

NEWS TODAY

India soon to create a comprehensive Anti-Drone Unit to secure its borders: Union Home Minister

Highlighting the rising menace of drone/Unmanned Aerial Vehicles (UAVs), he stressed on adopting 'whole of government' approach involving defense and research organizations to tackle the issue.

Anti-Drone Systems

- **About:** These are **methods/systems** used to **detect, track, and mitigate unauthorized UAVs or drones** that may pose a security threat, like carrying explosives, conducting surveillance, or interfering with airspace, etc.
- **Technology Used:** Radio Frequency jammers, Global Positioning System (GPS) spoofers, net guns, etc.

Need for Anti-Drone Unit in India

- **Rising Threats:** Drones are increasingly used for illegal activities along borders. Over 260 have been intercepted in 2024 from Pakistani border.
- **Real-time detection, tracking and Neutralization:** Particularly to safeguard areas such as **airports, military installations, critical infrastructure, and public events.**
- **Counter Non-state actors:** Drones are being used to smuggle weapons by terrorists to target civilians and security personnel.
- **Dual Use of drones:** Along with their use for smuggling weapons, they are being used for **combat missions and military reconnaissance.**
 - ⊕ **Example:** Recently, Bangladesh flew a **Bayraktar TB2 combat drone.**
- **Internal Security:** Recently militants in Manipur used drones to drop explosives raising concerns.

Some recent Anti-Drone Measures Deployed by India

- **DRDO's Soft Kill (for jamming the communication links of Drone) and Hard Kill (Laser based hard kill to destroy the Drone):** Indigenous technology to counter enemy Drones.
- **Laser-equipped anti-drone gun-mounted Mechanism:** Along India-Pakistan border has witnessed significant increase in neutralisation and detection cases.
- **Counter Drone System (D4 System) of Bharat Electricals Limited:** Capable of performing real time search, detection, tracking and neutralization.

Decent Work in Nature Based Solutions (NbS) Report Released

Launched at COP 16 of UNCCD by **the International Labour Organization (ILO), the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN).**

- The report seeks to deepen the understanding on the relation between **NbS, employment** and its role to achieve **Sustainable Development Goals.**

Key Findings of the Report

- **Employment: 60.5–63 million people** (1.8% of total global employment) currently work in NbS globally.
 - 95% of this employment is concentrated in Asia and the Pacific, primarily driven by **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).**
- **Youth Employment:** ~14% of NbS workers are youth (ages 15–29).
- **Women Employment:** **Constitute 1/3rd** of the NbS workforce globally.
- **Contribution to Gross Domestic Product (GDP):** Contributes only **0.3% to the world's GDP.**
- **Opportunities:** "**Green-grey**" infrastructure (both built and Nature based Infrastructure); generate **20–32 million new jobs by 2030.**

Key Recommendations on propelling adoption of NbS

- **Strengthen National NbS policy frameworks:** Integrate NbS into infrastructure, agriculture and other sectors.
- **Training programmes to address diverse skills needs:** Integrating NbS into education and training curricula in both rural and urban settings.
- **Promote inclusivity in the NbS workforce:** Ensure fair wages, safe working conditions, social dialogue and social protection, including marginalized communities.
- **Research and data collection:** Informed decision-making, improve data collection on NbS employment, skills and project outcomes.

About NbS

- **About:** Actions addressing **key societal challenges** through the protection, sustainable management and restoration of both **natural and modified ecosystems**, benefiting both **biodiversity and human well-being.**
- **Examples:** Protecting and restoring coral reefs, Building greener cities, etc.

Role of indigenous communities acknowledged in combating desertification at COP16 of UNCCD

First-ever 'Indigenous Peoples Forum at UNCCD' spotlighted invaluable contributions of indigenous people to land conservation and sustainable resource management.

Who are Indigenous Peoples?

- ▶ **Tribal communities who practice unique traditions**, retaining social, cultural, economic and political characteristics that are **distinct from those of dominant societies in which they live**. E.g. Aborigines (Australia), Maori (New Zealand), Santhals (India), etc.
 - ⊖ Representing **just 5% of world's population**, they have been recognized as "**gatekeepers of green areas**", which occupy 22% of planet.

Role of indigenous communities in combating desertification

- ▶ **Regenerative Agriculture & Agroforestry**: E.g. Use of Polyculture technique called Milpa by Mayan People.
- ▶ **Protected area management**: E.g. **Soligas Tribe** role in managing Biligiri Rangaswamy Temple Wildlife Sanctuary (BRTWS).
- ▶ **Forest Restoration**: E.g. **Khasi and Garo tribes of India** manage sacred groves in Meghalaya, preserving forests.
- ▶ **Water Management**: E.g. **karez' or 'surang bavi' system** to harvest rainwater in Bidar region.

