

NEWS TODAY

RBI announces measures to manage liquidity conditions

The measures included a ₹60,000-crore Open Market Operations (OMOs) purchase auctions of Government securities, a 56-day Variable Rate Repo (VRR) auction of ₹50,000 crore, and a \$5-billion USD/rupee buy/sell swap auction for a six-month tenure.

- **Open Market Operation (OMO)** refers to the purchase and sale of securities in the open market by the Central Bank of a country.
- **VRR** is a **short-term** liquidity adjustment tool employed by the RBI to supply funds to the banking system.
 - ⊕ Under this mechanism, banks borrow funds at an **interest rate determined** through an **auction** process.
 - ⊕ The auction amount is **decided by the RBI**.
 - ⊕ It is a tool under **Liquidity Adjustment Facility**.
 - ◆ Under this, RBI has the discretion to conduct **overnight repo or longer term repo auctions at fixed rate or at variable rates** depending on market conditions and other relevant factors.

Reason for liquidity issue in Indian banks

- **Lag effect:** The liquidity from the government side comes into the market after a gap which causes fluctuations in liquidity.
- **Inflation control measures:** Sometimes RBI controls inflation by keeping higher rates.
- **Other:** Higher cash **withdrawal** led by the festival demand, **deposits** have been **growing slower** than advances over the past one year, etc.

Ministry of MSMEs Launches MSME Trade Enablement and Marketing (TEAM) Initiative

It has been launched under the "Raising and Accelerating MSME Productivity (RAMP)" Programme of the Ministry of MSMEs.

- **RAMP** is the **World Bank supported Central Sector Scheme** implemented by **Ministry of Micro, Small & Medium Enterprises (MSMEs)** over the 5 year period **2022-23 to 2026-27**.
- It aimed at **improving access of MSMEs to market, finance & technology** upgradation by enhancing the outreach of existing **Ministry of MSMEs schemes**.

About TEAM Initiative

- **Aim:** Empower MSMEs by enabling **access to digital commerce through ONDC**, promoting their market reach & **reducing the cost of doing business**.
 - ⊕ The initiative will **leverage Digital Public Infrastructure** through ONDC to support micro and small enterprises (MSEs).
- **Outlay:** ₹277.35 crore
- **Duration:** FY 2024-2025 to FY 2026-2027.
- **Target beneficiaries:** 5 lakh MSEs (50% will be women owned MSEs).
- **Implementing Agency:** National Small Industries Corporation (NSIC).
- **Eligibility Criteria:** **MSEs with valid Udyam Registration** under manufacturing or service sectors.
 - ⊕ **Medium Enterprises are not eligible** for most benefits.

What is Open Network for Digital Commerce (ONDC)?

- It is initiative of **Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce**, aimed at **democratizing digital commerce**.
- Unlike traditional platforms, ONDC enables **interoperability** across buyer & seller applications.



Indian Digital Economy to contribute to nearly one-fifth of national income by 2029-30: Study

The study is titled 'Estimation and Measurement of India's Digital Economy' and released by the Ministry of Electronics & Information Technology (MEITY).

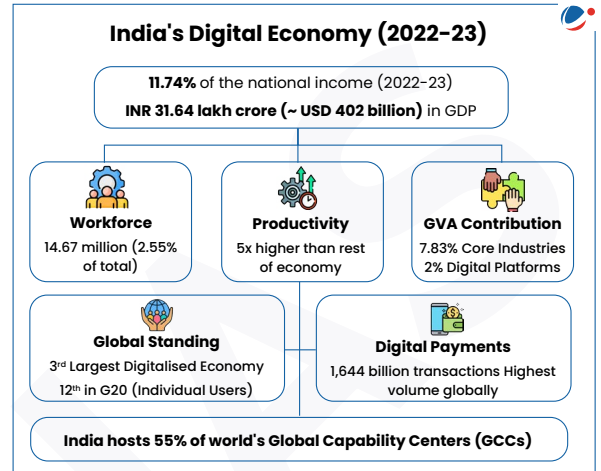
- It utilizes the Organisation for Economic Co-operation and Development (OECD) and Asian Development Bank (ADB) approach for measurement of digital economy.

