

NEWS TODAY

India, US ink pact to set up Semiconductor Fabrication Plant for National Security

It will be **India's first and world's first multi-material fabrication (fab) plant** for national security. It is also one of the first fabs of its kind within Quad.

➤ It is the first time, US military has agreed for a technology partnership in highly valued technologies with India.

About Semiconductor Fabrication Plant

- Fab, to be known as 'Shakti', will focus on **three essential pillars for modern war fighting** – advanced sensing, advanced communications and high voltage power electronics.
- It will be established with **objective of manufacturing infrared, gallium nitride and silicon carbide semiconductors**.
 - ⊕ It will **get support from India Semiconductor Mission** and set up as strategic technology partnership between Bharat Semi, 3rdiTech, and U.S. Space Force.

Significance of Semiconductor Fabrication Plant

- **Strategic Shift:** It will shift **India from chip taker to chip maker**, boosting national security and **positioning India** as a key player in **global semiconductor supply chain and net security provider in Indo-Pacific**.
- **Reducing country's dependence on imports:** India currently imports \$1 billion worth of semiconductors annually for national security purposes.
- **Bolster India's security infrastructure:** It will address growing needs of commercial sectors like telecommunications, railways, and green energy.
- **Enhance mutually beneficial linkages in R&D in chip manufacturing:** Eg. Creation of GlobalFoundries (GF) Kolkata Power Center.

India Semiconductor Mission (under Ministry of Electronics and IT)

- It aims to **build a vibrant semiconductor and display ecosystem** to enable India's emergence as a global hub for electronics manufacturing and design.
- It is a **specialized and independent Business Division** within Digital India Corporation.
- It has been working as nodal agency for Schemes approved **under Semicon India Programme**.

UN adopts Pact for the Future at the UN Summit for the Future

Pact along with its annexes **Global Digital Compact and a Declaration on Future Generations** is designed to **address 21st century challenges** (E.g. climate change, conflict, human rights etc.).

➤ Pact has been adopted by **member countries by consensus** with a small group of seven countries **led by Russia holding out**.

Key deliverables in Pact include:

- **Sustainable development and financing for development**
 - ⊕ Giving developing countries a **greater say at international financial institutions**;
 - ⊕ Strengthening the **global financial safety net** to protect the **poorest**.
- **International Peace and Security**
 - ⊕ Recommitment to nuclear disarmament with goal of **totally eliminating nuclear weapons**.
 - ⊕ Avoid weaponization and misuse of new technologies, such as **lethal autonomous weapons**.
- **Science, Technology, and innovation, and digital cooperation**
 - ⊕ **Scientific research** in responsible and **ethical manner** protecting human rights.
 - ⊕ **Protect indigenous and traditional knowledge, empower women and remove gender-risks** emanating from emerging technologies.
- **Youth and Future Generation:** Take account of future generations in our decision-making
- **Transforming Global Governance**
 - ⊕ Strengthen international frameworks that govern outer space (**Also preventing arms race in outer space**).
 - ⊕ Reform **effectiveness and representativeness of UNSC** prioritizing under-representation of Africa.

Annexures of Pact for the Future:

- **Global Digital Compact:** Worldwide agreement on international **regulation of AI & Digital technologies**.
 - ⊕ Outlines commitments to ensure that digital technologies contribute to sustainable development while addressing issues **e.g. digital divides, cybersecurity, and misuse of technology**.
- **Declaration on Future Generations:** Securing the well-being of future generations by protecting the environment and **promoting intergenerational equity**.

Periodic Labour Force Survey (PLFS) Annual Report (July, 2023 – June, 2024) released by NSSO

PLFS was launched in 2017 to estimate key employment and unemployment indicators. The objective of PLFS is primarily twofold:

- To estimate key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in short time interval of three months for urban areas only in 'Current Weekly Status' (CWS).
- To estimate employment and unemployment indicators in both 'Usual Status' and CWS in both rural and urban areas annually.

