

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 07-05-2026

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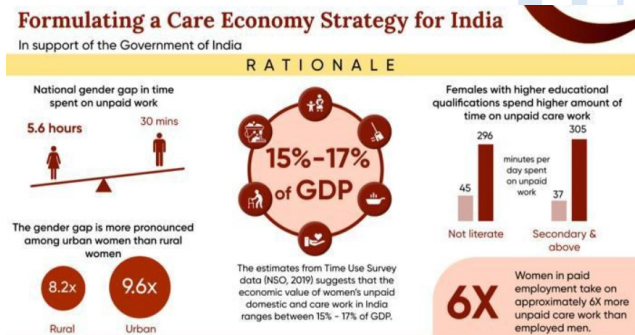
RECOGNISING AND STRENGTHENING INDIA'S CARE ECONOMY

Context

- ♦ A working paper by the Economic Advisory Council to the Prime Minister (EAC-PM) has laid out a roadmap to strengthen India's "care economy", a sector that includes childcare, eldercare, and support for people with disabilities.

What is the Care Economy?

- ♦ The care economy refers to **all paid and unpaid activities** related to the care of **children, elderly persons, persons with disabilities** etc.
 - Care work forms a critical pillar of **human development, labour productivity, and social welfare systems** in modern economies.
- ♦ **Future Projections:** Evidence from the International Labour Organisation suggests that increasing investments in the care services sector have the potential to generate **475 million jobs globally by 2030**.
 - For India specifically, direct public investment equivalent to **2% of GDP** can potentially generate **11 million jobs**, nearly 70% of which will go to women.



Why is the Demand for Care Services Rising?

- ♦ **Demographic Transition:** India's ageing population is increasing the need for long-term eldercare services.
- ♦ **Urbanisation and Migration:** Rapid urbanisation and migration are weakening traditional joint family systems. Nuclear families often lack informal support networks for caregiving.
- ♦ **Rising Female Workforce Participation:** More women entering the workforce has increased the demand for organised childcare and caregiving services.

Government Initiatives Related to the Care Economy

- ♦ **Rashtriya Vayoshri Yojana:** Provides physical aids and assisted-living devices for senior citizens with age-related disabilities.
- ♦ **Mission Shakti:** Mission Shakti aims to strengthen women's safety, empowerment, and support systems, including childcare and social protection services.
- ♦ **Integrated Child Development Services (ICDS):** Launched in 1975 to provide early childhood care, nutrition, health services, and preschool education through Anganwadi centres.
 - Targets children (0–6 years), pregnant women, and lactating mothers.
 - Provides supplementary nutrition, immunization, health check-ups, and preschool education.
- ♦ **POSHAN Abhiyaan (National Nutrition Mission):** Focuses on reducing stunting, undernutrition, and Anaemia among women and children.
 - Promotes behavioural change, use of technology (POSHAN Tracker), and convergence of health and nutrition services.
- ♦ **Mission Shakti:** Umbrella programme for women empowerment and safety.
 - It includes schemes supporting childcare services and economic empowerment of women.
- ♦ **Palna Scheme (National Crèche Scheme):** It provides day-care facilities for children aged 6 months to 6 years.
 - It offers nutrition, health care, and early learning support, helping mothers participate in the workforce.
 - Operates under Mission Shakti with Centre–State funding support.

Challenges in Implementing Care Economy Reforms

- ♦ **Fiscal Constraints:** Expanding care infrastructure and workforce training requires substantial public investment and long-term financial commitment.
- ♦ **Social Attitudes Towards Care Work:** Caregiving continues to be viewed as a private family responsibility rather than a public policy concern.

- Deep-rooted patriarchal norms limit recognition of unpaid care work.
- ♦ **Weak Regulatory Capacity:** Ensuring quality standards and monitoring care institutions across India remains administratively challenging.
- ♦ **Lack of Skilled Care Workforce:** India faces a shortage of professionally trained caregivers, especially in eldercare, disability support, and early childhood care.

Way Ahead

- ♦ **Recognise Care as Essential Social Infrastructure:** Policymakers should treat care services as a core component of economic and social infrastructure similar to education and healthcare.
- ♦ **Increase Investment in Care Services:** India should substantially increase public investment in childcare centres, eldercare facilities, rehabilitation centres, and community support systems.
 - Care policies should be aligned with **labour reforms, gender budgeting, and women's empowerment** programmes.
- ♦ **Improve Data Collection and Measurement:** India should strengthen time-use surveys and statistical frameworks to estimate the economic contribution of unpaid care work.