Key Observations: (see infographic)

- Sectoral Prospects: Beyond ICT sectors, digital intermediaries and platforms** are promoting digital diffusion and access.
- Growth prospects: India's digital economy is expected to **grow twice as fast** as the overall economy.
 - India's digital economy is likely to rise to **13.42% by 2024-25**.
- Digitization of traditional sectors:** There is **lack of uniformity in digitization**.
 - E.g. In the Banking, Financial Services, and Insurance (BFSI) sector, over **95% payment transactions** are digital but other **financial services like loans** are less digitized.

Recommendations:

- Digital literacy and skilling:** Adopt collaborative efforts like Pradhan Mantri Gramin Digital Saksharta Abhiyaan (PMGDISHA).
- Minimise regulatory uncertainty:** Formulation of **policies** and fill the **data gap** to ensure evidence-based interventions.
- Enhance cybersecurity and trust:** Increase cybersecurity awareness, build **cross-country collaboration**, invest in R&D etc.
- Make high-quality broadband universal:** Combine **supply-side efforts** with **demand-side interventions** to ensure the **affordability** of devices and data services.



Bureau of Energy Efficiency (BEE) releases offset methodologies for suggestions

A list of 10 sectors was approved for the **Offset Mechanism** under the **Carbon Credits Trading Scheme (CCTS)**.

- Out of these, **six sectors belong to Phase 1**, for which 12 methodologies have been developed.
- The methodologies have been adapted from the existing **UNFCCC Clean Development Mechanism (CDM) methodologies**.
 - Under the CDM, emission-reduction projects in developing countries can earn **certified emission reduction credits**.
 - These **saleable credits can be used by industrialized countries** to meet a part of their emission reduction targets under the **Kyoto Protocol**.
- These methodologies cover a range of sectors (given in the table below).

Sectors	Methodology
Energy	Grid-connected electricity generation from renewable sources Projects.
Industry	Energy efficiency and fuel switching measures for industrial facilities Projects.
Waste handling and disposal	Landfill methane recovery Projects.
Agriculture	Production of biofuel, Methane recovery from livestock and manure management at households and small farms.
Forestry	Afforestation and reforestation of lands except wetlands Projects.
Transport	Modal shift in transportation of cargo from road transportation to water or rail transportation, electric and hybrid vehicles.

Carbon Credits Trading Scheme (CCTS), 2023

Introduced through amendments in the **Energy Conservation (Amendment) Act, 2022**, it establishes Indian Carbon Market under two mechanisms:

- Compliance mechanism: Mandatory program** where the Government will set GHG emission intensity targets for **obligated entities**.
 - Initially includes 9 sectors like Fertiliser, Iron & Steel, Pulp & Paper, Petrochemicals, Petroleum refinery, etc.
- Offset mechanism: A voluntary project-based mechanism for non-obligated entities** (not covered under compliance mechanism).
 - Non-obligated entities** can register their projects and earn **Carbon Credit Certificates (CCCs)** once they meet eligibility requirements outlined by the BEE.

Annual Status of Education Report (ASER) 2024 released by NGO Pratham Foundation

The ASER is a nationwide rural household-based survey of children's schooling and learning status.

- It tests the **schooling status** for children in the age group of **3-16**, and the **ability to read simple text & do basic arithmetic** in the age group of **5-16**.
- The ASER survey was conducted **annually** from 2005 till 2014. Thereafter, an **alternate-year cycle** was introduced.

Key Findings

- Reversing the Learning Gap: Improvements in basic reading and arithmetic** among students of classes 3 and 5 in rural areas **reverting back from the post-pandemic damage**.
 - Improvement in both reading & arithmetic levels** for all elementary grades (Std I-VIII) since 2022 with **arithmetic levels being highest** over the decade.
- Digital Literacy:** In 2024, for the **first time**, it includes a component of '**Digital Literacy**' among the age group **14-16**.
 - Access to smartphones is close to universal:** Almost **90%** of both girls and boys report having a smartphone at home.
 - Gender Gap in Smartphone Ownership:** 36.2% of boys own a smartphone compared to just 26.9% of girls.
 - Smartphone Usage More for Social Media than Education:** Only 57% of teenagers use smart devices for educational purposes, while approximately 76% use them for social media.
- School Infrastructure:** All Right to Education indicators in ASER show slight improvements, including **functional girls' toilets, drinking water facilities** etc.