Key Indicators used in PLFS

- **Worker Population Ratio (WPR):** Percentage of employed persons in population.
- **Labour Force Participation Rate (LFPR):** Percentage of persons in labor force (i.e. working or seeking or available for work) in the population.
- **Unemployment Rate (UR):** Percentage of persons unemployed among persons in labour force.
- **Activity Status:** It is determined on basis of the activities pursued by person during specified reference period (preceding date of survey).
 - ⊕ **Usual Status:** Reference period is 365 days
 - ⊕ **Current Weekly Status (CWS):** Reference period is 7 days

Key Findings

| Indicator | | 2022-23 | 2023-24 | Trend |
|-----------|--------------|--------------|--------------|------------------|
| LFPR | Total | 57.9% | 60.1% | Increase |
| | Rural | 60.8 % | 63.7% | Increase |
| | Urban | 50.4 % | 52.0% | Increase |
| | Male | 78.5 % | 78.8% | Increase |
| | Female | 37.0 % | 41.7% | Increase |
| WPR | Total | 56.0% | 58.2% | Increase |
| UR | Total | 3.2% | 3.2% | Unchanged |

Coalition for Disaster Resilient Infrastructure (CDRI) marks its fifth Anniversary

On this occasion, CDRI announced a \$2.5 million fund under Urban Infrastructure Resilience Programme (UIRP) to enhance climate resilience of cities in 30 low and middle-income countries including India.

About CDRI

- **Launched: At UN Climate Action Summit (2019)** by India.
 - ⊕ CDRI is a global partnership of nations, UN agencies, multilateral development banks, and the private sector.
- **Objective:** To promote the resilience of infrastructure systems to climate and disaster risks ensuring sustainable development.
- **Members:** 40 countries and 7 organizations with its secretariat at New Delhi (India).
- **Reports:** Global Infrastructure Resilience Report.

Significance of CDRI

- **Funding:** Provide a global mechanism for financing and coordination of the effective implementation of the aims of the CDRI.
- **Technical Support and Capacity-building:** This includes disaster response and recovery support; innovation etc.

Initiatives Taken by CDRI

- **Infrastructure for Resilient Island States (IRIS):** To promote resilient, sustainable and inclusive infrastructure in Small Island Developing States (SIDS).
- **DRI Connect platform:** Knowledge exchange, learning and collaborative platform
- **International Conference on Disaster Resilient Infrastructure (ICDRI):** Annual conference bringing together experts, decision-makers etc. to discuss challenges and identify good practices.
- **Infrastructure Resilience Accelerator Fund (IRAF):** Established with support of UNDP and UNDRR, to support global action on disaster resilience of infrastructure systems

Other Initiatives/steps for Disaster Resilience

- **Global**
 - ⊕ **Sendai Framework for Disaster Risk Reduction 2015-2030:** Provides Member States with concrete actions to protect development gains from the risk of disaster.
 - ⊕ **UN International Strategy for Disaster Reduction (UNISDR)**
- **India**
 - ⊕ **National Policy on Disaster Management 2009** to build disaster resilient India by developing a holistic, proactive, multi-disaster oriented and technology driven strategy.
 - ⊕ **Disaster Management Act, 2005:** Established National Disaster Management Authority, State Disaster Management Authorities and National Disaster Response Force.

Viewing, storing Child Sexual Exploitation and Abuse material (CSEAM) an offence: Supreme Court

SC overturned Madras High Court ruling (2024) that decriminalized possession or viewing of CSEAM in private domain without intent of transmitting under Protection of Children from Sexual Offences (POCSO) Act, 2012 or IT Act, 2000.

- **SC endorsed** the use of term **CSEAM instead of Child Pornography** in all judicial orders/judgements as:
 - ⊕ There is **no difference between viewing CSEAM and act of child sexual abuse** as both have common malevolent intent of using child for sexual gratification.
 - ⊕ Word pornography (considered an act between consenting adults) may undermine victimization of child.

Key Highlights of Verdict

- **Criminalised CSEAM:** Mere possession of CSEAM without any actual transmission is a form of inchoate offence penalised under Section 15 of POCSO Act.
 - ⊕ **Section 67B of IT Act** penalises child sexual abuse. It provides punishment for publishing or transmitting of material depicting children in sexually explicit act in electronic form.
 - ⊕ **Inchoate (undeveloped/incomplete)** crimes are committed in preparation for a further offence.
- **Highlighted impact of CSEAM**
 - ⊕ Watching CSEAM **desensitizes individuals, increasing** its demand propelling its creation and distribution.
 - ⊕ Impacts **emotional, social and mental well-being** of child.
 - ⊕ **Face intense social stigmatization and isolation**, finding it difficult to maintain healthy relationships due to trust issues.

SC Suggestions to Union and courts

- **Amend POCSO** to substitute child pornography with CSEAM.
- **Constitute an Expert Committee** to devise a program for health and sex education.
- **Raising awareness about realities of CSEAM** and its consequences through public campaigns can help reduce its prevalence.

POCSO Act, 2012

- Aims to **combat sexual crimes against children**.
- **Defines a Child** (as person below age of 18) outlining different forms of sexual abuses with child friendly procedures for redressal.
- **Section 15 of POCSO Act** penalises storage of child pornography with an "intention to share or transmit" it.
- **Amended in 2019** to curb child pornography providing strict measures against those guilty.

