

## Periodic Labour Force Survey (PLFS) – Key Employment Unemployment Indicators for 2024 released

A total of 6,982 villages and 5,767 urban blocks were surveyed from January 2024 - December 2024. PLFS was launched by the National Sample Survey Office (NSSO) in 2017. The objective of PLFS is to estimate:

- The **key employment and unemployment indicators** in the short time interval of three months for the urban areas only in the 'Current Weekly Status' (CWS) (7 days preceding the date of enquiry.).
- Employment and unemployment indicators in both 'Usual Status' (principal activity and subsidiary economic activities over the past 365 days) and CWS in both rural and urban areas annually.

### Key highlight of the Survey

- **Current Weekly Status(CWS)**
  - ⊕ **Labour Force Participation Rate (LFPR):** Overall remained constant at 56.2%.
  - ⊕ **Worker Population Ratio (WPR):** Remained relatively unchanged (53.4% to 53.5%).
  - ⊕ **Unemployment Rate (UR):** Saw a minor drop (5.0% to 4.9%).
    - ◆ Decline in **unpaid helpers in household enterprises** seems to have contributed to the drop in WPR as well as LFPR among rural females
- **Principal and Subsidiary Status**
  - ⊕ **LFPR:** Marginally declined from 59.8% to 59.6%.
  - ⊕ **WPR:** Marginally declined from 58.0% to 57.7%.
  - ⊕ **Unemployment:** Increased from 3.1% to 3.2%.



### Key Employment and Unemployment Indicators

- **LFPR:** It is defined as the **percentage of persons in the labour force** (i.e. working or seeking or available for work) in the population.
- **WPR:** It is defined as the **percentage of employed persons** in the population.
- **UR:** It is defined as the **percentage of persons unemployed** among the persons in the labour force.

## Centre approved deal for 26 Rafale Marine (M) fighter jets from France

These fighter jets will be for the Indian **Navy** and will be deployed on the **country's first indigenous aircraft carrier INS Vikrant**.

- **The Indian Air Force operates 36 Rafale jets**, acquired earlier.

### About Rafale aircraft

- **Manufacturer:** Dassault Aviation, a French aerospace company.
- **"Omnirole" capabilities:** Which means **able to carry out all combat aviation missions** such as air defense, strikes, reconnaissance, nuclear deterrence, etc.
- **Generation:** 4.5 generation with maximum speed 1.8 Mach (1 Mach=1235km/hr).

Various Latest Generation Aircrafts	Specifications	Examples
<b>Fourth generation jet fighters (1970- 1980s)</b>	Ability to both <b>switch and swing roles</b> between air-to-air and air-to-ground.	MiG-29, F-16, Mirage-2000 etc.
<b>Four and half generation jet fighters</b>	Added 'stealth', radar absorbent materials, thrust vector controlled engines, to extend the range of fourth generation fighters.	Eurofighter Typhoon, Rafale etc.
<b>Fifth generation jet fighters</b>	<b>Advanced stealth technologies</b> and advanced weapons,	F-22 Raptor, Chengdu J-20 etc.

### U.S.-China 6<sup>th</sup>-Gen Aircraft Battle

- **USA:** The US President announced plans to move forward with a **next-generation fighter jet** dubbed F-47.
- **China:** In December 2024, China flew two sixth-generation fighter prototypes, the J-36 and J-50.
- **Sixth-generation fighter jets** are characterized by attributes such as **Artificial Intelligence (AI) integration, Hypersonic capabilities, Unmanned capabilities, etc.**

## Union Cabinet approved Modernization of Command Area Development and Water Management (M-CADWM)

M-CADWM as a sub-scheme of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is set to run for the period 2025-2026.

- PMKSY was launched in 2015-16 to enhance physical access of water on farm and expand cultivable area under assured irrigation, improve on-farm water use efficiency, etc.

### Key Features of M-CADWM

- Objective:** Modernization of the irrigation water supply network to supply of irrigation water from existing canals or other sources in a designated cluster.
- It will make robust backend infrastructure** for micro-irrigation by farmers from established source to the **Farm gate up to 1 hectare** with underground **pressurized piped irrigation**.
- Technology:** Use of Supervisory Control and Data Acquisition (SCADA), Internet of things technology will be used for **water accounting** and **water management**.
- Potential benefits:**
  - Increase the Water Use Efficiency (WUE)** at the farm level, increase agriculture production & productivity.
  - Sustainable farming by Irrigation Management Transfer (IMT)** to Water User Society (WUS) for management of irrigation assets.
    - WUS will receive handholding support for the **next five years**, helping them connect with economic entities like Farmer Producer Organizations (FPOs).
  - Attracting youth into farming** by adopting the modern method of irrigation.

### About Command Area Development and Water Management (CAD&WM) Programme

- Genesis:** It was launched in 1974-75 and was restructured and renamed as Command Area Development and Water Management (CADWM) Programme in 2004.
- Objective:** To enhance utilisation of irrigation potential created and improve agriculture productivity and production on a sustainable basis.
- It is being implemented** under PMKSY - Har Khet Ko Pani from 2015-16.
- 2 Components:**
  - Structural intervention:** On-Farm Development (OFD) works; Construction of field, intermediate & link drains; etc.
  - Non-Structural intervention:** One time Functional Grant to the registered Water Users' Associations (WUAs); Trainings, demonstration, and adaptive trials with respect to water use efficiency, etc.

## NHRC takes suo-motu cognisance of the difficulties faced by the Prisoners

Taking cognisance of the issue, National Human Rights Commission (NHRC) issued notices to the Chief Secretaries of all States and UTs to report on issues including overcrowding, a lack of basic amenities and healthcare facilities in jails.

- Under **Schedule VII of the Constitution of India**, Prisons fall in the **legislative and administrative domain of the States under List II**.

### Issues faced by the Prisoners

- Overcrowding and lack of basic amenities:** Indian prisons have an occupancy rate of ~131.4%.
  - Undertrials** made up **75.8% of India's prison population** in 2022.
  - Less than 40% of prisons provide sanitary napkins; only 18% have exclusive women's facilities.
- Women prisoners**
  - Violation of the rights to dignity and safety, increased violence** which causes mental distress.
  - Rights of women prisoners:** State jail manuals do not explicitly provide for the right to reproductive choice for a woman prisoner.
- Prisoners sentenced to death:** Inordinate delays in death penalty proceedings with the execution rate of just 0.3% in the period 2006 to 2022 (NCRB).
- Discrimination:** Division of prison work based on caste, prevalence of manual scavenging inside prisons, classification of prisoners based social status, etc.

### Existing Provisions for Prisoners

#### India

- Section 479 of the Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023:** Provides for release of an undertrial prisoner on bail on undergoing detention for a period extending up to one half of the maximum period of imprisonment specified for an offence under any law.
- Plea Bargaining (Section 289 to 300) in BNSS:** Enables pre-trial negotiation between the defendant and the prosecution.

#### Global

- Bangkok Rules: Adopted in 2010 by UN General Assembly,** provides for the rules for the treatment of women prisoners and non-custodial measures for women offenders.
- Nelson Mandela Rules: Adopted in 2015 by the UN General Assembly,** provides for Standard Minimum Rules for the Treatment of Prisoners.



## Japan builds 3D-Printed Train Station in just 6 hours

The West Japan Railway Company, a major railway operator in Japan unveiled a 3D-printed train station in the city of Arida, which it claimed was a world first.

### About 3D Printing

- **Definition:** 3D printing or **additive manufacturing** is a process of making three-dimensional objects from a digital file.
- **Process:** 3D-printed object is achieved using additive processes. In an additive process an object is created by laying down successive layers of material until the object is created.
- **Differentiator:** 3D printing is the opposite of subtractive manufacturing which is cutting out/ hollowing out a block of material with for instance a milling machine.

### Advantages of 3D Printing

- **Immediate realization of concepts:** As soon as designers have a 3D model possible to bring design to life.
- **Less dependency on workforce:** Significant for countries like Japan where the workforce is shrinking.
- **Customization on demand:** It can be done very quickly without altering the entire manufacturing process.
- **Cost-Effective:** Savings on material costs, labour and operational efficiency, reduced inventory and warehousing costs, etc.
- **More design freedom:** Complex geometries and lattices can be incorporated.
- **Other:** Eco-Friendly and sustainable, supports on-demand and on-location production, ensures better quality products, etc.

### Applications of 3D Printing

- **Manufacturing:** consumer products (e.g. eyewear), industrial products (manufacturing tools, prototypes, etc.).
- **Advanced Healthcare:** Custom prosthetics, Bioprinting organs such as organ on chip, etc.
- **Construction:** Architectural scale models, faster construction, finesse, etc.
- **Historical studies:** Help in reconstructing fossils, replicating ancient artefacts, etc.
- **Forensic:** Reconstructing evidence in forensic pathology.

## RBI's Monetary Policy Committee (MPC) meeting held

MPC consists of **six members** in which **three Members from RBI** and three are appointed by the **Central Government**.

### Key-decisions taken in MPC meeting

- **Policy stance:** MPC decided to reduce the policy **repo rate** by **25 basis points**, bringing it **down to 6 %** with immediate effect.
  - ⊕ **The repo rate** is the rate at which the RBI lends money to commercial banks, and a cut in this rate is aimed at **boosting lending and investment**.
  - ⊕ With this decision RBI changed its stance to **"accommodative"** from **"neutral"**.
    - ◆ Accommodative stance means RBI may reduce the **policy rates to increase the money supply in the economy**.
  - ⊕ The decision comes as **global economic uncertainty increases due to recent trade tariff tensions**, which have affected financial markets worldwide.
- **Framework on Co-lending arrangements (CLA):** RBI proposed a draft framework for co-lending arrangements between **all regulated entities** for all loans, priority sector or otherwise.
  - ⊕ Current regulation deals only with **priority sector loans between banks and non-banking financial companies**.
- **UPI limit:** National Payments Corporation of India (NPCI) will be empowered to set **transaction limits for Unified Payments Interface (UPI)** person-to-merchant transactions in consultation with banks and relevant stakeholders.
- **Foster innovation:** The RBI will make its **Regulatory Sandbox framework** theme-neutral and 'on-tap'.



## Also In News



### Aravali Range

National Green Tribunal (NGT) has instructed Haryana to ensure **no illegal mining in Aravali Range**.

### About Aravali Range

- **Type:** One of the oldest folded mountains of the world.
- **Range:** Runs approximately **670 km in a south-west direction**, starting near **Delhi**, passing through southern **Haryana and Rajasthan**, and ending in **Gujarat**.
- **Highest peak:** Guru Shikhar at 1,722 metres.
- **Rivers:** Banas River, Sahibi rivers and Luni River flow from Aravali.
- **Minerals:** Copper, zinc, lead, marble, etc.



### Alfalfa

The **Genetic Engineering Approval Committee (GEAC)** cleared the import of genetically modified alfalfa hay from the US

- Its final approval from India's **Agriculture Ministry is pending**.
- **The US has raised concerns** during trade talks.

### About Alfalfa

- It is a part of the **legume family**, but it's also considered an herb.
- It seems to have originally come from South and Central Asia, but it has been grown **around the world for centuries**.
- **In addition to being used as feed**, it has a long history of use as a medicinal herb for humans.





### Malabar Grey Hornbill

Researchers from Kerala have been awarded the **Future Conservationist Award by the Conservation Leadership Programme (CLP)** for their project on conserving the **Malabar Grey Hornbill**.

- The CLP is a partnership of **Fauna & Flora International, BirdLife International and the Wildlife Conservation Society**.
- **Award supports promising young conservationists** with less than five years of professional experience, offering funding and tailored mentoring to lead impactful projects.

#### About Malabar Grey Hornbill

- **Endemic to the Western Ghats** of India.
- It occurs from an **elevation of about 50 m** above mean sea level near the coast.
- **IUCN status:** Vulnerable.

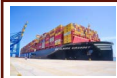


### Jevons Paradox

Recently, Microsoft CEO highlighted **Jevons Paradox** in the backdrop of increased adoption of the AI systems globally.

#### About Jevons Paradox

- It is the **idea** that technological progress that makes a resource cheaper or more efficient to use often leads to an **increase in demand for that resource**.
- **Background:** William Stanley Jevons first described a paradox in 1865 where he maintained that **more efficient steam engines** would not decrease the use of coal in British factories but would **actually increase it**.
- **In the case of AI**, as systems become more powerful and accessible, it is likely that their use will grow significantly.



### Vizhinjam Port

Recently, one of the world's largest container ships, MSC Türkiye, docked at **Vizhinjam International Seaport**, marking a milestone in the journey of **India's first deepwater transshipment port**.

#### About Vizhinjam port

- **Authority:** Vizhinjam International Seaport Limited (VISL), a company fully owned by Government of Kerala.
- **Location:** Thiruvananthapuram.
- **Type:** Natural Deepwater Multipurpose Seaport.
- **Objective:** To cater **container transshipment** besides multi-purpose and break bulk cargo.
- **Project model:** Developed in landlord model with a PPP component on a design, build, finance, operate and transfer ("DBFOT") basis.
  - ⊕ In the **landlord model**, private players take over the operational aspects, while the port authority acts as a regulator and landlord.



### Jatra Utsav

Tripura to organise Jatra Utsav.

#### About Jatra

- It is a popular folk theatre of **Bengal and Odisha**.
- Its origin can be traced to the **rise of Vaishnavism and the Bhakti Movement in the 16<sup>th</sup> century**, pioneered by Sri Chaitanya Mahaprabhu
- It is a **composite art form or as a theatre of mixed means** – song and dance, acting, and recitation.
- It depicts a **range of diverse and complex stories** including mythology, secular themes, humor, valour of heroic characters and melodramatic events.



### Registrar General of India

Registrar General of India cautions hospitals over delay in reporting events of birth, death.

#### About Registrar General of India (RGI)

- Set up in **1949** and comes under the **Union Ministry of Home Affairs**.
- **Responsibilities:**
  - ⊕ **Housing & Population Census:** Under Census Act, 1948.
  - ⊕ **Civil Registration System (CRS):** Under the **Registration of Births & Deaths (RBD) Act (1969)** which provides for the compulsory registration of births and deaths.
  - ⊕ **Sample Registration System (SRS):** Important source of vital rates like Birth Rate, Death Rate, Infant Mortality Rate and Maternal Mortality Rate.
  - ⊕ **National Population Register (NPR):** In pursuance to provisions contained in Citizenship Rules, 2003 framed under the **Citizenship Act, 1955**.
  - ⊕ **Mother Tongue Survey:** Documents the linguistic features of the selected mother tongues.



### River Mandovi

First No Objection Certificate has been issued via the newly launched **Digital Portal for National Waterways** for developing a Jetty on Malim on **River Mandovi**.

#### About River Mandovi

- Mandovi, also known as **Mahadayi or Mhadei river**, is described as the **lifeline of the Indian state of Goa**.
- Mandovi **joins with the Zuari**, both flush out into the **Arabian Sea**, forming the **Mormugao harbour**.
- It **originates from a cluster of 30 springs at Bhimgad** in the **Western Ghats in district Belagavi, Karnataka**.
- **Waterfalls:** Dudhsagar and Varapoha.
- **Important tributary:** River Mapusa.



### Mesoscale Convective System

Study focused on **Mesoscale Convective Systems (MCS)** found Soil moisture may help forecast intense storms.

#### About MCS

- It is a **collection of thunderstorms that act as a system**. An MCS can spread across an entire state and last more than 12 hours.
- **These systems often** bring intense rainfall, **causing widespread** damage to lives, livestock and infrastructure.
- **Hotspots for MCSs:** West and Central Africa, northern India, Argentina, China and the United States Great Plains.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



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