100th Launch of the Indian Space Research Organisation (ISRO) from Sriharikota

The ISRO successfully placed the **NVS-02 satellite** into **Geosynchronous Transfer Orbit** using **GSLV-F15** from **Satish Dhawan Space Centre, Sriharikota, Andhra Pradesh**

- GSLV-F15 Vehicle** is a **three stage launch vehicle** with a third-stage **CUS 15 cryogenic engine**.
- The **NVS-02** is the **second satellite in the NVS series**, and part of **India's Navigation with Indian Constellation (NavIC)**.

What is NavIC?

- About:** It is a **regional navigation satellite system** (erstwhile known as **Indian Regional Navigation Satellite System**) launched by ISRO.
- NavIC Network:** NavIC is designed with a **constellation of 7 satellites** of which **3 satellites are placed in geostationary orbit & 4 satellites are placed in inclined geosynchronous orbit**.
- NavIC Services:** **Standard Position Service (SPS)** for civilian users & **Restricted Service** for strategic users.
- Coverage Area:** India and a **region up to 1500 km beyond Indian boundary**.
- Accuracy:** NavIC's SPS offers **accuracy of better than 20 meters** and a **timing accuracy of better than 40 nanoseconds**.
- Other:** NavIC SPS signals are interoperable with the other global navigation satellite system (GNSS) signals i.e., **GPS** (of USA), **GLONASS** (Russia), **Galileo** (European Union) & **BeiDou** (China).

About ISRO

- Genesis:** It is the space agency of India formed on **August 15, 1969**.
 - ISRO was previously the **Indian National Committee for Space Research (INCOSPAR)**, set up in 1962, as envisioned by **Dr. Vikram Sarabhai**.
- Headquarters:** Bengaluru.
- Objective:** Development and application of space technology for various national needs.
- First Launch:** The first experimental flight of the **SLV-3** (carrying the **Rohini Technology Payload**) in **1979** was led by **Dr. A.P.J. Abdul Kalam**.

Also In News

Reverse Flip

Quick commerce unicorn Zepto has completed a **reverse flip from Singapore to India** ahead of its planned Initial Public Offering (IPO).

About Reverse Flip

- Reverse Flip** is the term used to describe the trend of overseas start-ups shifting their domicile to India and listing on Indian stock exchanges.
- Reasons:** To capitalize on India's large and growing economy, access to deeper pools of venture capital, favourable tax regimes, better intellectual property protection, young and educated population, and favourable government policies.
- The Economic Survey 2022-23 suggested measures to accelerate reverse flipping:** simplifying the processes for tax vacations, decreasing tax layers, etc.

Namdapha Tiger Reserve

An elephant has been spotted in **Namdapha Tiger Reserve** after over a decade.

About Namdapha Tiger Reserve

- Location:** It is India's **easternmost tiger reserve** located in **Changlang District (Arunachal Pradesh)**.
- River:** **Namdapha River** flows through the National Park.
- Vegetation:** Evergreen Forests, Moist deciduous forests, subtropical forests, Temperate Forests and Alpine.
- Fauna:** It is the **only reserve in India** to host all four big cats—**tiger, leopard, clouded leopard, and snow leopard**.
- Flora:** Pinus merkusi and Abies delavayi (Exclusive to this), Mishimi Teeta (Copti teeta).



Lower-sodium salt substitutes (LSSS)

The Department of Nutrition and Food Safety (NFS) of the World Health Organization (WHO) has launched its new **guideline** on the use of lower-sodium salt substitutes.

About the LSSS

- **Composition:** They contain less **sodium** than regular salt and often include **potassium chloride**, with or without other agents, to achieve a flavour similar to regular salt.
- **Advantages:** Help in limiting sodium intake to below **2 g/day** to reduce noncommunicable diseases such as blood pressure and risk of cardiovascular diseases (CVDs).
- **Concerns:** LSSS with potassium can be harmful as high levels of blood potassium (hyperkalaemia), can affect individuals with **impaired kidney function**.