International Rhino Foundation (IRF) released State of the Rhino 2024 Report

IRF, initially called International Black Rhino Foundation in 1991, is dedicated to **survival of world's rhino species.**

Key findings of report

➤ With all five species combined, there are just under **28,000 rhinos left in world.**

➤ **Rhino poaching in Africa increased by 4% from 2022 to 2023.**

➤ **Number of white rhinos increased** but greater one-horned rhino (Indian Rhino) number remained same.

➤ **White rhino populations in South Africa are on rise** despite poaching.

About Rhino

➤ **Five species of rhino:** 2 African (White Rhino, Black Rhino) and 3 Asian (Indian rhino, Sumatran Rhino, and Javan Rhino).

Rhino conservation initiatives:

National Rhino Conservation Strategy 2019 to conserve Indian rhino;

New Delhi Declaration on Asian Rhinos 2019; Indian Rhino Vision 2020 etc.

Difference between African Rhino and Asian Rhino

| Features | African Rhino | Asian Rhino |
|----------------------------|---|---|
| Size | ➤ White Rhino is second-largest land mammals after elephants. | ➤ Indian Rhino is largest of all Asian rhino species. |
| Appearance and Behaviour | <ul style="list-style-type: none"> ➤ Less armoured look ➤ More aggressive ➤ 2 horns ➤ Poor swimmers and they can drown in deep water (so they wallow in mud) ➤ Fights with their horns ➤ Feed low to the ground | <ul style="list-style-type: none"> ➤ More armoured look ➤ Less aggressive ➤ 2 horns (Sumatran rhino) and 1 horn (Indian Rhino and Javan rhinos) ➤ Good swimmers ➤ Fights with its bottom teeth ➤ Graze on tall grasses, shrubs, leaves. |
| Habitat | ➤ Grasslands, savannas and shrublands; deserts | ➤ Tropical and subtropical grasslands and savannas, Tropical moist forests |
| Conservation status (IUCN) | <ul style="list-style-type: none"> ➤ White Rhino: Near threatened ➤ Black Rhino: Critically Endangered | <ul style="list-style-type: none"> ➤ Indian Rhino: Vulnerable; Schedule I (Wildlife Protection Act, 1972) ➤ Sumatran Rhino: Critically Endangered ➤ Javan Rhino: Critically Endangered |

Also in News



Cancer Moonshot Initiative

QUAD Countries (**India, United States, Australia and Japan**) Launched Cancer Moonshot Initiative.

About Cancer moonshot Initiative:

- To strengthen **overall cancer care ecosystem in Indo-Pacific** by improving health infrastructure, research collaborations, etc.
- **Promoting HPV vaccination** to treat cervical cancer, increasing access to screenings, and **expanding treatment options.**
- **India's contribution to Cancer Moonshot Initiative:**
 - ⊕ **Grant of US \$7.5 million** to cancer testing, screening, and diagnostics in Indo-Pacific region.
 - ⊕ **Support for radiotherapy treatment and capacity building** in Indo-Pacific.
 - ⊕ **Technical assistance to interested countries** on DPI for cancer screening, care and continuum through its US \$10 million contribution to **WHO's-Global Initiative on Digital Health.**



Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)

CGTMSE has approved guarantees amounting to Rs 1 lakh crore.

About CGTMSE

- Set up in 2000 by **Ministry of Micro, Small and Medium Enterprises and SIDBI**
- **Aim:** To provide **credit guarantee support to member lending institutions** for credit facilities sanctioned by them to MSEs, especially in absence of collateral.
- **Eligible Lending Institutions:** Scheduled commercial banks (Public Sector Banks/Private Sector Banks/Foreign Banks) and select Regional Rural Banks.
- **Corpus Contribution:** Government and SIDBI in ratio of 4:1.



National Cadet Corps (NCC)

Ministry of Defence has approved expansion plan for NCC Cadet Vacancies by 3 Lakh, raising the total strength from 17 lakhs to 20 lakhs in coming years.

About NCC (HQ: New Delhi)

- Established under '**The National Cadet Corps Act 1948**'.
- Aims at **developing character, comradeship, discipline, secular outlook, the spirit of adventure and ideals of selfless service** amongst young citizens.
- **Nature** of NCC Programme is **voluntary.**
- **Motto: Unity and Discipline.**
- **Ministry: Ministry of Defence.**
- **Conduct of NCC activities is a joint responsibility of Central and State Governments** in terms of policies, finances, administrative and other aspects.



Futures & Options (F&O)

SEBI study highlighted that **93% of individual F&O traders** have incurred losses between 2022-24.