Challenges Faced by Indigenous Peoples

- ▶ Extreme poverty, Forced displacement, Gender discrimination, Poor political representation, Lack of access to social services, climate change, etc.

Recommendations

- ▶ Inclusion of Indigenous Peoples in **global decision making on green area protection**.
- ▶ Indigenous people should have **land rights and direct access to finance**.
- ▶ **Developing mechanisms** to integrate traditional knowledge into **national and international policies**.

Steps taken for green area protection using Indigenous Knowledge

- ▶ **Joint Forest Management (JFM)**: Involves local communities in managing degraded forest lands under government control.
- ▶ **Green India Mission (GIM)**: Protecting; restoring and enhancing India's diminishing forest cover.
- ▶ **Traditional Knowledge Digital Library (TKDL)**: Digital repository to prevent bio-piracy and wrongful patents.
- ▶ **Forest Rights Act (FRA) 2006**: Provides for Community rights over forest resources and traditional practices.




Supreme Court (SC) issues guidelines on processing of Mercy Petitions to States/UTs

Pronounced in the **State of Maharashtra Vs. Pradeep Yashwant Kokade case**, guidelines seek to **streamline the mercy petition and death penalty execution processes** avoiding undue delays, safeguarding convicts' legal rights, etc.

Major Guidelines issued by the SC

- ▶ **Dedicated Cells for Mercy Petitions**: To be established by **States and UTs** to handle mercy petitions and process them promptly within the prescribed timeframe.
- ▶ **Attachment of Judicial Officer**: An official from the Law and Judiciary Department to be attached to the dedicated cell.
- ▶ **Information Sharing and Documentation**: Prison authorities must forward mercy petitions to the dedicated cell and call for information from police stations and investigation agencies, etc.
- ▶ **Coordination with Governor and President's Secretariats**: Mercy petitions must be forwarded to these secretariats for further action.
- ▶ **Electronic Communication**: Communications should be conducted via email to ensure efficiency, barring cases that require confidentiality.
- ▶ **Guidelines and Reporting**: State Governments to issue executive orders detailing procedures for handling mercy petitions.
- ▶ **Implementation**: States/UTs to report compliance with the SC directions within three months.
- ▶ **Guidelines to Sessions Courts**: Maintain record of such cases, issue notices to public prosecutors or investigative agencies for pending appeals.
- ▶ **Execution warrants**: To be **issued by the State** immediately after the death penalty becomes enforceable.

Other Significant Observations by SC

 <p>Impact of Delays: Delays have a de humanizing effect on the convicts violating Article 21.</p>	 <p>Right to Challenge Delay: Convicts can challenge delays under Article 32 (SC) and Article 226 (High Court).</p>	 <p>Case Specific Determination: What constitutes undue or inordinate delay cannot be defined and to be decided on a case-specific basis.</p>
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About Mercy Petition

- ▶ **Constitutional Framework**: Constitution has granted the **President (Article 72) and Governor (Article 161)** the power to grant pardons or commute sentences.
 - ⊖ SC in **Maru Ram vs. Union of India (1981)**, established that the President must act based on the Council of Ministers' advice in mercy petitions.
- ▶ **Legal Framework**: Covered under **Section 472(1) of Bharatiya Nagarik Suraksha Sanhita (BNSS) 2023**.

Action taken Report on Performance Review and Regulation of Insurance Sector presented in Lok Sabha

Status of Insurance Sector in India:

- **Insurance penetration:** Insurance penetration increased from 2.71% in 2001-02 to **4.2% in 2021-22**.
⊖ The global average was **7% in 2021-22**.
- **Insurance density:** Insurance density has increased from \$11.5 in 2001-02 to **\$91 in 2021-22**.
⊖ The global average was **\$874 in 2021-22**.
- **Insurance business:** India ranked **9th in life insurance business** with a market share of 3.23% in 2021.

Key Issues of Insurance Sector in India:

- **Missing Middle:** Around 30% of population is devoid of health insurance (NITI Aayog).
- **Level Playing Field for Public Sector Companies:** They lack adequate capital and have lagging insolvency ratios.
- **Absence of Policy Roadmap:** There is no Policy Roadmap for achieving envisaged ambitious target of Insurance for All by 2047

Recommendations:

- Development of **new affordable micro insurance products** for financial protection of vulnerable sections.
- **Bringing uniformity in TDS on GST** applicable to insurance provided by both Public and Private Sector Insurance Companies.
- **Allow composite licensing**, enabling a single insurance entity to offer both life and non-life insurance products.
- **Rationalize the GST rate on insurance products**, especially health and term insurance, which is 18% at present.

Steps taken for Development of Insurance sector

- **Insurance Regulatory and Development Authority of India (IRDAI):** To ensure orderly growth of the insurance business
- **Insurance Act 1938:** It provides legislative framework for functioning of insurance businesses
- **New Schemes:** Pradhan Mantri Suraksha Bima Yojana (PMSBY), Pradhan Mantri Jan Arogya Yojana (PM-JAY), Pradhan Mantri Fasal Bima Yojana (PMFBY) etc.

GLMC releases a report titled "Navigating Tomorrow: Mastering Skills in a Dynamic Global Labor Market"

It highlights that **cognitive skills and STEM capabilities** are crucial for future workforce in **India and Asia-Pacific region**, driven by growing demand for AI, data science etc.

Four key global forces shaping labor demand according to Report:

- **Economic Globalization:** Global trade creates opportunities but increases competition, leading to job losses and skilled migration. E.g. **Brain drain in India**
- **Shifting Demographics:** Aging populations in countries like **Japan and South Korea** shrink labor forces.
⊖ While young populations in countries like India can benefit from a "**demographic dividend**" with investments in education and jobs.
- **Technological Change :** **McKinsey Global Institute (2018)** projected that automation could displace 15% of the global workforce by 2030.
- **Climate Change:** Climate disruption affects sectors like outdoor work and emergency services.
⊖ In India, **32% seek reskilling** due to environmental concerns. However, the green economy could create 24 million jobs by 2030.

Way Forward:

- **Labor Market Information:** Governments should share real-time data to guide training and curriculum, **like Australia's model**.
- **Inclusive Education:** Programs like **India's Skill India Mission** offer skills and job opportunities for marginalized groups.
- **Government Financing:** Public funding and incentives can reduce barriers to training, especially for small enterprises and individuals.
- **Continuous Learning:** Lifelong learning, **upskilling and reskilling** with both technical and soft skills, should be prioritized. In India, 70% of professionals seek upskilling opportunities.

Steps taken by India to address challenges highlighted by Report:

- Pradhan Mantri Kaushal Vikas Yojana (**PMKVY**)
- National Policy on Skill Development & Entrepreneurship (**NPSDE**)
- Visiting Advanced Joint Research (**VAJRA**) Faculty Scheme
- Investing in education through schemes like **Sarva Shiksha Abhiyan**, and **Rashtriya Madhyamik Shiksha Abhiyan**

Also In News



Amrit Gyaan Kosh Portal

Amrit Gyaan Kosh Portal on iGOT platform jointly developed by **Capacity Building Commission** and **Karmayogi Bharat** launched.

About Amrit gyan kosh Portal:

- **Purpose:** Capacity Building Commission aims to **empower educators and enhance the quality of public administration** training across India.
- This comprehensive repository curates best practices from across India, **aligning with 15 of the 17 Sustainable Development Goals (SDGs)**
- It encompasses diverse policy themes such as health, education, agriculture, and digital governance.

About iGOT Karmayaogi platform

- All-in-one online platform for civil service officials.
- It **guides learning, hosts discussions, manages careers, and conducts reliable assessments** to showcase officials' competency effectively.



Consumer Confidence Survey (CCS)

Latest RBI survey shows weakened consumer confidence in India's economy, employment, and spending.

About CCS

- It is an economic indicator reflecting **optimism or pessimism** about the economy and personal finances.
- It gauges the economy's health from the **consumer's perspective**. **High confidence** typically leads to increased consumer spending.
- The **Reserve Bank of India (RBI)** measures it through a bi-monthly CCS.
- CCS responses are measured through two indexes:
⊖ **Current Situation Index (CSI):** Consumer sentiment about the economy, employment, and prices compared to a year ago.
⊖ **Future Expectation Index (FEI):** Expectations about the economy, employment, and prices a year ahead.



Reserve Bank of India (RBI) Governor

Recently, Union government named the 26th RBI Governor.