Source: ET

INDIA-VIETNAM RELATIONS: ENHANCED COMPREHENSIVE STRATEGIC PARTNERSHIP

Context

- ♦ Recently, India and Vietnam elevated their bilateral ties to an '**Enhanced Comprehensive Strategic Partnership**' during the visit of the Vietnamese President to India.

India-Vietnam Relations

- ♦ **Historical Evolution:** India and Vietnam share ancient cultural ties through Buddhism, Hindu influence in Champa civilization, and maritime trade connections
- ♦ **Modern Diplomatic Relations:** Diplomatic ties established in **1972**.
 - Vietnam supported India's anti-colonial and non-aligned positions. India backed Vietnam during reconstruction after the war.

- **2007:** Strategic Partnership established;
- **2016:** Relations upgraded to Comprehensive Strategic Partnership;
- **2026:** Elevated to Enhanced Comprehensive Strategic Partnership;
- ♦ Vietnam was the first ASEAN country with which India established a Strategic Partnership.

Key Highlights of the 2026 Visit

- ♦ **Trade and Economic Cooperation:** Trade doubled in the last decade to **\$16 billion**; and it sets a new target of **\$25 billion by 2030**.
 - **Agricultural Access:** India to export grapes and pomegranates; and Vietnam to export Durian and Pomelo.
 - **Signed Agreements:** The two countries signed **11 agreements** covering rare earth cooperation, cultural exchange, manuscript preservation, digital payments, and urban governance.
- ♦ **Defence and Security Cooperation:** Major areas of cooperation include joint military exercises, maritime security, defence industry collaboration, joint research and co-production, hydrography cooperation, naval port calls, air force engagements, search and rescue operations.
 - **MAHASAGAR Vision:** Mutual and Holistic Advancement for Security and Growth Across Regions.
- ♦ **Indo-Pacific and South China Sea:** Both countries emphasized freedom of navigation, peaceful resolution of disputes, adherence to international law, and UNCLOS 1982 compliance.
 - The joint statement indirectly referred to China's aggressive posture by stressing non-militarization, self-restraint, and rules-based maritime order.

Significance of India-Vietnam Relations

- ♦ **Strategic Convergence in Indo-Pacific:** Both support a **free, open, inclusive Indo-Pacific**; and shared concerns regarding Chinese assertiveness.
- ♦ **Maritime Cooperation:** Cooperation in blue economy, maritime domain awareness, and naval engagements.

- ◆ **Defence Partnership:** Vietnam is one of India's strongest defence partners in ASEAN.
 - India supports training of Vietnamese armed forces, defence credit lines, and indigenous defence exports.
- ◆ **Economic Complementarity:**
 - India: pharmaceuticals, IT, agriculture
 - Vietnam: electronics, manufacturing, supply-chain integration
- ◆ **ASEAN Centrality:** Vietnam acts as a bridge between India and ASEAN.

Related Challenges and Concerns

- ◆ **China Factor:** Chinese assertiveness in the South China Sea creates regional tensions. India needs to balance strategic interests carefully.
- ◆ **Trade Imbalance and Limited Connectivity:** Trade potential remains underutilized; and direct shipping and air connectivity remain inadequate.
- ◆ **Slow Defence Industrial Cooperation:** Need for faster implementation of defence projects; and limited joint manufacturing so far.
- ◆ **ASEAN Geopolitical Sensitivities:** ASEAN nations avoid overt anti-China positioning; India needs to maintain strategic diplomacy.
- ◆ **Supply Chain Vulnerabilities:** Dependence on China in manufacturing and critical minerals remains high.

Way Forward: Strengthening India-Vietnam Relations

- ◆ **Expand Defence Manufacturing:** Joint production of naval systems, missiles, and surveillance technologies.
- ◆ **Improve Connectivity:** Direct maritime corridors, increased flight connectivity, and digital trade platforms.
- ◆ **Strengthen Supply Chain Resilience:** Cooperation in rare earths, semiconductors, and electronics manufacturing.
- ◆ **Enhance Maritime Cooperation:** Joint patrols, white shipping agreements, and information sharing.
- ◆ **Boost Cultural and Educational Exchanges:** Buddhist diplomacy, academic partnerships, and tourism cooperation.
- ◆ **Greater Engagement through ASEAN:** Deepen India's role in East Asia Summit;

and ASEAN Defence Ministers' Meeting Plus (ADMM+).

