (South), Kolkata (East)

Jurisdiction

- The NGT has jurisdiction **over civil cases** relating to substantial environmental questions under laws such as:
  - The Water (Prevention and Control of Pollution) Act, 1974;
  - The Water (Prevention and Control of Pollution) Cess Act, 1977;
  - The Forest (Conservation) Act, 1980;
  - The Air (Prevention and Control of Pollution) Act, 1981;
  - The Environment (Protection) Act, 1986;
  - The Public Liability Insurance Act, 1991;
  - The Biological Diversity Act, 2002.
- Decisions of the Tribunal are **binding**.

Institutional Strengths

- Application of the **'Polluter Pays'** and **'Precautionary'** principles;
- Dedicated environmental expertise (Judicial & Expert Members);
- Time-bound disposal (ideally within six months);
- Power to provide relief, compensation, and restoration.

Source: IE

DISTRICT COOLING: A CLIMATE-SMART SOLUTION FOR INDIA'S URBAN FUTURE

Context

- In the backdrop of rising temperatures and rapid urbanisation, district cooling is emerging as a climate-responsive and urban planning solution aligned with India's sustainability goals.

What is District Cooling?

- District cooling is a **centralised system that supplies air-conditioning to multiple buildings** through a network of insulated underground pipes.
- A **central plant produces chilled water** (around 6–7°C), which circulates to connected buildings.
- The **water absorbs heat (returning at 12–14°C)** and is **re-cooled** at the plant in a closed-loop system.
  - Buildings receive **"cooling as a service"** and do not require individual chillers or cooling towers.
- **Tariff structure generally includes:**
  - One-time connection charge,
  - Fixed demand charge (based on reserved capacity),
  - Variable consumption charge.

Environmental Benefits

- **Large centralised chillers** operate at **much higher efficiency** than individual building systems.
- Peak electricity demand can decline by **20–30%,** easing grid stress during heatwaves. Greenhouse gas emissions can fall by **15–40%** due to reduced electricity use.
- **Refrigerant volumes** in buildings can be **reduced by up to 80%,** lowering leakage risks and supporting India's Kigali Amendment commitments under the Montreal Protocol.

Source: TH

SINGLE GENOME-EDITING STRATEGY CAN HELP TREAT MULTIPLE DISORDERS

Context

- A study in Nature recently revealed that researchers have developed a method to address many **nonsense mutation diseases using a single genome-editing strategy.**

About

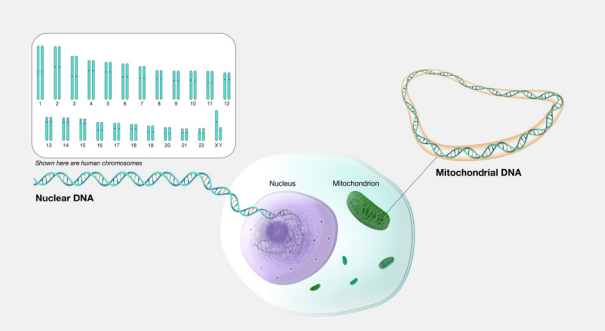
- Their approach is called **Prime-Editing-mediated Readthrough of premature termination codons (PERT).**
- It reprogrammes **one of the cell's own genes into a tool** to override premature stop signals, **allowing the cell to ignore the faulty instruction and complete the protein.**
- The study offers a proof-of-concept for a gene-agnostic therapy that could benefit many rare diseases caused by nonsense mutations.