About F&O

- They are **derivative instruments** deriving its value/price from an **underlying asset.**
- **Options:** Provide holders' the **right (not obligation) to buy or sell** an underlying asset at a specified price within a set timeframe.
 - ⊕ **It is of two types: Call,** gives right to **buy** to the holder and **Put,** gives the right to **sell.**
- **Futures: Standardized contracts obligating** the buyer/seller to purchase/deliver an **underlying asset** at a predetermined price on a **specified future date.**



Computer Security Incident Response Team – Power (CSIRT-POWER) facility

Union Minister of Power has inaugurated CSIRT-POWER facility in New Delhi.

About CSIRT-POWER facility

- It was **initiated by Ministry of Power** following the National Cyber Security Policy and in **collaboration with CERT-In**.
- Equipped with advanced infrastructure, cutting-edge cybersecurity tools, CSIRT-Power is **well-prepared to tackle emerging threats**.
- Objective is to **build and enhance the cybersecurity resilience in Indian Power Sector**, through a structured and coordinated approach.
- **Setup** under Central Electricity Authority.
- **CERT-In** is providing requisite leadership for to coordinate all incident and other cyber security activities in Power sector.



Sustainable Road construction Practices

Recently, Ministry of Road Transport & Highways (MoRTH) has issued policy guidelines to promote use of **urban solid waste/inert materials in construction of National Highways**.

Sustainable Road Construction Practices:

- **Use of inert soil:** It is a major component of solid waste which is generated by bio-remediation and bio-mining
- **Use of Waste Plastic as modifier in binder:** leads to higher resistance to deformation and water induced damages.
- **Geo-synthetics:** Reinforcement in pavement, slope protection
- **Fly-ash:** Embankment, cement concrete, stabilization
- **Cold mix asphalt (CMA):** Unlike hot mix asphalt, CMA is produced without need for heating aggregates or asphalt binder.
 - ⊕ It produces lower emissions & is energy efficient.



Unlawful Activities (Prevention) Act (UAPA), 1967

Supreme Court ruled that **14-day timeline for granting sanction for prosecution under UAPA, 1967 is mandatory** and not discretionary.

About UAPA, 1967

- It provides for more **effective prevention of certain unlawful activities of individuals and associations** and for dealing with terrorist activities.
- Prosecution of individuals accused of terrorism requires **prior sanction from government** via two steps i.e.
 - ⊕ An **independent authority must review evidence gathered by investigators** and make a recommendation to government **within seven working days**. (Rule 3 of Unlawful Activities (Prevention) (Recommendation & Sanction of Prosecution) Rules, 2008)
 - ⊕ **Government then has an additional seven working days to decide** whether to grant or deny sanction based on authority's recommendation. (Rule 4)



Barak Bhuban Wildlife Sanctuary

National Green Tribunal stayed construction of road inside Barak Bhuban Wildlife Sanctuary.

Barak Bhuban Wildlife Sanctuary

- **Location:** Spread **between Barak and Sonai Rivers in Assam's Cachar district**.
 - ⊕ Named after **second largest river in Northeast, Barak**.
 - ⊕ Barak Valley also houses **Borail Wildlife Sanctuary**.
- It was **notified in 2022** by Assam Government.
- **Fauna:** **8 recorded species of primates**, namely, slow loris, rhesus, pig-tailed, stump-tailed, Assamese macaque, capped langur, hoolock gibbon, etc.
 - ⊕ Provides **suitable habitat for King Cobra**.

Personality in News



Jagadguru Sant Tukaram Maharaj

Maharashtra government approved a proposal to rename Pune Airport as **Jagadguru Sant Tukaram Maharaj Pune International Airport**.

About Sant Tukaram

- **17th-century saint poet** (Contemporary of Shivaji Maharaj) and philosopher related to Bhakti movement of Maharashtra.
- Belonged to '**Warkari**' sect (along with **Saint Dnyaneshwar, Eknath & Namdev**) which flourished in medieval Maharashtra.
- **Key Contributions**
 - ⊕ Known for **Abhanga devotional poetry** and community-oriented worship through spiritual songs known as **Kirtans**.
 - ◆ **Abhanga** is in praise of **Lord Panduranga or Vitthal** (Chief deity of Warkari, an incarnation of Vishnu)
 - ⊕ **Famous work: Tukaram Gatha (1632-1650)** in Marathi, includes about 4500 Abhangas.
 - ◆ His works contributed to the Bhakti movement, which **emphasized equality, devotion to God, and social reform**.
- **Values:** Faith, Devotion, Spirituality, etc.