Source: TH

NCRB RELEASES 'CRIME IN INDIA 2024' REPORT

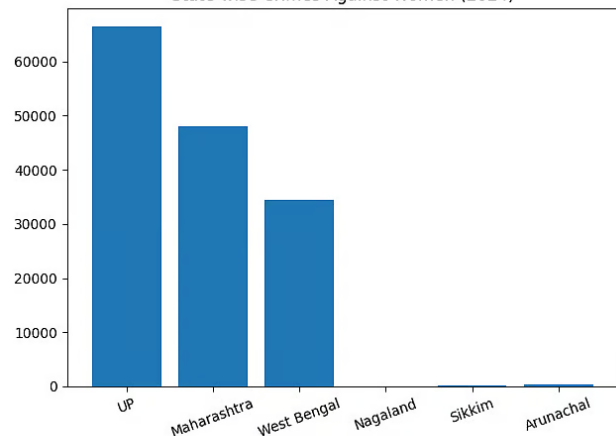
Context

- ◆ According to data released by the National Crime Records Bureau (NCRB), **13,396 cases were registered under crimes against women and 7,662 under crimes against children in 2024.**

Major Findings

- ◆ The overall crime rate in India **declined by 6% in 2024** compared with 2023 but there was an increase of over **17% in cybercrime cases.**
- ◆ **Crimes Against Women:** Declined 1.5%, with a rate of 64.6 per lakh population, down from 66.2.

State-wise Crimes Against Women (2024)



- ◆ **Deaths due to drug overdose saw a 50% increase in 2024** compared with the previous year, with Tamil Nadu recording most fatalities.
- ◆ **Crimes Against Children:** Increased by 5.9%, dominated by kidnapping (40%) and sexual offences (36.9%).
- ◆ **Economic Offences** also showed an increase of 4.6%, with over 2.14 lakh cases registered in 2024.
- ◆ **Metropolitan Crime Data:** Delhi recorded the **highest number of crimes against women and senior citizens** among India's 19 Metro cities in 2024.
 - **The Capital additionally topped the country in theft cases,** accounting for nearly 30% of all such offences nationally.

Highest number of crimes against senior citizens

● The number of crimes against senior citizens was the highest in Delhi among all UTs and metro cities in 2024, according to a latest NCRB report.

A slight year-on-year dip in such cases

2023 1,361
2024 1,267

Tops in crime against women

● Crime against women in Delhi remained the highest among 19 major cities, with **13,396** cases registered in 2024 alone, according to the NCRB report.

● Number of such crimes per 1 lakh women in Delhi in 2024 was at **176.8**. Overall crimes against women in city in 2024 saw 0.22% rise from 2023.

Tops in overall crime rate

● Capital also tops among all metropolitan cities in terms of overall crime rate.
● It, however, saw a 15% dip in 2024, when compared to 2023, and 8.8% against 2022.



Prisons most overcrowded

● 19,512 inmates against capacity of 10,026 prisoners.
● Occupancy rate stands at 194.6% as of December 31, 2024
● 17,178 prisoners are undertrials — nearly 9 in 10, or 88%

'Theft capital'

● Delhi dominated theft statistics, with nearly three-fourths of all such cases registered in 19 major metro cities.
● With 1,80,973 theft cases in 2024, Delhi also topped the list of cities across India with nearly

30% of all such offences.

Reports most kidnapping and murder cases

● Even as Delhi records marginal dip in murder cases in 2024, among UTs, the city recorded the highest number of such cases in absolute terms. The murder rate stood at 2.3 per lakh population in 2024 — higher than the national average of 1.9.

● Kidnapping and abduction cases in the Capital were also the highest among metro cities, with 5,580 cases in 2024 — accounting for nearly 35% of all such cases across the metros.

It includes:

- Formal education and vocational training.
- Informal learning through work experience and digital platforms.
- Continuous reskilling and upskilling to adapt to changing labour markets.

Key Findings of the ILO Report

- Inequalities in Learning Opportunities:** Informal workers, low-income groups, women, and less-educated individuals have significantly lower access to training opportunities.
 - The report highlights a widening “learning divide” between formal and informal sectors.
- Overemphasis on Formal Education:** Existing policies focus excessively on initial formal education while neglecting continuous skill development throughout life.
 - Access Gap:** Only **16%** of people aged **15–64** participated in structured training during the **12 months** preceding the survey.
 - Nearly **51%** of full-time permanent workers employed in formal sector firms received employer-provided training.

