

Chief of Defence Staff Releases 3 Joint Doctrines For Armed Forces

This move is considered a **significant step towards enhancing jointness, integration, and theaterisation** within the **Indian Armed Forces**.

Overview of Three Joint Doctrines:

➤ Joint Doctrine for Special Forces (SF) Operations

- ⊕ Aims to foster common understanding, terminologies, and basic procedures among the **Army's (Para-SF), Navy's Marine Commandos (MARCOS), and IAF's (Garuds)**.
- ⊕ Encompasses **joint training to minimise duplication, future weapon profiles, and command and control strategies** across land, maritime, and air domains.

➤ Joint Doctrine for Airborne (AB) and Heliborne (HB) Operations:

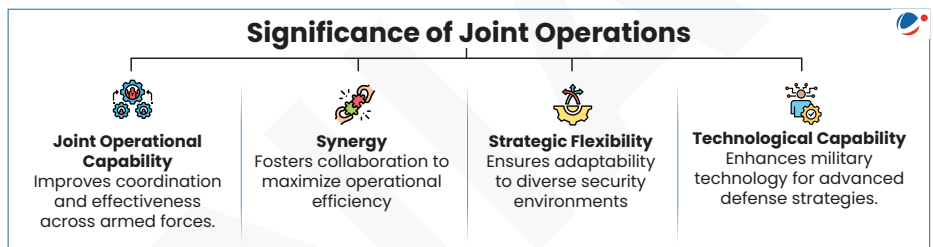
- ⊕ For **seamless coordination between the Army, Navy, and Air Force**.
- ⊕ Seeks to **bridge doctrinal gaps by standardizing planning and execution procedures**, and integrating advanced air mobility assets and unmanned systems.

➤ Joint Doctrine for Multi Domain Operations (MDO):

- ⊕ For **employing military forces and non-military national capabilities** across Land, Sea, Air, Cyber, Space, and Cognitive domains.
- ⊕ Emphasizes a **'Whole-of Nation' Approach (WONA)**, integrating military and non-military partners to achieve politico-military aims.

About Chief of Defence Staff (CDS)

- The Chief of Defence Staff is the **Permanent Chairman of the Chiefs of Staff Committee**.
- Acts as the **Principal Military Adviser to Defence Minister on all Tri-Services**.



Annual Survey of Industries (ASI) Results for 2023-24 Released

It is released by the **Ministry of Statistics and Programme Implementation (MoSPI)**.

- It aims to provide meaningful insights into changes in the **composition, growth, and structure of manufacturing industries**, including **output, value added, employment, and capital formation**.
- The ASI is conducted annually under the **Collection of Statistics (Amendment) Act, 2017**.
- ASI covers factories registered under the **Factories Act, 1948**, Bidi and cigar units under the **Bidi and Cigar Workers (Conditions of Employment) Act, 1966**, and **electricity undertakings** not registered with the Central Electricity Authority (CEA).
- **Defence establishments, oil storage and distribution depots, departmental units** such as railway workshops, gas storage, etc., are not covered under ASI.
- The results are prepared at the **state and major industry level**.

Key highlights of the Survey

- **The top 5 Industries in terms of Gross Value Added (GVA)** are Basic metal, Motor vehicles, Chemical and Chemical products, Food products, and Pharmaceutical products.
- **The top 5 States in Respect of Employment** are Tamil Nadu, Gujarat, Maharashtra, Uttar Pradesh, and Karnataka.
- **Gross Value Added (GVA) grew by 11.89%** over the previous year.
- **Industrial output increased** by more than 5.80% over the previous year.
- **Average emoluments per person engaged** grew by 5.6% compared to 2022-23.

Concepts and Definitions used in Survey

- **Gross Value Added (GVA)** is defined as additional value created by the process of production. This is calculated by deducting the value of total input from total output.
- **Net Value Added (NVA)** is arrived at by deducting total input and depreciation from total output.
- **Fixed Capital** represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year.
 - ⊕ Fixed capital involves **allocation of capital into long-term assets or projects** (like buildings, machines, or land) whereas **Working Capital investment** facilitates day-to-day operations of the business.

WHO and UNICEF Report on Progress on Household Drinking Water and Sanitation 2000–2024

The report focused on **inequalities in access to Water, Sanitation and Hygiene (WASH)**, which impeded the achievements of **SDG 6 (Ensure access to water and sanitation for all)**.

Key Findings

» Global:

- ⊖ **Open defecation:** In low-income countries remain **4 times higher than the global average**.
- ⊖ **Access to safe sanitation** now **58%**.
- ⊖ **Safely managed drinking water:** Coverage rose from **68% (2015)** to **74% (2024)**.
- ⊖ **Gendered burden:** Emerging evidence as **women spend more time fetching water**.
- ⊖ **Menstrual health data:** 70 countries shows widespread gaps across all income levels.

