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News In Short

INTEGRATED COLD CHAIN AND VALUE ADDITION INFRASTRUCTURE (ICCVAI)

Context

- **Post-harvest losses** remain a significant challenge in India, particularly for **perishable commodities** and there is a need for integrated cold chain and value addition infrastructure.

Scale of Post Harvest Loss

- India ranks **second** in global agriculture production, but its share in global **agricultural exports is only 2.4%**, placing it eighth in the world.
- **India's post-harvest losses** amount to approximately ₹1,52,790 crore annually, according to a Ministry of Food Processing Industries 2022 study.
- The biggest loss is from perishable commodities, which include **livestock produce such as eggs, fish and meat (22%), fruits (19%) and vegetables (18%).**

Reasons for the Post Harvest Loss

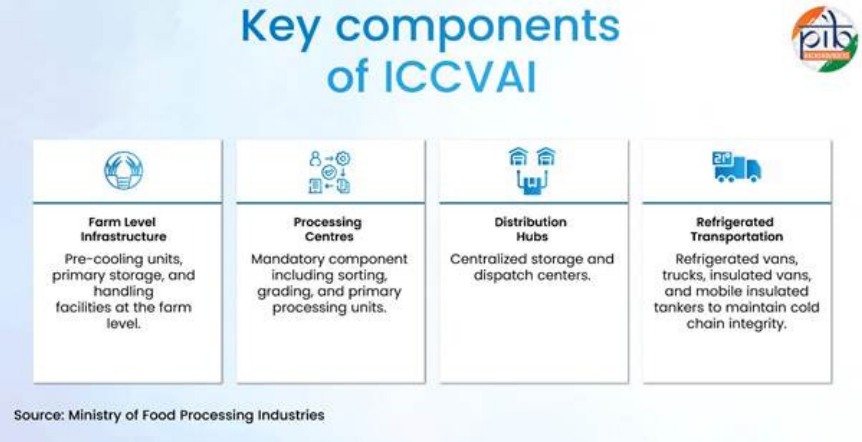
- **Harvesting Inefficiencies:** Premature or delayed harvesting leads to the quality & quantity loss.
- **Mechanisation Gaps:** Limited access to harvest machinery causes damage & spillage.
- **Inadequate Market Access & Price Support:** Small farmers often sell produce immediately after harvest due to liquidity constraints and lack of warehouse receipts.
  - Leads to distress sales and discourages investment in proper storage or post-harvest handling.
- **Pest & Disease Attacks:** Inadequate pest control leads to crop spoilage.
- **Inadequate Infrastructure:** Shortage of cold chains, warehouses, moisture-proof silos leads to the rotting/decay of the food items.
- **Transport Bottlenecks:** The road infrastructure is not robust and there is a lack of refrigerated transport support.

Concerns

- **Direct GDP Loss:** In India, food loss is estimated at ₹1.5 trillion annually of GDP loss which can be avoided through more efficient and resilient food systems.
- **Farmer Incomes:** It leads to reduced profitability due to spoilage and wastage of produce.
- **Green House Gas Emissions:** Even modest percentage losses in cereals, particularly paddy, translate into more than 10 million tonnes of carbon dioxide (CO_2)-equivalent emissions annually, owing to the **high methane intensity** of rice.
  - Losses of livestock products are equally damaging because of their **heavy resource footprint.**
- **Burden on government schemes:** The food wastage also has a cascading impact on the government food security schemes such as Public Distribution System, nutrition missions.
- **Loss of Resources:** The production of these food crops is a cumulative result of proper water supply, energy, fertilizer, land and labour.
  - The food lost is equivalent to the wasted water, energy, fertilizer, and land etc.

Government Initiatives

- **Integrated Cold Chain and Value Addition Infrastructure Scheme (ICCVAI):** The Ministry of Food Processing Industries (MoFPI) runs the ICCVAI Scheme, as part of the Pradhan Mantri Kisan Sampada Yojana (PMKSY).
  - The scheme encompasses multiple sectors, including horticulture, dairy, meat, poultry, and marine or fish products, thereby addressing a broad spectrum of perishable commodities crucial to agriculture and allied industries.