About RBI Governor

- **Appointment:** By the **Central Government** as per the **Reserve Bank of India (1934) Act**.
- **Process:** **Financial Sector Regulatory Appointment Search Committee**, (consisting Cabinet Secretary, current RBI Governor, Financial Services Secretary and two independent members) shortlists candidates.
 - ⊕ Final appointment is made by the **Cabinet Committee on Appointments**, headed by the Prime Minister.
- **Tenure:** Holds office for term **not exceeding 5 years** or as the Central Government may fix while appointing.
 - ⊕ **Eligible for reappointment.**



Bima Sakhi Yojana

Recently, Prime Minister launched the **Life Insurance Corporation of India (LIC)'s Bima Sakhi Yojana**

Bima Sakhi Yojana

- **About:** **Stipendiary Scheme**, exclusively for **Women**, with a stipendiary period of **3 years**,
- **Stipend:** Rs. 7,000/month for 1st year; Rs. 6,000/month for 2nd and Rs. 5,000/month for 3rd subject to conditions.
- **Target:** Provide employment to **2 Lakh Women**.
- **Eligibility:** **Age(18-70 years), Education (Class 10th Pass)**
- **Significance**
 - ⊕ **Provide training**, after which they can serve as LIC agents.
 - ⊕ Opportunity to be considered for the role of **LIC Development Officer**.



Diamond Battery

Scientists from **University of Bristol and UKAEA** have created world's **first carbon-14 diamond battery**, a sustainable power source that can last thousands of years.

About Diamond Battery

- It uses radioactive decay of **carbon-14(half-life of 5,700 years)**, an isotope used in radiocarbon dating, to generate electricity.
- Like a solar panel, battery converts energy, but instead of light, it uses fast-moving **electrons from radioactive decay**.
- **Encased in diamond**, it safely absorbs **short-range radiation**, and generates low levels of electricity without leakage.

Potential Applications

- Can power devices like **pacemakers, hearing aids, and ocular devices**.
- Ideal for **space missions** because of long-lasting power for satellites.
- Can help manage **nuclear waste** by extracting carbon-14, reducing radioactivity and storage costs.



Bamboo Shoots

Recent study found an extract from a traditional fermented bamboo shoot variety of Tripura, popularly called '**Melye-amiley**' having anti-obesity effects.

Bamboo Shoots

- **About:** Young sprouts that emerge from the underground stems of bamboo.
 - ⊕ They are **edible** and are a popular ingredient in many Asian dishes, for their unique flavour and texture.
 - ⊕ In India, **Northeast ethnic communities** use fresh or fermented bamboo shoots as a preferred food item.
- **Nutritional Values:** Rich in proteins, carbohydrates, vitamins, fibres, and minerals and very low fat.



Malaria-Parasites and Genetically Modified (GM) Mosquitoes

Recently, scientists experimented with the **genetic modification of the Malaria-causing parasite** to prevent them from causing disease.

- Earlier, studies largely focused on the **GM Mosquitoes**.

About Malarial Parasites

- 2 of the 5 parasite species (*Plasmodium falciparum* and *Plasmodium vivax*) pose the greatest threat of malaria.
- They are transmitted to people through the bites of infected **female Anopheles mosquitoes**.

About GM Mosquitoes

- They are **mass-produced in a laboratory for effective mosquito control** and carry **two types of genes**:
 - ⊕ **Self-limiting gene** (prevents female mosquito offspring from surviving)
 - ⊕ **Fluorescent marker gene** (glows under a special red light, enabling their identification).



Indian Star Tortoise

Recent study revealed that **releasing seized tortoises** into forests without scientific planning could worsen conservation efforts.

About Indian Star Tortoise (*Geochelone elegans*)

- **About:** **Solitary animals, do not hibernate** but stay inactive when it is very dry/hot/cold.
 - ⊕ **Mainly Herbivores** and **exhibit distinctive obsidian shell with sun-yellow star patterns**.
- **Habitat:** Endemic to arid regions of **northwest India, southern India, and Sri Lanka**.
- **Threats:** Habitat loss, Genetic diversity issues, High demand as exotic pets, trafficking, etc.
- **Conservation status:**
 - ⊕ **CITES:** Appendix I
 - ⊕ **Wildlife (Protection) Act, 1972:** Schedule I
 - ⊕ **IUCN:** Vulnerable

Place in News



Bulgaria (Capital: Sofia)

Austria is dropping its veto on Romania and Bulgaria becoming full members of Europe's Schengen free-travel area.

Political Features

- ⊕ Located in Southeast Europe, on **Balkan Peninsula**.
- ⊕ It shares borders to the north with Romania, to the south with Turkey and Greece, and to the west with North Macedonia and Serbia.
- ⊕ **Black Sea** coast of Bulgaria forms the eastern edge of the country.
- ⊕ Member of **NATO** and **European Union**.

Geographical Features

- ⊕ **Climate :** Varies from **continental** to **Mediterranean**.
- ⊕ **Major Rivers :** Danube, Maritsa, Struma etc.
- ⊕ **Highest Peak :** Musala