» India:

- ⊖ **Open defecation:** Significant progress but **residual challenges remain in rural areas** and among marginalised groups.
- ⊖ **Sanitation coverage:** **Near universal access to basic sanitation**, but **slippage in use** and **quality of waste management** noted.
- ⊖ **Drinking water:** Expanded **household tap water connections**.
 - ◆ **Safely managed drinking water** remains below universal levels.
- ⊖ **Equity issues:** Marginalised groups (tribal populations, poorest) lag in access.



WASH Initiatives in India

- » **Swachh Bharat Mission (SBM):** Eliminates open defecation. Also empowered women, ensured safety, reduced child mortality.
- » **Jal Jeevan Mission (JJM):** **Provide safe and adequate drinking water** through individual household tap connections to all households in rural India.

BioE3 (Biotechnology for Economy, Environment and Employment) Policy Completed One Year

To celebrate one year, the **Union Minister of Science and Technology** launched **India's first National Biofoundry Network**, making biotechnology a driver of India's economy.

- » **The National Biofoundry Network** involves **6 institutions** to help scale up proof-of-concept developments, enhance indigenous biomanufacturing, and create employment opportunities.

About BioE3 Policy

- » **Aim:** Accelerating development of technologies for bio-based products and their commercialization by setting up of **BioEnablers** (Bio-Artificial (Bio-AI) Intelligence Hubs, Biofoundries and Biomanufacturing Hubs).
- » **Implementation:** Department of Biotechnology (DBT), Ministry of Science and Technology.
- » **6 thematic sectors have been prioritised:** Bio-based chemicals and enzymes, Functional foods and Smart proteins, Precision biotherapeutics, Climate resilient agriculture, Carbon capture and its utilization, Futuristic marine and space research.
- » **Key achievements in 1 year**
 - ⊖ Inauguration of **India's first Biomanufacturing Institute** at Mohali (Punjab).
 - ⊖ **Launch of more than a dozen joint research calls** covering advanced areas such as cell and gene therapy, climate-smart agriculture, carbon capture, and functional foods.
 - ⊖ DBT has initiated **centre-state partnerships**, including an MoU with Assam to establish a BioE3 Cell.

What is Bioeconomy?

- » **It is the use of renewable biological resources** to produce food, energy and industrial goods, which supports sustainability and economic growth.
- » **Key sectors:** BioPharma & BioMedical, BioAgr, BioIndustrial, BioResearch, etc

Status of Bioeconomy in India

- » India's bioeconomy has grown from **\$10 billion (2014)** to **\$165.7 billion (2024)**, working towards a target of **\$300 billion by 2030**.
- » Contributing **4.25% to GDP (India Bioeconomy Report 2025)**.

Cabinet Approves Restructuring & Extension of PM SVANidhi Scheme

The lending period has now been **extended until March 31, 2030**, from 31.12.2024, and the restructured scheme **aims to benefit 1.15 crore beneficiaries**, including 50 lakh new beneficiaries.

New Features

- **Enhanced Loan Limits:**
 - ⊕ 1st tranche: ₹15,000 (↑ from ₹10,000).
 - ⊕ 2nd tranche: ₹25,000 (↑ from ₹20,000).
 - ⊕ 3rd tranche: Unchanged at ₹50,000.
- **UPI-linked RuPay Credit Card:** For vendors after repaying the 2nd loan; ensures quick access to emergency credit.
- **Digital Cashback Incentives:** Up to ₹1,600 for **retail/wholesale UPI transactions**.
- **Capacity Building:** Financial literacy, entrepreneurship, digital skills, and marketing support, hygiene & safety training via FSSAI partnership.

About PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi)

- **Type:** Central Sector Scheme
- **Ministry:** Ministry of Housing and Urban Affairs.
- **Implementation:**
 - ⊕ **Ministry of Housing & Urban Affairs.**
 - ⊕ **Department of Financial Services (DFS)** (Loan/Credit card facilitation through Banks/Fin. Institutions).
- **Objective:** Provide working **capital loans**, **promote financial inclusion**, **digital payments**, and **identity/recognition to street vendors**.
- **Targeted beneficiaries:** Street vendors/ hawkers vending in urban areas, as on or before March 24, 2020.



Also in News



Gangotri Glacier

According to a study, **Gangotri Glacier has lost 10 percent of its snow** melt flow in four decades.

About Gangotri Glacier

- The Gangotri Glacier is a **30 km long** glacier in the **Uttarkashi district of Uttarakhand**.
- This glacier feeds the **Bhagirathi River**, **one of the primary headstreams** of the Ganges River.
 - ⊕ As it flows down, the **Bhagirathi merges with the Alaknanda River at Devprayag to form Ganga**.
- It is home to **Gangotri National Park**.
 - ⊕ **Key Fauna:** Snow Leopard, Himalayan Blue Sheep (Bharal), **Himalayan Monal**, the **state bird of Uttarakhand**.



Hierarchical Reasoning Model (HRM)

Sapient's scientists have developed a new AI modeled on the human brain. **Current Large Language Models (LLMs)** like ChatGPT have certain **limitations** due to use of **Chain-of-Thought (CoT) reasoning**.

About Hierarchical Reasoning Model (HRM)

- **Modelled on:** Human brain's hierarchical, multi-time scale processing.
 - ⊕ Mimics how different brain regions integrate information across durations.
- **How HRM Works:**
 - ⊕ HRM **executes sequential reasoning tasks in a single forward pass** without explicit supervision of the intermediate process.
 - ⊕ Uses **two modules**:
 - ◆ **High-level module:** slow, abstract planning.
 - ◆ **Low-level module:** fast, detailed computations.



Exercise Bright Star

The Armed Forces and Headquarters Integrated Defence Staff will participate in the **Multilateral Exercise Bright Star 2025**.

About Exercise Bright Star

- **Origin:** Conceived as a **bilateral US-Egypt exercise** after the **Camp David Accord (1977)**.
 - ⊖ **First edition:** 1980, Egypt.
 - ⊖ **Expanded:** Since 1995, multiple nations included.
- Among the **largest Tri-Service multilateral exercises** in the region.



3I/ATLAS

3I/ATLAS is a comet discovered in 2025 by **ATLAS (Asteroid Terrestrial-impact Last Alert System)** survey telescope situated in **Rio Hurtado (Chile)**.

- It is the **third known object from outside our solar system** to be discovered by **Astronomers**.
 - ⊖ The first was **1I/Oumuamua** in **2017**, and second was **Comet 2I/Borisov** in **2019**.
- It is categorized as interstellar because of the **hyperbolic shape** of its orbital path.
 - ⊖ **It does not follow** a closed orbital path about the Sun.



Glanders

The **Department of Animal Husbandry & Dairying (DAHD)** has issued the **Revised National Action Plan on Glanders**.

About Glanders

- It is an **infectious disease** that mainly affects **horses, donkeys and mules**.
- The disease is notifiable under the **Prevention and Control of Infectious and Contagious Diseases in Animals (PCICDA) Act, 2009**.
- **Caused by:** Bacterium *Burkholderia mallei*.
- It can be **transmitted to humans**.
- It is a **life-threatening zoonosis** and **no vaccines exist**.



International Atomic Energy Agency (IAEA)

Inspectors from the IAEA began work at key nuclear sites of Bushehr in Iran.

- **Genesis:** It was **created in 1957**.
- **About:** It is the world's **central intergovernmental forum** for scientific and technical cooperation in the nuclear field.
- **Function:** It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.
- **Policy-Making bodies:** They comprise the General Conference of all Member States and the 35-member Board of Governors.
- **HQ:** Vienna (Austria).
- **Award:** Nobel Peace Prize in **2005**.



Purchasing Power Parity (PPP)

According to **EY study**, India is projected to emerge as the **world's second-largest economy** in purchasing power parity.

About PPP

- PPP is used to **compare economic productivity and standards of living between countries**.
- PPP involves an **economic theory that compares different countries' currencies** through a **"Basket of Goods" approach**.
- According to the PPP theory, as long as **there are no barriers to trade like Tariffs and Quotas, Exchange Rates should eventually adjust so that the same product costs the same** whether measured in India or another country.



Unified District Information System for Education Plus (UDISE+)

UIDAI and Ministry of Education join hands to facilitate pending **Mandatory Biometric Update (MBU)** in Aadhaar on UDISE+ application.

About UDISE+

- It is an **Educational Management Information system** under the Department of School Education & Literacy, Ministry of Education.
- **Objective:** To collate credible and comparable information collected using a standardized **'Data Capture Format'** across the country through online, real-time mode in an efficient manner.
- It functions as a **central platform that enables** respective schools to efficiently record and submit data related to its **profile** (infrastructure & facilities), individual students and teachers' details.



Article 9.1 of Paris Agreement

India and developing countries push to bring Article 9.1 back at the center of negotiations in **COP30**, at **Belém, Brazil**.

Article 9.1 of the Paris Agreement

- **Core Principle:** Developed countries **"shall provide financial resources to assist developing countries"** with **mitigation and adaptation** in continuation of their existing obligations under the Convention.
- **Basis:** Anchored in the principle of **Common But Differentiated Responsibilities** and historical responsibility.



AHMEDABAD



BHOPAL



CHANDIGARH



DELHI



JAIPUR



JODHPUR



GUWAHATI



HYDERABAD



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI



SIKAR