Why is Lifelong Learning Becoming Important?

- Technological Transformation:** Rapid digitalisation and the spread of **Artificial Intelligence (AI)** are transforming traditional occupations and creating new skill requirements.
 - Automation** is expected to **replace repetitive and low-skill tasks**, increasing demand for advanced cognitive and digital skills.
- Green Transition:** The shift towards **renewable energy, sustainable industries, and climate-resilient economies** is generating new employment sectors.
 - Workers require new technical and environmental skills to adapt to green jobs.
- Demographic Changes:** **Aging populations** in many countries and **youth-heavy populations in developing nations** are reshaping labour supply dynamics.

National Crime Records Bureau (NCRB)

- It is a government agency responsible for **collecting, analyzing, and publishing crime and criminal data in the country.**
- It was established in **1986** on the recommendation of the **Task Force of the National Police Commission (1977–1981)** and the MHA Group of Experts on Crime Records (1985).
- It functions under the **Ministry of Home Affairs.**
- Important NCRB Reports:**
 - Crime in India.
 - Accidental Deaths & Suicides in India (ADSI).
 - Prison Statistics India.
- Specialized Tools:** CyTrain (training portal for cybercrime investigation); Cri-MAC (Crime Multi-Agency Centre- facilitates inter-agency coordination).

Source: TH

LIFELONG LEARNING FOR AN AI-DRIVEN LABOUR MARKET

Context

- The International Labour Organization (ILO) in its report has called on governments to make lifelong learning a central pillar of economic and social policy amid rapid technological and structural changes in labour markets.

What is Lifelong Learning?

- Lifelong learning refers to the **continuous acquisition of knowledge, skills, and competencies** throughout an individual's life.

- Lifelong learning helps older workers remain employable and enables youth to meet evolving industry needs.
- ♦ **Changing Nature of Work: Gig economy, remote work, and platform-based employment** require workers to continuously upgrade their competencies.

Key Government Initiatives

- ♦ **Skill India Mission** aims to train millions of youth in industry-relevant skills focusing on improving employability and bridging the skill gap.
- ♦ **Jan Shikshan Sansthan (JSS):** Offers vocational training to non-literates, neo-literates, and school dropouts, focusing on rural, women, and marginalized communities.
- ♦ **National Apprenticeship Promotion Scheme (NAPS):** Promotes apprenticeship by offering financial support for apprentice stipends. Training includes both basic and on-the-job/practical training in industries.
- ♦ **PM Kaushal Vikas Yojana (PMKVY):** It is the **flagship skill certification scheme** launched under the **Skill India Mission** to enhance employability among youth.
 - It seeks to provide **industry-relevant short-term training, Recognition of Prior Learning (RPL),** and special projects.
- ♦ **National Education Policy (NEP) 2020** has recommended integration of vocational education into mainstream education in all educational institutions.

What are the Challenges?

- ♦ **Digital Divide:** Unequal access to internet connectivity and digital infrastructure limits participation in online learning.
- ♦ **Informal Workforce:** In countries like India, a large informal workforce lacks institutional support for training and reskilling.
- ♦ **Financial Constraints:** High training costs discourage participation among vulnerable populations.
- ♦ **Institutional Fragmentation:** Lack of coordination between governments, educational institutions, and industries weakens skill ecosystems.

- ♦ **Rapid Skill Obsolescence:** Technological change is making existing skills outdated at a faster pace.

ILO Recommendations

- ♦ **Inclusive Learning Systems:** Ensure affordable and accessible training for women, informal workers, rural populations, and vulnerable groups.
- ♦ **Strengthen Public-Private Partnerships:** Collaboration between governments, industries, and educational institutions can align training with labour market needs.
- ♦ **Flexible Learning Models:** Encourage modular courses, online education, micro-credentials, and workplace learning.
- ♦ **Social Protection:** Social security systems should support workers during periods of retraining and job transitions.