- **Mission for Integrated Development of Horticulture (MIDH):** Under the MIDH, financial assistance is provided for a range of horticulture activities, including the construction, expansion, and modernization of cold storages with a capacity of up to 5,000 MT across the country.
  - These projects are implemented based on Annual Action Plans submitted by States and Union Territories.
- **Operation Greens Scheme:** It is a central Sector Scheme being implemented by MoFPI under Pradhan Mantri Kisan SAMPADA Yojana from 2018-19, with the objective of enhancing the value realisation of farmers and minimizing post-harvest losses.
- **Agriculture Infrastructure Funds (AIF):** The Fund aims to facilitate the creation of post-harvest management and community farming assets, including cold storages, warehouses and processing units.
  - All the eligible beneficiaries can avail collateral-free term loans of up to ₹2 crore along with an interest subvention of 3% per annum on the term loan.
- **Enhanced Budgetary Allocation under PMKSY (2025):** The Union Cabinet in 2025 approved an additional outlay of ₹1,920 crore for the PMKSY, raising the total allocation to ₹6,520 crore for the 15th Finance Commission cycle.
  - This significant increase reflects the government's strong commitment to expand the impact of cold chain infrastructure.

Achievements and Progress

Conclusion

- The evolution of the scheme demonstrates **adaptive governance**.
- The 2025 budget increase underscores the **government's focus on strengthening and expanding the impact** of cold chain infrastructure.
- Strengthening linkages with agricultural marketing reforms can further amplify benefits for farmers including Doubling Farmer's Income (DFI).

Source: PIB

INDIA UNVEILS MAJOR GLOBAL SOLAR INITIATIVES AT ISA ASSEMBLY

Context

- **India** launched a set of **flagship global initiatives** to accelerate the world's transition to clean, equitable, and circular solar energy systems at the **Eighth session of the International Solar Alliance (ISA).**

Initiatives Launched

- **The SUNRISE platform:** The **Solar Upcycling Network for Recycling** will connect governments, industries, and innovators to unlock the value embedded in solar waste.
  - By promoting recycling and upcycling, SUNRISE aims to make solar deployment truly sustainable.
- **One Sun One World One Grid (OSOWOG):** The plan identifies priority links between East Asia-South Asia, South Asia-Middle East, Middle East-Europe, and Europe-Africa, enabling clean energy trade and greater energy resilience over the next decade.
- **Global Capability Centre (GCC):** GCC is a hub-and-spoke network connecting national research and training institutions under a new Solar Technology Application Resource Centre (STAR-C) model.
  - The GCC aims to foster R&D, innovation, and digital capacity-building through the ISA Academy.
- **SIDS Procurement Platform:** It is jointly developed by the ISA and the World Bank Group.
  - The signing reaffirmed the commitment of 16 Member Countries to advancing solar energy deployment through coordinated procurement, digital integration, and capacity-building to enhance energy resilience.

Significance

- The initiatives mark a significant shift for the ISA **from advocacy to implementation.**

- These initiatives strengthen the **Alliance's mission** to make solar energy accessible, affordable, and sustainable across the Global South.
- The latest announcements before COP30 in Brazil, **signal India's intent to position the Global South at the centre of the solar revolution.**
- Through these initiatives, **ISA is helping nations move from pilots to scale** — creating a solar-powered, inclusive, and regenerative future."

The International Solar Alliance (ISA)

- It is a treaty-based intergovernmental organization, launched in **2015 by India and France at the COP21 summit.**
- **Aim:** Promoting solar energy as a sustainable solution for energy access and climate change, with the goal of **mobilizing USD 1 trillion in solar investments by 2030.**
- **Members:** ISA now counts **125 Member and Signatory Countries**, driving projects on mini-grids, rural electrification, and solar financing.
  - Initially focused on developing countries, the ISA's Framework Agreement **was amended in 2020 to allow all United Nations member states to join.**
- **Headquartered** in **Gurugram** India, the ISA is the first international organization established in the country.

Outlook for Future Projects of ISA

- **Ease of Doing Solar (EODS):** It notes that global investments in the energy transition reached USD 2083 billion in 2024, with ISA Member Countries contributing USD 861.2 billion.
  - Renewable energy attracted USD 725 billion, of which solar power accounted for USD 521 billion—cementing its position as the dominant driver of the global energy transformation.
- **Solar Compass – Special Issue on Integrated PV Applications:** It highlights that now is the moment for Global South leadership in solar innovation.
  - Nearly 70% of buildings in developing countries are yet to be constructed, Building-Integrated Photovoltaics (BIPV) offers a transformative opportunity to embed solar into future infrastructure.
- **Global Floating Solar Framework projects:** The global floating solar capacity to expand rapidly over the next decade, with the Asia-Pacific region expected to lead this growth.
  - The framework equips countries with the tools to develop strategies tailored to their unique geographies, markets, and social contexts.
- **Solar PV Skills and Jobs in Africa projects:** The continent's solar workforce to grow from 226,000 today to 2.5–4.2 million by 2050.
  - Technicians will drive this growth, with 1.3 million roles expected, and small-scale systems accounting for 55% of all jobs.

Source: DTE

RETHINKING URBAN PLANNING IN INDIA

Context

- India's urban centers need to evolve **from being reactive spaces to proactive engines** of growth and **focus on land-use zoning**, as it aspires to become a $30 trillion economy by 2047 under the vision of Viksit Bharat.

Need of Urban Planning in India & Strategic Role of Cities

- **Economic Growth:** Cities contribute over 63% of India's GDP and are projected to account for 75% by 2030.
  - Urban planning ensures that this growth is spatially efficient and economically inclusive.
- **Population Surge:** Over 400 million people live in cities, and it is expected to increase nearly 600 million people by 2036 and 800 million people by 2050, planning is essential to manage density, infrastructure, and services.
- **Frontline of Climate Action:** India's pledge to achieve net zero emissions by 2070 demands urban leadership.
  - Cities consume significant energy and contribute heavily to greenhouse gas emissions. Hence, they need to integrate climate action plans that promote low-carbon growth, efficient energy use, and sustainable infrastructure.

Do You Know?

- Urban planning is the function of Urban Local Bodies (ULBs)/Urban Development Authorities **(12th Schedule of the Constitution of India).**
- MoHUA is supporting States/ULBs in capacity building activities through various Schemes such as AMRUT, for improving the capacities of ULB functionaries, elected representatives, etc.,

Limits of Traditional Urban Planning

- Historically, urban planning in India has revolved around **static master plans** that prioritize **land allocation for residential, commercial, and industrial use**. However, this approach has failed to keep pace with the dynamic challenges of modern urbanization, like:
  - **Fragmented Governance:** Cities suffer from overlapping jurisdictions and weak local governance, making coordinated planning difficult.
  - **Mobility and Transport Integration:** Cities are growing rapidly, but without integrated transport planning, congestion and pollution worsen.
  - **Environmental Stress:** Rapid urban expansion has led to water shortages, air pollution, and heat stress, demanding integrated environmental planning.
  - **Social Infrastructure & Inequity:** Health, education, and affordable housing are often afterthoughts, leading to inequitable urban development.
    - Informal settlements and inadequate infrastructure continue to marginalize millions, especially in Tier 2 and Tier 3 cities.
  - **Economic Dynamism:** Land-use plans seldom account for economic clusters, innovation hubs, or employment zones that drive urban prosperity.
- **Financing Gaps:** Cities struggle with low absorptive capacity, fragmented governance, and limited access to commercial financing.
  - A **World Bank report** estimates that ₹70 lakh crore will be needed by 2036 to meet urban infrastructure demands.

Towards a New Paradigm: Rethinking Urban Planning

- **Economic Vision as the Foundation:** Urban planning should begin with a *city-level economic vision* spanning 20–50 years.
  - It involves identifying economic drivers, estimating job creation, and aligning land-use and infrastructure requirements accordingly.
- **Natural Resource Budgeting:** Each city needs to assess its *natural resource availability and carrying capacity*.
  - Urban plans should incorporate resource budgeting for water, energy, and waste while promoting demand management and circular economy principles to ensure sustainability.
- **Climate Action Integration:** Cities should formulate *Climate Action Plans* that outline strategies for emission reduction, renewable energy adoption, and resilience building.
  - These plans need to align with national targets for greenhouse gas reduction by 2030 and net zero by 2070.
- **Environmental and Mobility Planning:** Urban environmental management needs to include air pollution control, waste management, and green infrastructure.
  - A Comprehensive Mobility Plan should promote public transport, cycling, and walking to reduce congestion and emissions, in line with sustainable transport principles.
- **Regional and Smaller City Integration:** Urban economies extend beyond municipal boundaries. Therefore, planning needs to adopt a regional approach**,** integrating urban and rural economies.
  - Smaller cities, with their lower land costs, hold immense potential for manufacturing and industrial expansion.
- **Data-Driven Decision Making:** GIS mapping, real-time analytics, and smart city tools can enable adaptive planning.
- **Institutional and Educational Reforms:**
  - **Revised Planning Laws:** To enable economic, environmental, and regional integration within urban plans.
  - **Capacity Building:** Updating educational curricula in planning and architecture to train professionals equipped for economic, environmental, and technological challenges.
  - **Interdisciplinary Collaboration:** Encouraging partnerships between economists, environmental scientists, and urban planners to foster holistic development strategies.

Government-Led Planning Reforms

- **NITI Aayog's 2021 Report:** Recommends creating an **All India Urban and Regional Planning Service**, reforming **Town & Country Planning Acts,** and strengthening urban planning education.
- **MoHUA Initiatives**: Through **Urban and Regional Development Plan Formulation and Implementation (URDPFI)** and **Model Building Bye-laws**, the Ministry promotes land-use efficiency, sustainability, and affordability.
- **India Infrastructure Report 2023:** Emphasizes urban redevelopment, sustainable growth, and the need for institutional capacity building.

- **PM Gati Shakti National Master Plan:** A multi-modal infrastructure strategy integrating transport, logistics, and urban planning for seamless connectivity.
- **Smart Cities Mission:** Aimed at improving quality of life through technology-enabled governance, efficient public services, and sustainable urban design.
- **Urban Infrastructure Investment:** India is allocating 3.3% of its GDP to infrastructure, with a focus on roads, railways, and urban transport.

Source: IE

UNION CABINET DECIDES TO RAISE FERTILIZER SUBSIDY

In News

- The Union Cabinet approved the proposal of the Department of Fertilizers for fixing the Nutrient Based Subsidy (NBS) rates for RABI Season 2025-26 (from 01.10.2025 to 31.03.2026) on Phosphatic and Potassic (P&K) fertilizers.

About the proposal

- The government is making available 28 grades of P&K fertilizers including DAP to farmers at subsidized prices through fertilizer manufacturers/ importers.
- The subsidy on P&K fertilizers is governed by NBS Scheme w.e.f. 01.04.2010.
- In accordance with its farmer friendly approach, the Government is committed to ensure the availability of P&K fertilizers to the farmers at affordable prices.
- The subsidy would be provided to the fertilizer companies as per approved and notified rates.

Reasons Behind the Subsidy Hike

- **Global Price Volatility:** Rising international prices of raw materials like urea, DAP, MOP, and sulphur have increased the cost of fertilizer imports.
  - The subsidy aims to cushion farmers from these global shocks.
- **Nutrient-Based Subsidy (NBS) Scheme:** Under the NBS framework, the government adjusts subsidy rates based on nutrient content and market dynamics. The current revision reflects updated import costs and nutrient needs.
- **Farmer Welfare and Food Security**: Ensuring timely and affordable access to fertilizers is critical for sustaining crop yields and supporting rural livelihoods, especially during the Rabi season when wheat, pulses, and oilseeds are sown.