Genetic Disorders and Nonsense Mutations

- **Genetic disorders** often stem from **small errors in the DNA sequence** with major consequences.
  - **Many diseases** like cystic fibrosis and Batten disease can be traced to changes disrupting the cell's ability to build a complete, functional protein.
- **Nonsense Mutation:** One particularly common reason is the **nonsense mutation,** where a **single incorrect DNA letter inserts a premature stop signal.**
  - When the cell encounters it, protein production ends too early, leaving the body without important enzymes, transporters or structural components.
  - **Nonsense mutations account for about a quarter** of all known disease-causing genetic changes.
- **Therapy:** Each one halts a different protein at a different point, creating a wide range of disorders that, at present, **require separate treatments.**
  - Each therapy needs to be designed, tested and approved on its own. This is a **slow and expensive process.**

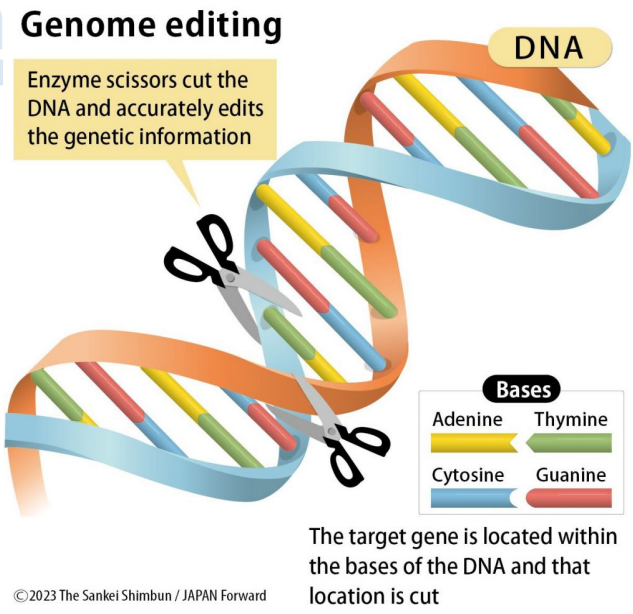
Genome

- The genome is the **entire set of DNA instructions found in a cell.**
- In humans, the genome consists of **23 pairs of chromosomes** located in the cell's nucleus, as well as a small chromosome in the cell's mitochondria.
- A genome contains **all the information needed for an individual to develop and function.**



Gene Editing

- **Genome editing technologies** enable scientists to make changes to DNA, leading to changes in physical traits, like eye color, and disease risk.
  - These technologies act like scissors, cutting the DNA at a specific spot. Then scientists can remove, add, or replace the DNA where it was cut.
- The first genome editing technologies were developed in the **late 1900s.**
  - More recently, a new genome editing tool called **CRISPR**, invented in 2009, has made it easier to edit DNA.
  - CRISPR is simpler, faster, cheaper, and more accurate than older genome editing methods.



Gene Therapy

- It is a technique that uses genes to treat, prevent, or cure diseases by:
  - Replacing faulty genes,
  - Deactivating harmful genes,
  - Introducing new genes to restore health.

- **There are two different categories of gene therapies: germline therapy and somatic therapy.**
  - **Germline therapies** change DNA in reproductive cells (like sperm and eggs). Changes to the DNA of reproductive cells are passed down from generation to generation.
  - **Somatic therapies,** on the other hand, target non-reproductive cells, and changes made in these cells affect only the person who receives the gene therapy.

Conclusion

- While genetic technologies offer **promising tools for conservation**, their application must be guided by scientific rigor, ethical considerations, robust regulation, and ecological sensitivity.
- A balanced, interdisciplinary approach is key to ensuring their responsible and effective use.