International Labour Organisation (ILO)

- ♦ It is an United Nations Agency established in **1919** as part of the Treaty of Versailles that ended World War I, and it became the **first specialized agency of the UN in 1946.**
- ♦ India became a founding member of the ILO in **1919**, even before gaining independence.
- ♦ It has **187 Member states.**
- ♦ **It sets labour standards, develops policies** and devises programmes promoting decent work for all women and men.
- ♦ It is the **only tripartite U.N. agency** that brings together governments, employers and workers.
- ♦ It is headquartered in **Geneva, Switzerland.**

Source: TH

ECOCIDE

Context

- ♦ The term “ecocide” has gained renewed attention amid allegations of large-scale environmental destruction during recent conflicts, including the wars in Gaza, Lebanon, and Iran.

What is Ecocide?

- ♦ Ecocide refers to **severe, widespread, or long-term destruction** of the environment caused by human actions.

- ◆ The term was coined in **1970** by **Arthur W. Galston** during debates surrounding the environmental devastation caused by **Agent Orange in the Vietnam War**.
- ◆ In **1972**, **Olof Palme** used the term at the United Nations Conference on the Human Environment.
- ◆ **Vietnam** became the first country to **criminalise ecocide domestically in 1990**.
 - Countries such as **Russia, Ukraine, France, Belgium, and Chile** have incorporated similar provisions into their legal systems.

Existing International Laws on Environmental Damage

- ◆ **Geneva Conventions:** The Geneva Conventions prohibit **methods of warfare** causing widespread, long-term, and severe environmental damage.
- ◆ **The Environmental Modification Convention** bans deliberate environmental manipulation for hostile purposes.
- ◆ **The International Criminal Court's Rome Statute** recognises four core crimes: **Genocide, Crimes against humanity, War crimes, and Crime of aggression**.
 - Intentionally launching attacks causing widespread, long-term and severe **environmental damage during war can qualify as a war crime**. However existing international laws are largely **anthropocentric**, meaning they focus on harm caused to humans.
 - Hence environmentalists are **demanding** that ecocide be recognised as the **fifth international crime** under the Rome Statute.

Recent International Developments

- ◆ **IUCN Recognition:** In 2025, the **International Union for Conservation of Nature** formally recognised ecocide as a crime concept, encouraging states to incorporate it into domestic and international law.
- ◆ **Council of Europe Convention (2025):** The Council of Europe adopted the Convention on the Protection of the **Environment through Criminal Law in 2025**.

Source: IE

NEWS IN SHORT

GOVERNOR ROLE IN REMOVAL OF CHIEF MINISTER

In News

- ◆ Trinamool Congress Chief refused to resign from Chief Minister post after election defeat, calling the result a conspiracy, alleging unfair polls and misuse of central forces.

Do you know?

- ◆ An election can be challenged by filing an election petition before the Calcutta High Court within 45 days of result declaration, under Section 100 of the Representation of the People Act, 1951, on grounds such as **corrupt practices or violations of election rules by officials**.
- ◆ Additionally, a writ petition may be filed if the integrity of the electoral process is questioned, including issues like large-scale deletion of voters during electoral roll revisions, which can be argued as a violation of fundamental rights.

Chief Minister

- ◆ Article 164(1) of the Constitution states that the Chief Minister is appointed by the Governor and ministers hold office "during the pleasure of the Governor."
- ◆ The governor normally acts on the "aid and advice" of the Council of Ministers, preventing arbitrary use of this power.

Governor's role in removal

- ◆ If the Governor doubts whether a Chief Minister enjoys majority support in the Legislative Assembly, a floor test must be conducted in the House.
- ◆ During this process, the Chief Minister has to prove that they have the support of more than half of the MLAs.
- ◆ If the Chief Minister fails to demonstrate this majority, they are required to resign from office.
- ◆ If no party is able to form a stable government, President's Rule under Article 356 may be imposed as a last resort.

Supreme Court's Interpretation

- ◆ In *A.G. Perarivalan v. State Through Superintendent of Police*, the Supreme Court held that the Governor generally acts on the "aid and advice" of the Council of Ministers.
- ◆ The Governor is mainly a constitutional/formal head, not an independent authority in ordinary matters.

Article 172 of the Constitution

- ◆ It lays down the tenure of a State Legislative Assembly. It states that an Assembly normally continues for five years from the date of its first meeting unless it is dissolved earlier.
- ◆ At the end of this five-year period, the Assembly automatically stands dissolved, making way for the formation of a new Assembly and government.

Source:TH

- ◆ The corridor is dominated by labour migration, especially in **construction, services, transport, and domestic work sectors**.