Expected Outcomes

- **Enhanced Crop Productivity**: Timely access to balanced nutrients will support optimal crop growth and yield.
- **Price Stability for Farmers:** The subsidy will shield farmers from market fluctuations and reduce input cost burdens.
- **Boost to Rural Economy**: Increased agricultural output can stimulate rural demand and employment.

Suggestions and Way Ahead

- India has already added urea capacity in recent years. Continued investment in indigenous manufacturing will reduce import dependency.
- The fertilizer subsidy hike for Rabi 2025 is a strategic intervention to stabilize agricultural input costs, support farmers, and ensure food security amid global uncertainties. As India navigates climate challenges and market volatility, such proactive measures will be key to building a resilient and inclusive agricultural economy.

Do you know?

- The **Nutrient Based Subsidy (NBS) scheme,** implemented by the Government from 1 April 2010, provides a fixed subsidy on Phosphatic and Potassic (P&K) fertilizers—including **Di-Ammonium Phosphate (DAP)**—based on their nutrient content, with rates reviewed annually or bi-annually.
  - Under this scheme, the P&K fertilizer sector is decontrolled, allowing manufacturers and importers to set **Maximum Retail Prices (MRPs)** at reasonable levels, subject to government monitoring.
    - Fertilizer production and imports are guided by market dynamics.

Source :TH

EARLY WARNING SYSTEMS IN THE HIMALAYAS

Context

- The Himalayan region often referred to as the Third Pole, needs robust Early Warning Systems (EWS) to tackle rising climate-induced disasters amid inadequate disaster preparedness.

Rising Vulnerability of the Himalayas

- According to a report, out of 687 disasters that occurred in India between 1900 and 2022, nearly 240 were concentrated in the Himalayan belt.

- The Himalayas are warming **0.15°C–0.60°C per decade**, faster than the global average, making the region increasingly unpredictable and prone to extreme weather events.
- NASA's data shows that between 2007 and 2017, over 1,100 landslides occurred in the Himalayan region.

Need for Early Warning Systems (EWS)

- EWS can monitor and predict **glacial lake outburst floods (GLOFs), landslides, snowstorms, and cloudbursts** in the Himalayan region.
- Real-time data enables **evacuation, rescue planning, and disaster management** at both community and administrative levels.
- Integration of EWS into mountain governance can **strengthen local resilience** and **reduce economic losses** from recurrent disasters.

Challenges in Setting up EWS in the Himalayas

- **Geographical Complexity:** The Himalayan arc spans over 2,400 km, encompassing varied terrains, elevations, and climatic conditions, making uniform monitoring difficult.
- **Infrastructure and Connectivity Issues:** Many valleys remain beyond the reach of mobile networks and satellite connectivity, complicating data transmission.
- **Lack of Indigenous Technology:** India lacks low-cost, weather-resistant, easy-to-install EWS systems that can be locally maintained.
- **Institutional Gaps:** Coordination between scientific institutions, local governments, and disaster response agencies is weak.
  - Funding for research and field-level implementation is limited.
- **Low Community Involvement:** Local communities, often the first responders during disasters, are rarely trained or included in monitoring or response mechanisms.

Role of Technology and Artificial Intelligence in EWS

- AI-based models can **transform live data from multiple sensors into predictive warnings**, helping local authorities make informed decisions.
- **Satellite monitoring and remote sensing can track glacier movements**, rainfall intensity, and temperature anomalies, though high costs remain a concern.
- **Drones**, while useful for localised mapping, face limitations in windy and high-altitude terrains.
- **Integration of AI, ground-based sensors, and community networks** can offer a hybrid, scalable solution suited to the Himalayas.

Indian Initiatives

- The Ministry of Environment recently funded an **AI-assisted hailstorm EWS** for apple **orchards in Uttarakhand and Himachal Pradesh,** capable of sub-kilometre alerts.
- Projects like the **National Mission for Sustaining the Himalayan Ecosystem (NMSHE)** and **National Disaster Management Authority (NDMA)** frameworks encourage the integration of technology and community preparedness.

Way Ahead

- **Develop Indigenous, Low-Cost EWS:** Promote locally manufactured, weather-resistant systems for easy deployment.
- **Community-Based Disaster Management:** Train local populations to maintain and operate EWS and respond effectively to alerts.
- **Data Integration and AI Use:** Combine satellite data, ground sensors, and AI-driven models for accurate and timely warnings.
- **Transboundary Cooperation:** Since Himalayan rivers and glaciers are shared by multiple countries, regional data-sharing and coordination are vital.
- **Policy and Funding Prioritisation:** The central and state governments must treat Himalayan disaster resilience as a national priority, with dedicated funds and institutional focus.

Source: TH

GLOBAL EMISSION CUTS FALL SHORT OF PARIS GOALS

Context

- The United Nations Synthesis Report has found that global emission reduction efforts are falling short of the targets set under the Paris Agreement (2015).

Concerns raised by the Report

- The report is based on countries' updated **nationally determined contributions (NDC)**, which are promises to cut fossil fuel emissions or plant forests (to capture carbon dioxide) until 2035.
  - The report is based on submissions from **64 out of 190 countries. India** is yet to submit its updated NDC, with its last submission made in August 2022.
- The Countries are on track to reduce emissions by only **17%** of 2019 levels by 2035, far below the levels required to keep global warming within 1.5°C or even 2°C by the end of the century.

- However, to keep global temperature rise below 2°C and 1.5°C, countries must cut emissions by **37% and 57% of 2019 levels respectively by 2035.**
- **The Global Tipping Points Report 2025**, highlights that the world is reaching its first climate tipping point, the widespread mortality of warm-water coral reefs.

India's Commitments Emission Reductions

- India has launched the **LiFE mission (Lifestyle for Environment)** and **updated its NDCs (Nationally Determined Contributions)** under the Paris Agreement.
- Under its updated NDC 2022, India pledges:
  - **45% reduction in emissions intensity** (amount of CO_2 per unit of GDP) by 2030, compared to 2005 levels.
  - **50% of installed electricity capacity** will come from non-fossil fuel sources by 2030.
  - Creating a **carbon sink** of **2.5 to 3 billion tonnes of CO_2 equivalent** ($GtCO_2e$) by increasing forests and tree cover.

Challenges in GHG Emission Reduction

- **Global Challenges:**
  - **Industrial Resistance:** European industries continue to lobby for relaxed emission norms.
  - **Carbon Credit Dependence:** Overreliance on foreign carbon credits risks shifting the burden of decarbonisation to developing nations.
  - **Slow Transport Transition:** The EU faces persistent emissions from the road transport sector due to the slow adoption of clean mobility technologies.
- **India's Heavy Dependence on Coal:** Coal still fuels **~75%** of Indian emissions. Also, the **steel industry** is growing fast and still depends heavily on coal, which adds to the pollution problem.
- **Climate Targets Need to Be Stronger:** India has set climate goals (NDCs), but experts say they are **not strong enough to limit global warming to 1.5°C.**
- **Policy Gaps Remain:** India is setting up a carbon market (where companies can trade the right to emit carbon), but it is **still optional and not fully working** yet.

Way Ahead

- **Enhance Global Ambition:** Major emitters, especially G20 nations, must strengthen their NDCs ahead of COP30 to align with scientific pathways.
- **Accelerate Renewable Transition:** Expanding solar, wind, green hydrogen, and CCUS (Carbon Capture, Utilisation, and Storage) capacity should be prioritised.
- **Strengthen Adaptation Measures:** Build resilient infrastructure, improve disaster preparedness, and promote nature-based solutions.
- **Mobilise Climate Finance:** Developed nations must deliver on their **$100 billion** annual commitment and expand concessional finance for mitigation and adaptation.
- **Encourage Behavioural Change:** Promote sustainable lifestyles through initiatives such as Mission LiFE, focusing on reduced consumption and waste.

Concluding remarks

- The UN report serves as a wake-up call ahead of **COP 30,** urging countries to enhance their NDCs, mobilize climate finance, and accelerate adaptation efforts.
- Without substantial progress, the **Paris Agreement's goals** of **1.5°C and 2°C** will remain out of reach, putting global ecosystems and communities at grave risk.

Source: TH

NEWS IN SHORT

8TH CENTRAL PAY COMMISSION

Context

- The Union Cabinet, chaired by the Prime Minister approved the Terms of Reference of **8th Central Pay Commission**.

About

- The 8th Central Pay Commission was announced in **January, 2025.**
- The commission aimed to examine and recommend **changes in the Salaries and other benefits of Central Government employees.**
- It will be a temporary body.
- The Commission will comprise one **Chairperson Justice Ranjana Prakash Desai**; One Member (Part Time) and one Member-Secretary.
- It will make its recommendations within **18 months of the date of its constitution.**

Central Pay Commissions

- The Central Pay Commissions are **periodically constituted** to go into various issues of emoluments structure, retirement benefits and other service conditions of Central Government

employees and to make recommendations on the changes required thereon.

- The first CPC was established in 1946, and subsequent commissions have been set up roughly every 10 years.
- Going by this trend, the effect of the 8th Central Pay Commission recommendations would normally be **expected from 01.01.2026.**

Source: AIR

SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP)

In News

- Thousands of families in the United States are set to lose access to the **Supplemental Nutrition Assistance Program (SNAP)**, commonly known as **food stamps**, after the U.S. Department of Agriculture (USDA) announced a temporary halt in payments due to funding shortages.

Supplemental Nutrition Assistance Program (SNAP)

- SNAP is the **largest food assistance programme** in the US in which the recipients are given **reloadable debit cards**, which they may use to purchase essential groceries from supermarkets and e-commerce platforms like Amazon Grocery.
- It was launched in **2008**, replacing the **Food Stamp Program** that began in 1939 during the Great Depression, when **President Franklin D. Roosevelt** introduced it to boost consumer purchasing power and stabilize crop prices to help revive the economy.
- It has traditionally been funded on a 50:50 basis by the federal government and the states, with the former typically paying for the benefits and the states assuming the cost of administering the programme.
- **Eligibility** is based on income thresholds aligned with the Consumer Price Index—$15,060 for individuals and $30,000 for families of four in 2025—with maximum monthly benefits of $292 and $975 respectively.
    - Primarily intended for US citizens, certain refugees from Cuba or Haiti and asylum seekers may qualify if income criteria are met.
    - Permanent residents and green-card holders must have completed five years to be eligible.
    - The One Big Beautiful Bill Act raised the work requirement age from 54 to 64, now exempting only parents with children under 7.

Source :IE

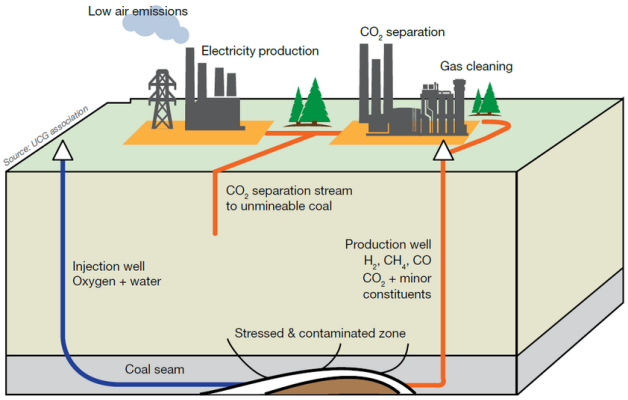
14TH ROUND OF COMMERCIAL COAL MINE AUCTIONS

Context

- The Ministry of Coal is gearing up to launch the **14th Round of Commercial Coal Mine Auctions.**
    - For the first time, the Ministry is introducing provisions for **Underground Coal Gasification (UCG) within the auction framework.**

Underground Coal Gasification (UCG)

- UCG is a process that **converts coal into a combustible gas** called **syngas** while it is still in the ground, rather than through conventional mining.



- It represents a **strategic initiative to harness India's deep-seated coal reserves**—resources that are otherwise unmineable through conventional methods.
- This innovative step is expected to **reduce dependence on imported natural gas and crude oil while unlocking new avenues for investment.**

Source: PIB

LOKTAK LAKE

Context

- A recent study by Nagaland University has established a direct link between land use and severe water pollution in Manipur's Loktak Lake.

About Loktak Lake

- It is the **largest freshwater lake in Northeast India** and is known for its unique **floating biomass**, called **phumdi** in the Meitei language.
- **Rivers like Khuga, Nambul, Imphal, Kongba, Iril, and Thoubal** drain into Loktak Lake.
- The lake supports **132 plant species** and **428 animal species,** including several endemic and migratory species.

- It is designated as a **Ramsar Site** for its ecological significance.
  - Due to the degradation, Loktak Lake has been on the **Montreux Record** since **1993**, a global warning list for wetlands facing severe ecological damage.
- **Ecological Importance:**
  - It is home to the **Keibul Lamjao National Park**, the world's only floating national park.
  - The park shelters the **Sangai or brow-antlered deer,** Manipur's state animal, which is **critically endangered.**

Source: TH

CLIMATE INEQUALITY REPORT 2025

In News

- The Climate Inequality Report 2025, co-authored by Lucas Chancel and Cornelia Mohren of the World Inequality Lab, found that wealthy individuals drive the climate crisis more through their investments than their consumption.

Key Findings

- It highlights that wealthy individuals contribute more to the climate crisis through asset ownership than consumption, with the top 1% responsible for 41% of emissions linked to private capital and 15% of consumption-based emissions.
- Their per-capita emissions are up to 680 times higher than those in the bottom 50%.
- Ownership-based emissions in countries like the US, France, and Germany far exceed consumption-based estimates, highlighting the disproportionate impact of the rich.

Impacts

- The report warns that climate change could worsen wealth inequality, projecting the top 1% could control 46% of global wealth by 2050 if they dominate climate investments.

Suggestions

- The report proposes a carbon-adjusted wealth tax to discourage high-carbon investments and fund the green transition, arguing it would be more progressive and effective than consumer-focused carbon taxes.
- Additional recommendations include banning new fossil fuel investments and expanding public ownership of low-carbon infrastructure to reduce inequality.
- With the global carbon budget for 1.5°C warming nearly exhausted, urgent action is needed to prevent climate change from worsening global wealth disparities.

Source :IE

HAL–RUSSIA DEAL: SJ-100 TO BE MADE IN INDIA

Context

- The Hindustan Aeronautics Limited (HAL) and Russia's United Aircraft Corporation (UAC) have signed a Memorandum of Understanding for production of civil commuter aircraft **SJ-100**.

About

- The **SJ-100** is a **twin-engine, narrow-body** passenger aircraft. So far, over **200 units** have been produced and are operated by **more than 16 commercial airlines** worldwide.
- Under this collaboration, **HAL will have the rights to manufacture the SJ-100** for domestic customers — a move expected to be a **game changer for short-haul connectivity** under the **UDAN Scheme**.
- This will also mark the **first time a complete passenger aircraft is produced in India** since the **AVRO HS-748**, which HAL manufactured between **1961 and 1988**.
- The SJ-100 project is not only a step towards **'Aatmanirbharta' in civil aviation**, but will also **strengthen the private sector**, and **generate employment** across the aviation manufacturing ecosystem.

Do you know?

- Over the next decade, India's aviation sector is projected to need **over 200 jets** in this category for regional connectivity and **around 350 more** for nearby international destinations across the Indian Ocean region.

Source: TH

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