Source: TH

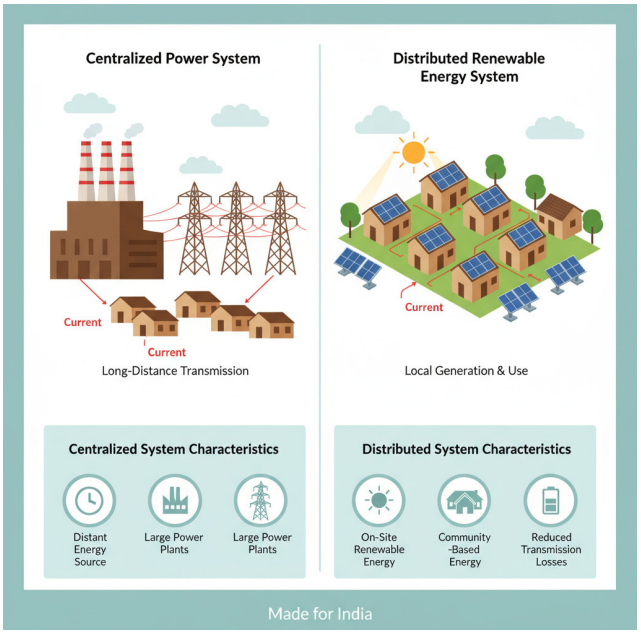
AI COULD BE GAME CHANGER FOR DISTRIBUTED RENEWABLE ENERGY

Context

- **Artificial intelligence (AI)** can be a game changer for India's **rapidly expanding distributed renewable energy,** said the Ministry of New and Renewable Energy (MNRE) at India AI Impact Summit.

Distributed Renewable Energy (DRE)

- **Distributed renewable energy (DRE)** refers to small-scale, decentralised power generation systems typically ranging from a few kilowatts to megawatts that produce electricity from renewable sources directly.



  - **Unlike conventional centralized power plants** that require extensive transmission infrastructure, DRE systems operate independently or connect to the local distribution network.
- **Sources:** rooftop solar, small wind turbines, or biomass.
- India has around 140 gigawatts (GW) of solar power capacity, of which DRE is about 35 GW.
  - In the last 15 months, India has added close to 18 GW to DRE, both under the PM Surya Ghar and PM-KUSUM.
- **Advantages of DRE in India:**
  - Rapid deployment in remote areas without waiting for grid extension.
  - Reduced transmission and distribution losses.
  - Enhanced energy security through diversification.
  - Lower environmental impact compared to fossil fuels.
  - Job creation and economic development in rural areas.
  - Empowerment of local communities through energy ownership.

Use of AI in DRE

- **Optimising Energy Systems:** AI helps forecast solar and wind better, enabling higher renewable integration and reducing curtailment.
  - AI-managed smart grids, batteries, and demand-response systems reduce energy wastage.
- **Efficiency in Industries:** AI-driven optimization reduces emissions in transport (fuel routing, logistics), buildings (smart HVAC), and manufacturing (process automation).
- **Policy Framework:** Energy Conservation Building Code & National Energy Efficiency Roadmap integrate AI in renewable energy, and sustainable design.
- **Smart Real Estate:** AI-driven solutions such as smart lighting, predictive Heating, Ventilation, and Air Conditioning (HVAC), automated building controls energy savings up to 25%.

Challenges

- **Data Scarcity and Poor Quality:** Limited availability of high-resolution, real-time data from rooftop solar, microgrids, and rural systems reduces the accuracy of AI forecasting and optimisation models.
- **High Initial Costs:** Deployment of smart sensors, AI software platforms, and skilled manpower increases upfront investment, making small DRE projects less financially viable.

- **Skill and Capacity Constraints:** Lack of trained professionals in AI–energy integration, especially at the local utility and DISCOM level, limits effective implementation.
- **Cybersecurity and Interoperability Risks:** AI-enabled DRE systems are vulnerable to cyberattacks and often face compatibility issues due to diverse hardware vendors and legacy grid infrastructure.

Key DRE Solutions Transforming India's Energy

- **Rooftop Solar Systems:** These systems range from 1-10 kW for residential installations to larger capacities for commercial and industrial users.
- **Solar + Storage Solutions:** Integrated solar and battery storage systems address the intermittency challenge of solar power.
- **Solar Agricultural Pumps:** These systems eliminate farmers' dependence on diesel pumps or unreliable grid electricity.
- **Biomass and Small Hydro:** Biomass gasification plants convert agricultural waste into electricity, providing a reliable baseload power source complementary to solar.
  - Small hydro projects (up to 25 MW) harness flowing water in hilly regions.

Government Policies and Incentives Driving DRE Adoption

- **PM-KUSUM Scheme:** The Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) aims to add 30.8 GW of solar capacity through:
  - Component A: 10 GW of decentralized ground-mounted solar plants.
  - Component B: Installation of 20 lakh standalone solar pumps.
  - Component C: Solarization of 15 lakh grid-connected agricultural pumps.
  - The scheme offers 30-90% subsidies depending on the component and beneficiary category.
- **Pradhan Mantri Surya Ghar Yojana:** This scheme targets one crore households with rooftop solar installations by providing:
  - Subsidy of 40% for systems up to 3 kW.
  - Subsidy of 20% for systems between 3-10 kW.
  - Simplified application process through national portal
  - Low-interest loans through partner banks.
  - The initiative aims to save households up to 15,000 annually in electricity bills.
- **State-Level Initiatives:** Several states have introduced similar complementary policies.

Conclusion

- Distributed Renewable Energy represents a transformative approach to addressing India's energy challenges.
- By generating clean power close to the point of use, DRE systems enhance energy access, improve reliability, reduce environmental impact, and create economic opportunities.
- The declining costs of technologies, supportive government policies, and innovative business models are accelerating DRE adoption across India.

Source: IE

CALLS FOR REFORM OF GLOBAL TRADING SYSTEM

In News

- Recently, the head of the World Trade Organization agreed with U.S. calls for reforming the global trading system, noting it is resilient but not robust.

Global Trading System and Role of WTO

- The World Trade Organization (WTO) is the sole global body governing international trade rules.
- It is aiming to ensure smooth, predictable, and free trade through agreements negotiated and ratified by member nations.
- It manages global trade rules, serves as a forum for negotiating agreements, resolves trade disputes, and supports developing countries.
- Its decisions are made by member governments through ministers or representatives in Geneva.

Emerging Issues

- **Rising Protectionism:** Growing use of tariffs and trade barriers is weakening free trade norms.
- **Geopolitical Rivalries:** Strategic competition among major powers is disrupting supply chains and markets.
- **Agricultural Disputes:** Subsidies by developed nations distort trade, affecting developing countries.
- **Dispute Settlement Crisis:** WTO's Appellate Body has been inactive since 2019, weakening rule enforcement.
- **Digital & Climate Issues:** Lack of global consensus on e-commerce, data flows, and carbon taxes is creating new trade tensions.

Suggestions

- Restore dispute settlement and update rules for digital trade, services, and sustainability.

- Strengthen the voice of developing countries, especially on agriculture and climate trade.
- Diversify sourcing to reduce overdependence and improve stability.
- Align trade policies with climate goals and promote green technologies.

Conclusion

- Global trade is moving away from liberal multilateralism toward mercantilism, where trade is used as a tool of state power and national advantage.
- Therefore The global trading system needs urgent reforms to prevent fragmentation and trade conflicts, ensuring it remains rules-based, inclusive, and growth-oriented.
- India should back WTO reforms while safeguarding farmers and small industries.
    - India has opportunities in digital infrastructure, renewable energy, and services, but must strengthen institutions, social cohesion, and public investment to remain relevant in the emerging world order.

Source :DD

NEWS IN SHORT

OL CHIKI SCRIPT

Context

- President Droupadi Murmu inaugurated the centenary celebration of the Ol Chiki script in New Delhi, emphasising its importance in preserving Santhal heritage.

About

- Ol Chiki was developed in **1925** by **Pandit Raghunath Murmu** to provide a dedicated writing system for the Santhali language.
- It comprises **30 letters** designed to capture Santhali phonetics with precision, allowing systematic documentation of its vocabulary and grammar.
- Santhali, a member of the **Austroasiatic language family**, is spoken across **Jharkhand, Odisha, West Bengal, Assam, and Bihar**.
    - It was included in the Eighth Schedule of the Constitution in 2003.

Do you know?

- Before the creation of Ol Chiki, the language was written in scripts such as Roman, Bengali, Odia, and Devanagari.

Source:PIB

BHU-AADHAAR

Context

- The Government of Delhi has initiated the assignment of a **14-digit Unique Land Parcel Identification Number (ULPIN)**, popularly termed **'Bhu-Aadhaar',** to every land parcel in the Capital.

What is ULPIN (Bhu-Aadhaar)?

- Unique Land Parcel Identification Number (ULPIN) is part of the **Digital India Land Records Modernization Programme (DILRMP).**
- It is a **14-digit identification number** accorded to a land parcel based on the **longitude and latitude coordinates** of the land parcel and depends on detailed surveys and geo-referenced cadastral maps.
    - The system integrates GIS mapping, drone surveys, and Ortho Rectified Images (ORI) for accuracy.
- It functions as a **digital land identity,** similar in concept to Aadhaar for individuals.

Significance

- The initiative aims to **enhance transparency, curb fraudulent transactions, and modernise land records** through geospatial technology.
- It complements the **SVAMITVA Scheme**, under which 48 villages in Delhi have already been covered.

Source: ET

CBDC-BASED DIGITAL FOOD COUPON PILOT IN GUJARAT

Context

- The Government of India has launched a Central Bank Digital Currency (CBDC)-based Digital Food Currency pilot in Gujarat in collaboration with the Reserve Bank of India (RBI).

About

- Under the CBDC framework, **digital coupons generated through the RBI** will be credited directly to beneficiaries as programmable digital currency (e).
- Beneficiaries can redeem their entitled quantity of foodgrains at **Fair Price Shops (FPS)** using **CBDC coupon or voucher codes.**
- The system will address challenges related to **biometric authentication** and **e-POS operational issues** while ensuring secure, traceable and real-time transactions.

Evolution of Digital Reforms in Food Security

- Key initiatives taken in the past include:
  - **End-to-end digitisation of ration cards** and nationwide portability under the **One Nation One Ration Card (ONORC)** framework.
  - **Deployment of electronic Point of Sale (e-POS)** devices for Aadhaar-enabled authentication and real-time transaction capture.
  - **Rightful Targeting Dashboard:** A data-driven validation mechanism that audits, verifies, and sanitises PDS databases to improve targeting accuracy and ensure that benefits reach eligible households.
  - **Ann Chakra:** A digital supply-chain optimisation tool that enhances route planning and logistics efficiency in food grain movement, reducing transportation costs and delays.
  - **Ann Sahayata:** A strengthened grievance redressal platform that improves transparency, responsiveness, and citizen-centric service delivery within the PDS framework.

Source: PIB

GOVERNMENT LAUNCHES "PM RAHAT"

Context

- Prime Minister Modi has approved the launch of the PM RAHAT (Road Accident Victim Hospitalization and Assured Treatment) Scheme.

Features of the Scheme

- **Every eligible road accident victim** on any category of road will be entitled to cashless treatment up to **one lakh 50 thousand per victim,** for a **period of seven days** from the date of accident.
- **Stabilization treatment** will be provided for up to 24 hours in non-life-threatening cases and up to 48 hours in life-threatening cases, subject to police authentication on an integrated digital system.
- **It is implemented through** a technology-driven framework amalgamating the Electronic Detailed Accident Report (eDAR) platform of the Ministry of Road Transport and Highways with the Transaction Management System (TMS 2.0) of the National Health Authority.
  - This integration enables seamless digital linkage from accident reporting to hospital admission, police authentication, treatment administration, claim processing, and final payment.
- **Reimbursement to hospitals** will be made through the Motor Vehicle Accident Fund (MVAF).
- **Grievances of road accident victims** will be addressed by a Grievance Redressal Officer nominated by the District Road Safety Committee.

Source: PIB

JAPAN'S 'GOD'S CROSSING'

Context

- A centuries-old winter phenomenon known as **"Miwatari" (God's Crossing)** at Lake Suwa has failed to appear for several consecutive years, signalling the growing impact of climate change in East Asia.

What is "Miwatari"?

- "Miwatari" refers to a **natural ice ridge** that forms **when the entire surface of Lake Suwa freezes.** It occurs after several days of temperatures **below –10°C.**
- **Thermal expansion** and **contraction of the frozen surface** creates cracks; newly formed ice shards push upward, forming a raised ridge.
- Traditionally, it is believed to mark the path of a deity crossing the lake to visit his consort.

Evidence of Climate Change

- Miwatari appeared almost every winter until the **1980s**, but its frequency has sharply declined since then and it **has not appeared** at Lake Suwa since **2018.**
- Morning winter temperatures increasingly fail to drop low enough for complete lake freezing.

Source: TH

KAMALA HYDROELECTRIC PROJECT

In News

- Recently, the expert panel of the Ministry of Environment, Forest and Climate Change of India has recommended clearance for **Kamala hydroelectric project** in Arunachal Pradesh, which will require felling 23.4 lakh trees.

Kamala Hydroelectric Project

- It is a multipurpose project with the **twin objectives of power generation and flood moderation**. It is proposed by the **National Hydroelectric Power Corporation (NHPC) Limited.**
- It is located on **the Kamla river, a right-bank tributary of Subansiri** which is **Brahmaputra's tributary.**

Source :IE

EMERGENCY LANDING FACILITY

Context

- Prime Minister Narendra Modi inaugurated a 4.2 kilometre **Emergency Landing Facility** on the Moran Bypass in Assam, the first such facility in Northeast India.

About

- An Emergency Landing Facility or ELF is a reinforced highway stretch designed to act as an alternative runway for the Indian Air Force.
- The concept of ELF emerged during the Cold War, when countries developed highway runways to reduce the vulnerability of fixed airbases. Nations such as **Finland, Sweden, and Switzerland** continue to use such dual-use infrastructure.
- Located about 300 kilometres from the **Line of Actual Control**, the Moran ELF provides critical backup during conflict situations and strengthens disaster response in remote regions.
  - It can handle fighter aircraft up to 40 tonnes and transport aircraft up to 74 tonnes.
- With around 15 such facilities now operational, this strategic grid stretches from the deserts of Rajasthan to the expressways of Uttar Pradesh and now to the strategic borders of the Northeast.

Source: TOI

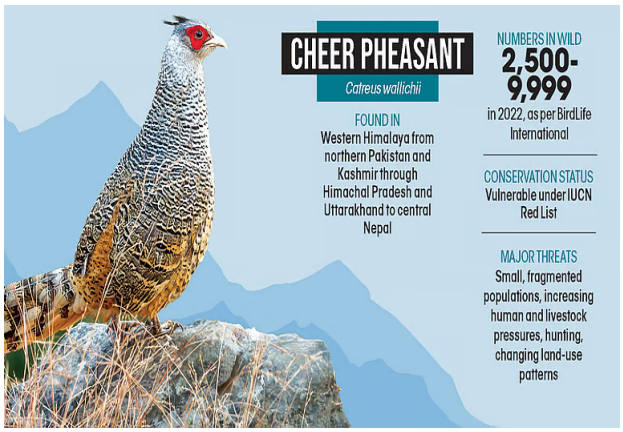
CHEER PHEASANT

In News

- **BirdLife International and the International Union for Conservation of Nature (IUCN)** classified the **cheer pheasant as Vulnerable**, a reflection of its small and naturally fragmented populations.

Cheer Pheasant

- The **cheer pheasant nests** on the ground and shows strong natal philopatry, relying on early successional grasslands maintained by low-intensity traditional cutting and burning.



  - "Cheer" denotes the bird's association with **Chir Pine forests,** while **"Pheasant" refers to its belonging to the game-bird family**, which predominantly consists of ground-dwelling species.
- The species now survives in scattered Himalayan grasslands across northern Pakistan, Kashmir, Himachal Pradesh, Uttarakhand, and central Nepal, preferring steep, rocky, scrubby slopes at 1,200–3,350 m elevation.
- The cheer pheasant enjoys the highest level of legal protection—Schedule I of India's Wildlife (Protection) Act, 1972, and Appendix I of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)—and is safe-guarded across India, Nepal and Pakistan.

Source :DTE

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