Deep Seek AI

China's DeepSeek AI models named **DeepSeek-V3** and **DeepSeek-R1** performed on par with ChatGPT challenging western dominance in AI.

About Deep Seek AI Models

- They are advanced **open sourced AI language models** and more **efficient** in reasoning, coding, and mathematical computation.
- They are also **cheaper** to use. **DeepSeek-R1** is reported to be **20 to 50 times cheaper** than OpenAI's models.
- It leads to **Jevons paradox** - Technological progress that makes a resource **cheaper** or more **efficient** to use often leads to an increase in **demand** for that resource.



F11 Bacteria

A recent study **discovered F11 bacteria** (*Labrys portucalensis*) that degrades at least 3 types of **per- and polyfluoroalkyl substances (PFAS)**.

About F11 Bacteria

- It is an **aerobic bacteria** from the **Xanthobacteraceae** family.
- It may aid **Bioaugmentation** in wastewater treatment etc.
 - ⊕ **Bioaugmentation** is the addition of **microorganisms** that can **biodegrade** recalcitrant molecules in a **polluted environment**.

About PFAS

- PFAS are **toxic chemicals** that **resist grease, oil, water, and heat**. They are called '**forever chemicals**' due to their almost **indestructible nature**.
- **Uses:** Nonstick cookware, grease-resistant food packaging, and waterproof and firefighting clothing etc.



Bi Paternal Mouse

Scientists create first adult mouse with **two Male Parents**.

- It was made possible through targeted imprinting gene edits in **Embryonic Stem Cells (ESC)**.
 - ⊕ ESC are **pluripotent** cells which give rise to all **somatic cell types in the embryo**.
- Researchers targeted 20 imprinting genes to overcome barriers in unisexual reproduction using **different techniques**, including CRISPR, frameshift mutations, gene deletions, and regulatory region edits.
- This demonstrates the potential for overcoming **barriers to unisexual mammalian reproduction** and improving regenerative medicine.



Silicon Carbide

Researchers have extracted silicon carbide from (simulated) **moon soil**, which could lead to the making of **silicon carbide-based composites** for building lunar habitats.

About Silicon carbide (SiC)

- Also known as **carborundum**, silicon carbide is a **synthetically produced** crystalline compound of **silicon** and **carbon**.
- **Properties:** **Extremely hard, high thermal conductivity**, excellent resistance to wear and oxidation, **resistance to chemical reaction** etc.
- **Application:** In electrical, mechanical, structural and ballistic fields and armor industries.



Nagoba Jatara

Nagoba Jatara, a holy pilgrimage event of **Mesram clan Adivasi Gonds**, started in Adilabad district, **Telangana**.

- Tribal people from **Maharashtra, Chhattisgarh, Orissa and Madhya Pradesh** belonging to the Mesram clan offer prayers at the festival.
- The **Gusadi Dance performance by dancers** from the Gond tribe is a major special attraction of the event.

About Gond Tribe

- A community of around **four million people spread all over central India**, they have a recorded history of 1400 years.
- The word 'Gond' comes from the **Dravidian expression 'Kond'** which means 'green mountain'.

Personality in News



Field Marshal K.M. Cariappa (1899-1993)

- He was remembered on his **birth anniversary**.

Key Contribution:

- He was independent India's **first Commander-in-Chief** of the Indian Army—a role **previously reserved for the British**.
 - ⊕ **Army Day**, celebrated every **January 15**, marks the day he took over as Commander-in-Chief, replacing General Sir Francis Roy Bucher.
- **Military Career: 1919-1953**
 - ⊕ He is the **first Indian to command a battalion in the Indian Army**.
 - ⊕ During **World War II**, he served in the **Middle East and Burma**.
- Following his **retirement**, he served as **Indian high commissioner to Australia & New Zealand**.
- The Government conferred the **rank of Field Marshal on Cariappa in 1986**.

Values:

- Leadership, Integrity, patriotism etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI