Three Committees constituted to draft Comprehensive Social Security Model for workers

Constituted by the Union Ministry of Labour & Employment and state governments, will design Social Security model with a focus on unorganised workers, including gig and platform workers.

- Each committee will comprise five States.
- Also, ministry is proposed to developing a dedicated social security and welfare scheme for gig and platform workers.

Social security and Need of Comprehensive Plan for it

- Definition: Includes measures of protection afforded to employees to ensure access to health care and to provide income security, particularly in cases of old age, unemployment, sickness, and invalidity, and work injury.
- Need:
 - Majority of people are engaged in Unorganised Sector: Comprises about 94% of the workforce.
 - Workers in this sector often lack protection under social security laws.
 - Changing family structure: Historically, India's joint family system served as a social safety net for its members however in recent times it is changing.
 - Other: Jobless Growth & Automation Impact, etc.

Current Mechanism of Social Security System in India

- ➤ Code on Social Security, 2020: It subsumes nine central labour legislations such as The Employees' Provident Funds and Miscellaneous Provisions Act, 1952, The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959, The Maternity Benefit Act, 1961, etc.
 - It provides for establishment of a Social Security Fund by central government.
- Life and Disability coverage: E.g., Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Pradhan Mantri Suraksha Bima Yojana (PMSBY).
- Old age benefits/Pension coverage: E.g., Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM) and National Pension Scheme (NPS) for Traders and The Self-employed Persons

A New Study Highlights how Sundarbans are resilient in face of natural, manmade stress

The Study by IIT Bombay (among others), highlights that the **Sundarbans** have shown resilience to **extreme weather** and **pollution** but have **limits to their self-repair abilities**.

Key Findings on Mangroves of Sundarbans:

➤ Resilience to Weather Extremes: Mangroves have demonstrated resilience to extreme weather events like cyclones and thunderstorms, recovering within 1-2 weeks.

- Nutrient Stability: Even with a decline in nutrient composition due to anthropogenic water pollution, mangroves showed stable productivity, indicating their ability to maintain function under stress.
- Increased Link Strength and Memory: Mangroves stabilize productivity by increasing link strength and memory with hydrometeorological variables (e.g., precipitation, temperature, wind speed).
 - In plants, memory refers to "remembering" responses to past stressful events like cyclones and storing them for future use.

About Mangroves

▶ Definition: A mangrove is a woody plant which lives between the sea and the land, in areas which are flooded by tides for part of the time.

About Sundarbans

- Location: The Sundarbans Forest located on the delta of Ganga-Brahmaputra-Meghna in South Asia (India & Bangladesh).
- Global Significance:
 - It is the largest contiguous mangrove forest in the world.
 - Recognized as a UNESCO World Heritage Site and a Ramsar Site of International Importance.
- Threat: The Indian Sundarbans were classified as endangered in a 2020 assessment under the IUCN Red List of Ecosystems.
- Ecosystem Services: Acts as the first line of defense for coastal communities against floods; Supports the livelihoods and blue economy of millions, etc.

Species Characteristics

- Mangroves are the only kind of trees that can thrive in salty water near the sea.
- Due to their high carbon densities and sequestration rates, they are an essential component of the global carbon budgets.
- They are often called 'Blue Forests' or 'Wetland Ecosystem Engineers'.
- Mangroves in India (Other than Sundarbans): Bhitarkanika (Odisha), Pichavaram Forest (Tamil Nadu); Chorao Island (Goa); Gulf of Kutch (Gujarat), Vembanad Kol (Kerala), Andaman and Nicobar Islands, etc.







Union Minister of Finance and Corporate Affairs presented the Economic Survey 2024-25 before the Parliament

The Economic Survey is a compilation of the Indian economy's performance and government policies, as well as the outlook for the upcoming financial year.

- ➤ Prepared by: The Department of Economic Affairs in the Union Finance Ministry, under the guidance of the Chief Economic Advisor (CEA).
- ➤ Focus of Economic Survey 2024-25: Driving domestic growth and resilience through deregulation.

Key Highlights of the Economic Survey 2024-25

➤ Real Gross Domestic Product: Which maps economic activity from the demand side of the economy, in the current financial year (FY25) is pegged at 6.4%; in the coming year (FY26).

Survey's Recommendation

- Deregulate the Economy: Simplify regulations to unleash economic growth, lower the cost of doing business, and boost employment and income generation.
- ▶ Infrastructure Development Focus: Public spending prioritized in physical, digital, and social infrastructure. Private sector participation critical for scaling projects under Viksit Bharat@2047.
- ▶ Getting out of the way: Allowing businesses to focus on their core mission is a significant contribution that governments can make to foster innovation and enhance competitiveness.
- ▶ Headline inflation (Overall price level increase measurement): Is moderating because of moderating core inflation (inflation in goods and services except food and fuel).
- Export Growth Amid Global Challenges: Total exports (goods + services) rose over \$600 billion in the first nine months of FY25.
- Concerns flagged by the Survey:
 - Unfavourable Global Economic Environment: Rising trade protectionism have slowed global trade and investment,
 - ⊕ China's Manufacturing Dominance: China accounts for a third of global production, surpassing the next 10 countries combined.
 - India faces limitations: In producing critical goods at the scale and quality required to serve the infrastructure and investment needs of an aspiring economy.

Four more wetlands included under the Ramsar Convention

This has increased wetlands tally from 85 to 89, highest in Asia, third globally. Wetlands have been added from Tamil Nadu, Sikkim and Jharkhand.

- ➤ Tamil Nadu leads with 20 Ramsar sites, the highest among Indian states.
- Sikkim and Jharkhand have added their first Ramsar sites.

SIRRIII and Tharkhand have added their hist Ramsar sites.	
About 4 New Ramsar Sites	
Sakkarakottai Bird Sanctuary (Tamil Nadu)	 Location: Near Gulf of Mannar, on the Central Asian Flyway. Historical Significance: Sakkarakottai Tank was dug in 1321 A.D. through Kudimaramattu (community participation). Hosts species like Painted Stork, Black-headed Ibis, etc.
Therthangal Bird Sanctuary (T.N.)	 Location: Near Gulf of Mannar, on the Central Asian Flyway. Home to species like Painted Stork, Black-headed Ibis, Spot-billed Pelican etc. Notable for the Babul (Acacia nilotica) trees.
Khecheopalri Wetland (Sikkim)	 Also Known as Wishing Lake, believed to fulfill wishes; locally called Sho Dzo Sho ("Oh Lady, Sit Here"). Originally Kha-Chot-Palri, meaning "Heaven of Padmasambhava". Cirque-type wetland, considered sacred by both Buddhists and Hindus.
Udhwa Lake (Jharkhand)	 Named after Saint Uddhava from Mahabharata, a friend of Lord Krishna. Declared as Wildlife Sanctuary and Important Bird Area (IBA). Sanctuary has two water bodies i.e. Patauran and Berhale. Home to bird species like House Swifts, Fishing Eagles, and Brahminy Kite.

Ramsar Convention on Wetlands

- Adopted in Ramsar (Iran) in 1971
- Objective: Provides a framework for national and international efforts to conserve and wisely use wetlands.
- World Wetlands Day is celebrated on 2nd February







Government Amends Aadhaar rules Allowing private entities to use Aadhaar authentication for delivering services

The Ministry of electronics and IT (Meity) notified Aadhaar Authentication for Good Governance (Social Welfare, Innovation, Knowledge) Amendment Rules, 2025, amending the 2020 rules.

These Rules have been notified under the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016.

Amendments to the 2020 Rules

- Expanding Aadhaar Authentication for Ease of Living: The amendment enables both government and non-government entities to avail Aadhaar authentication service for providing various services in the public interest.
 - The amendment extends to services in sectors like e-commerce, travel, tourism, hospitality, and healthcare.
- Streamlined approval process for Aadhaar Authentication requests
 - Entities seeking Aadhaar authentication must apply to the concerned ministry or department via a dedicated portal.
 - Unique Identification Authority of India (UIDAI) examines applications, and MeitY grants approval based on recommendations.
 - The concerned ministry or department notifies the entity after MeitY confirmation.

Significance of these Amendments

- Improved Governance and Innovation:
 - solutions leveraging Aadhaar authentication.
 - Strengthens partnerships between government and private entities for better governance.
- Trusted transactions: With the use Aadhaar authentication trusted transaction is ensured between service provider and service seeker.
- Efficient Service Delivery: Streamlines processes for faster and more efficient delivery of Aadhaar-enabled services.

About Aadhaar:

- It is a 12-digit random number issued by Unique Identification Authority of India (UIDAI).
 - O UIDAI is a statutory authority established under the Aadhaar Act. 2016.
 - O It contains Demographic (Name, Gender, Date of Birth, Address) & Biometric (Fingerprints, Iris scans and Facial Photograph) data.
- Section 7 of the Aadhaar Act 2016: Governments may require Aadhaar for beneficiaries to access benefits or subsidies under schemes funded by the Consolidated Fund of India or States
- AADHAAR Meta Data: As per Supreme court, Aadhaar data cannot be stored beyond 6 months.

Karnataka allows dignified death for the terminally ill

The decision has been taken by State in accordance with the Supreme Court's ruling which held that terminally ill patients have right to die with dignity.

Karnataka is the second State after Kerala to implement the directive.

Supreme Court Ruling

- In Common Cause vs. Union of India & Anr. (2018) case, recognised right to die with dignity as a fundamental right under Article 21 and upheld legal validity of passive euthanasia.
 - Euthanasia is an act of deliberately ending a person's life to relieve suffering from painful and incurable disease or disorder.
- Further in 2023, court further simplified certain directions of an earlier Constitution Bench on how to implement advance medical directives for passive euthanasia.

Passive euthanasia

- In it, there is withholding or withdraw of life-sustaining treatment (LST) for terminally ill patients undergoing prolonged medical treatment with no hope of recovery and do not have decision-making capacity.
 - On the other hand, active euthanasia is the intentional act of killing a terminally ill patient on voluntary request.
 - It is illegal in India.
- Ministry of Health and Family Welfare has released draft "Guidelines for Withdrawal of Life Support in Terminally ill Patients" (refer to box).

Key highlights of Guidelines

- Withdrawing Life Sustaining Treatments (LST) can be done in certain conditions such as an individual is declared brainstem death, etc.
- Constitution of Primary Medical Board (PMB) and Secondary Medical Board (SMB)
 - Foregoing of LST proposals should be made by consensus by members of PMB.
 - SMB must validate PMB decision.
- Clinical Ethics Committee to be constituted by hospitals for audit, oversight, & conflict resolution.



Also In News



Ammonia Pollution

Recently, Yamuna board stated that ammonia problem occurs every year and there are no convergent solutions by states

Ammonia Pollution in water

- According to the Bureau of Indian Standards, the acceptable maximum limit of ammonia in drinking water is 0.5 ppm.
- Causes: Intensive rearing of farm animals, can also arise from cement mortar pipe linings, discharge of untreated sewag, etc.
- Ammonia in water is an indicator of possible bacterial, sewage and animal waste pollution.
- Health risk: Affecting the respiratory system through irritation of the eyes, nose, and throat,etc.



SwaRail Application

The Ministry of Railways has introduced the 'SwaRail' SuperApp, a one-stop solution to streamline various railway services.

About SwaRail

- Offers services like Reserved Ticket Bookings, Unreserved Ticket & Platform Ticket Bookings, etc.
 - A key focus of the App is enhancing user experience with a seamless and clean user interface (UI).
- Developed by Centre for Railway Information Systems (CRIS).









Inland Mangrove of Guneri

Gujarat has notified "Inland Mangrove of Guneri" in the District of Kutch as a Biodiversity Heritage Site (BHS).

- It is Gujarat's first Biodiversity Heritage Site.
- Notified in accordance with the Biodiversity Act, 2002.

About Inland Mangrove of Guneri

- Guneri mangroves grow 45 km from Arabian Sea and 4km from Kori Creek, representing a rare inland ecosystem.
 - Unlike conventional mangrove ecosystems, this site does not receive tidal water inflow and lacks muddy or swampy conditions.
- It is reportedly one of only eight of its kind across the world.
- Area houses around 20 migratory and 25 resident migratory avifaunal species.



Araku Valley

Araku Utsav tiled 'Chali' is being organised in the Araku Valley of Andhra Pradesh.

- Location: Part of Eastern Ghats and located at an average altitude ranging between 600 m and 900 m above the sea level.
- Features
 - Anantagiri and Sunkarimetta Reserved Forest, which are part of Araku Valley, are rich in biodiversity and are mined for bauxite.
 - Often referred to as Ooty of Andhra.
 - Inhabited by different tribes, mainly Araku Tribes.
 - 0 It is renowned for Araku Arabica Coffee, which is accredited with Geographical Indication (GI) Tag in 2019.
 - Valley is surrounded by mountains like Galikonda, Raktakonda, Sunkarimetta and Chitamogondi.



India Post Payments Bank (IPPB)

The Reserve Bank of India (RBI) has imposed penalties on India Post Payments Bank (IPPB) for deficiencies in regulatory compliance.

About IPPB

- Genesis: Established in 2018 with 100% equity owned by Government of
- Aim: IPPB aims to provide every household in India an access to efficient banking services.
- Ministry: Works under the Department of Posts, Ministry of Communication.



Neutrinos

A small detector, weighing under 3 kilograms, successfully identified antineutrinos, which are the antimatter counterparts of neutrinos.

About Neutrino

- Neutrinos are subatomic particles with no electric charge and an extremely small mass, almost close to zero.
- Neutrinos are among the most abundant particles in the universe, second only to photons.
- Neutrinos interact with matter only via the weak nuclear force and gravity, making them incredibly difficult to detect.
- Global Neutrino Detection Initiatives: IceCube Neutrino Observatory (Antarctica), Super-Kamiokande (Japan), etc.
- India's Initiative: India-based Neutrino Observatory (INO) at underground laboratory in Tamil Nadu, India.



Yamanaka

OpenAI has ventured into protein engineering by developing a model-GPT-4b micro. The model enhances Yamanaka factors.

About Yamanaka Factors

- Yamanaka Factors are four specific proteins: Oct4, Sox2, Klf4, and c-Myc. These factors are transcription factors that regulate gene expression and can reprogram somatic (adult) cells into induced pluripotent stem cells (iPSCs).
- **Applications**
 - Regenerative Medicine: iPSCs generated using Yamanaka Factors can differentiate into any cell type, offering potential treatments for
 - Drug Testing: iPSCs provide a platform for testing drug efficacy and toxicity.
- Discovery & Recognition: Identified in 2006 by Shinya Yamanaka; Awarded the 2012 Nobel Prize in Physiology or Medicine.



Opioid

The US FDA has approved Suzetrigine, a first-in-class non-opioid treatment for moderate-to-severe acute pain.

About Opioid

- Definition: A class of drugs that derive from or mimic natural substances found in the opium poppy plant.
- Common Opioids Examples: Oxycodone, Morphine, Heroin etc
- Primary Use: Pain relief.
- Addiction: Although opioids are effective as painkillers, they can be addictive.

Place in News



Republic of Rwanda (Capital: Kigali)

The Rwandan-supported M23 armed group advanced southward, approaching a crucial military airport in the Democratic Republic of Congo (DRC).

- Rwanda is situated in East central Africa.
- Boundaries: Uganda (North), Tanzania (East), Burundi (South) and the DRC (west).

Geographical features

- Rwanda, is a landlocked country in the Great Rift Valley where the African Great Lakes region and East Africa converge.
- Mountain: Virunga volcanic mountains in northern Rwanda.
- Lake: Lake Kivu, one of Africa's Great Lakes, forms part of Rwanda's western border with the Democratic Republic of Congo.
- Rivers: Kagera River, the most remote headstream of the Nile River, flows through Rwanda.























CENTRAL AFRICAN

REPUBLIC OF THE CONGO

SOUTH

RWANDA

UGANDA KENYA

TANZANIA



ETHIOPIA



AHMEDABAD

BHOPAL

CHANDIGARH

JODHPUR

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