India–United States Migration Corridor

- ◆ The India–United States Corridor is the **sixth-largest** migration corridor globally. Around **3.2 million** Indian migrants were residing in the United States in 2024.
- ◆ Indian migrants constitute the **second-largest foreign-born group** in the U.S. after Mexicans.
- ◆ Indian migration to the U.S. is largely driven by:
 - Highly skilled professionals.
 - Information technology workers.
 - International students.
 - Healthcare professionals and researchers.

Source: TH

WORLD MIGRATION REPORT 2026

Context

- ◆ The International Organization for Migration released the World Migration Report 2026 highlighting that the India–UAE and India–U.S. migration corridors were among the top 10 international migration corridors in 2024.

Key Findings of the Report

- ◆ International migrants accounted for **3.7%** of the global population in 2024, compared to **2.9% in 1990**.
- ◆ Around **304 million** people were living outside their country of birth by mid-2024.
- ◆ The largest migration corridor globally remains **Mexico–United States Corridor** with nearly **11 million migrants**.
 - **Other major corridors** include: Afghanistan–Iran Corridor, Syria–Türkiye Corridor and Russia–Ukraine Corridor.

India–UAE Migration Corridor

- ◆ The India–United Arab Emirates Corridor is the **fifth-largest** migration corridor globally.
- ◆ More than **8 million** international migrants live in the **United Arab Emirates**, constituting nearly **74%** of its total population.
 - Indians form the largest migrant community in the UAE, numbering over **3 million**.

KARNATAKA'S NEW GIG WORKER GRIEVANCE SYSTEM

Context

- ◆ The Karnataka government announced the **operationalisation of a specialised grievance redressal mechanism** for platform-based gig workers in the State.

About

- ◆ **Background:** The Karnataka Platform-Based Gig Workers (Social Security and Welfare) Act, 2025, was notified in 2025.
 - In 2026, Karnataka became the **first Indian State** to notify the Rules to enact the law for gig workers.
 - The grievance-redressal mechanism for gig workers in the State forms a crucial part of the Act.
- ◆ **Aim:** To bring more structure and transparency into the process and ensure legal recourse for these workers outside the formal economy.
- ◆ It allows workers to **officially lodge complaints** through the **Integrated Public Grievance Redressal System (IPGRS)**.
 - **They can lodge grievances**, including those related to pay, working conditions, and platform-specific disputes.

- ◆ Every aggregator platform must constitute an **Internal Dispute Resolution Committee (IDRC)**.
 - Grievances filed on the IPGRS will be automatically routed to the **respective platform's IDRC**.
- ◆ Upon receiving a complaint, the IDRC is expected to attempt **resolution within 15 working days**, and is allowed up to 45 days to issue a final order.
- ◆ Any party aggrieved by the final decision can escalate the matter to the **Karnataka Gig Workers Welfare Board within 30 days**.

Source: TH

INDIA TO HOST 1ST IBCA SUMMIT

In News

- ◆ The Union Minister for Environment, Forest and Climate Change launched the website and logo for the **1st International Big Cat Alliance (IBCA) Summit 2026**, in New Delhi.

International Big Cat Alliance (IBCA)

- ◆ It is an inter-governmental international organisation headquartered in India,
- ◆ It was launched in 2023, during the event 'Commemorating 50 years of Project Tiger'.
 - There are 24 member countries, three observer countries, and several other 'range' countries in the alliance.
- ◆ It was launched with the aim of conservation of seven big cats - Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar and Puma – with membership of all UN countries/the range countries harbouring the said species and non-range countries where historically these species are not found but interested to support big cat conservation.
- ◆ The primary objective of IBCA is to facilitate collaboration and synergy among stakeholders, consolidating successful conservation practices and expertise to achieve a common goal of conservation of big cats at global level.
 - It aims to bolster the conservation agenda, halt the decline in big cat populations, and reverse current trends.

Source : PIB

MITIGATING SO₂ FROM COAL POWER PLANTS

In News

- ◆ A new IIT Delhi study published in Nature estimates that fully reducing SO₂ emissions from coal-fired power plants (CFPPs) in India could prevent about 1,24,564 deaths annually.

Key Findings

- ◆ **Mechanism of pollution:** CFPPs emit SO₂, which react in the atmosphere to form sulphate, nitrate, and ammonium aerosols.
 - These contribute to PM_{2.5} pollution, linked to heart and lung diseases.
- ◆ **Trend in emissions:** Global SO₂ emissions from power plants declined (2005–2021).
 - India's emissions increased from 2.36 to 5.05 thousand kilotonnes (2005–2021).
 - Further ~30% rise observed in 2023.
- ◆ **Health impact :** About 14,777 cardiovascular deaths could be avoided annually.
 - About 8,476 respiratory deaths could be avoided annually.
- ◆ **Statewise data:** Maharashtra, Tamil Nadu and Karnataka were estimated to see the highest number of avoidable deaths due to high population exposure to pollution.
 - Chhattisgarh and Odisha were expected to see the biggest improvement in air quality because they have several coal power-based pollution hotspots
- ◆ **Equity:** Benefits of SO₂ reduction would be higher for Backward Classes, Scheduled Castes, Scheduled Tribes, and lower/middle-income groups.
 - This makes SO₂ mitigation both an air pollution and environmental justice issue.

Initiatives taken in India

- ◆ India introduced stricter emission norms for power plants in 2015, including SO₂ limits and FGD requirements.
 - The FGD is a technology that removes SO₂ from exhaust gases of fossil fuel power plants and industrial boilers, reducing acid rain and air pollution.
- ◆ In 2025, many coal plants (about 79%) were exempted from installing FGDs.

Technology debate

- ◆ FGDs (Flue Gas Desulphurisation systems) remove SO₂ from emissions.
- ◆ Critics argue Indian coal has low sulphur, making FGDs expensive.
- ◆ The study argues health benefits outweigh installation costs.

Recommendations

- ◆ Strict enforcement of SO₂ emission norms.
- ◆ Wider installation of FGDs and pollution control technologies.
- ◆ Focus on pollution hotspot regions.
- ◆ Complementary measures: cleaner cooking fuels, EV adoption, reduced stubble burning.

Source: IE

JOINT INITIATIVE TO STRENGTHEN EV BATTERY RECYCLING

In News

- ◆ India and EU Launched Joint Initiative to Strengthen EV Battery Recycling under the **India-EU Trade and Technology Council (TTC)-Working Group-2**.

Working Group 2 (WG2) of the TTC focuses on Green and Clean Energy Technologies, identifying battery recycling as a strategic priority.

About the India and EU Initiative to Strengthen EV Battery Recycling

- ◆ It aims to promote EV battery recycling, with submissions due by 15 September 2026.
- ◆ It will be **funded through the EU's Horizon Europe programme**, while the Ministry of Heavy Industries (MHI) will support the Indian component.
- ◆ It will focus on **developing advanced recycling technologies**, including high-efficiency material recovery, safe and digitalised collection systems, and pilot-scale demonstration of innovative processes.
 - It will also support the establishment of a joint India-EU pilot line in India to enable real-world validation and industrial deployment, bringing together leading researchers, industries, and startups.
 - It will also focus on high material recovery, handling mixed battery types, improving

logistics, ensuring safety, and enabling reuse of key minerals like lithium, cobalt, and graphite.

India's progress

- ◆ India's EV battery **recycling market is rapidly growing**.
- ◆ The sector is valued at approximately ₹1,380 crore to ₹3,510 crore (2024-25) and is projected to reach ₹4,14,000 crore by 2035.
- ◆ NITI Aayog estimates 128 GWh of recyclable battery capacity by 2030, driven primarily by the public transport and EV segments.
- ◆ Recycling at this scale can reduce battery production carbon emissions by up to 90%.
- ◆ Consequently, **recycling of Lithium-ion batteries** as secondary materials sourcing has become one of the focus areas for both the EU and Indian governments to reduce their dependence on international imports.

Source: PIB

SAMAGRA SHIKSHA TEACHERS

Context

- ◆ Delhi Government has approved a substantial increase in the salaries of vocational teachers and those working under the **Samagra Shiksha Abhiyan**.

Samagra Shiksha Scheme

- ◆ It is an integrated scheme, announced in the **Union Budget 2018-19**, for school education covering complete **pre-primary to senior secondary** (up to class 12th).
- ◆ **Type: Centrally Sponsored Scheme** (partnership with States & UT).
- ◆ Subsumed erstwhile Centrally Sponsored Schemes:
 - **Sarva Shiksha Abhiyan (SSA)**
 - **Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and**
 - **Teacher Education (TE)**
- ◆ **Objectives:** To implement **SDG 4**, Right to Education and New Education Policy.
- ◆ **Coverage:** 1.16 million schools, over 156 million students and 5.7 million Teachers of Govt. and Aided schools.

Source: AIR