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- **Impact on Women:** In Gujarat, women salt farmers transitioning from diesel to solar pumps have seen income boosts of 94%, while significantly reducing CO2 emissions. Initiatives like Barefoot College and Solar Sister enable women to become solar engineers, enhancing community health and safety.
- **Job Creation:** The solar photovoltaic industry employed around 4.9 million people in 2022, with women making up 40% of the workforce. With projected job creation of three million by 2030 in India's solar sector, there is a significant opportunity for women's economic empowerment.
- **Uplifting Marginalized Communities**
 - **Sustainable Pathways:** Unlike coal, which perpetuates the 'resource curse' in mining regions, solar energy provides sustainable development opportunities for impoverished communities. Distributed solar systems link energy production to community well-being, driving resilience against climate change.
 - **Rural Economic Development:** Off-grid solar projects deliver clean energy to rural areas lacking traditional electricity sources, promoting economic development. Rooftop installations and mini-grids create local jobs while minimizing environmental impact compared to large-scale projects.
 - **Community Engagement:** Effective community engagement is essential for the success of solar initiatives. Institutions like self-help groups and local energy committees can oversee operations, ensuring thorough energy access and maximizing benefits for the entire community.
- **Challenges and Policy Implications**
 - **Geographical and Sectoral Imbalance:** Investments in solar are disproportionately concentrated in developed nations, leaving many developing regions, particularly in Africa, behind. Funding largely favors large-scale solar farms over crucial applications like solar pumps and cold storage.
 - **Lifecycle and Waste Management:** Addressing the life cycle of solar technologies is vital for sustainability. Clear recycling guidelines and producer responsibility frameworks must be established to manage waste effectively and enhance the solar sector's environmental health.
 - **Inclusive Energy Transition:** A just energy transition requires a reevaluation of energy policies through a gender lens. Integrating electrification initiatives with sectors like agriculture can dismantle barriers affecting women, ensuring that solar energy benefits all communities equitably.

3. Tackling learning disabilities head-on GS 2 (Health)

- **Why in News:** Recent discussions highlight the urgent need to improve educational support for students with learning disabilities in India, where 8-15% of school-going children, approximately 50 million, are affected. The existing educational framework often fails to accommodate these students, exacerbating their challenges, particularly in light of the COVID-19 pandemic.
- **Understanding the Complexity of Learning Disabilities**
 - **Communication Struggles:** Learning disabilities impact not only reading and writing but also how students think and process information. Interruptions during classroom discourse can hinder students' ability to articulate thoughts, stunting their intellectual growth and learning opportunities.
 - **Misunderstandings and Prevalence:** Officially recognized under the **Rights of Persons with Disabilities Act, 2016**, specific learning disabilities often go unsupported in schools due to a lack of resources. Misconceptions label affected students as "lazy" or "stupid," obscuring their real needs and capabilities.

Tackling learning disabilities head-on

Picture a classroom where a student, eager to learn, raises their hand. As they begin to speak, their words come out haltingly, thoughts struggling to take shape. The teacher, pressed for time, gently moves on to another student. In that moment, more than just words are lost. Half-formed ideas retreat, clarity slips away, and with it, a crucial opportunity for learning is lost.

A deeper truth
This struggle is not just about communication; it is about the very process of forming and articulating ideas. Each interruption of an attempt doesn't just silence a voice; it stunts the growth of thoughts. In the rapid flow of classroom discourse, these students fall behind in speaking, in thinking, in understanding, in learning itself. In classrooms across India, this scene highlights a deeper truth: learning disabilities are far more complex than we often recognise. They don't just involve reading or writing, but affect how students think, process, and engage with the world. Recent data suggest that 8-15% of school-going children in India (50 million children) have been reported to have some form of learning disability. The challenges they face are often misunderstood. The Rights of Persons with Disabilities Act, 2016 officially recognises 'specific learning disabilities' among 21 categories, but most schools aren't equipped to handle them.

Take dyslexia, for instance. It is not just about mixing up letters. It is about a brain that processes language differently, affecting not just reading but also comprehension, memory, and even social interactions. Attention Deficit Hyperactivity Disorder (ADHD), often dismissed as restlessness, is a complex disorder impacting attention and impulse control. Our education system, built for neurotypical students, often fails to meet diverse needs. Studies show most teachers lack

the training or experience to teach in an inclusive manner, especially in rural India. The COVID-19 pandemic worsened the situation, as many teachers were unprepared to support students with learning disabilities online. The recent story of Radhika, a student with multiple learning disabilities who scored 97% in her CBSE exams, is exceptional. Yet, for every Radhika, countless students remain unsupported – not because they cannot learn, but because we haven't adapted how we teach to meet the needs of such students. Students with unaddressed learning disabilities often internalise a sense of failure. They are not "lazy" or "stupid"; their brains simply work differently. Without proper support, they may never uncover their true potential. A study published in the *Indian Journal of Psychiatry* found that children with specific learning disabilities experience significantly higher rates of anxiety and depression compared to their peers. They battle mental health issues in silence, unable to express what they can't fully understand. The government's announcement of a diagnostic test for adult learning disabilities is a positive step. However, real change will happen only when we train our teachers. B.Ed programmes must focus on neurodiversity and adaptive teaching methods. While the National Education Policy (NEP), 2020, has set standards, the challenge is to turn them into practical classroom strategies.

The way forward
To tackle learning disabilities head-on, we must develop comprehensive programmes that emphasise early identification and intervention, using screening tools and evidence-based methods tailored to India's needs. Countries such as Finland excel in identifying and supporting students from a young age, but India faces unique hurdles due to its size. Promising steps have indeed been taken, such as the 22

Cross-Disability Early Intervention Centres (CEICs). Kerala's early intervention initiatives, though focused on hearing impairments, show the potential for broader support systems.

Technology is another key factor. Tools like text-to-speech software and AI-powered learning aids can level the playing field. Initiatives such as PM e-Vidya, DIKSHA, and e-Panchal under the Digital India framework, supported by NEP 2020, aim to unify digital education. But the real challenge is ensuring that these tools reach every student, especially those with learning differences.

Finally, we need a cultural shift. Learning disabilities are not a source of shame, but different ways of processing information. Public awareness campaigns and films such as *Tare Zameen Par* can play a crucial role in changing perceptions, but awareness must start at home. Parents play a critical role in recognising early signs and advocating for the support their children's needs. Educating them about available resources and how to navigate the system is important.

Teachers, too, need motivation. Incentivising specialised training in neurodiversity – through financial rewards, career advancement, or recognition – will encourage more educators to embrace adaptive methods. Government bodies, NGOs, and private institutions must work together to innovate and ensure that these policies become actionable solutions.

The reality of learning disabilities is complex, but our response doesn't have to be. With understanding, empathy, and evidence-based interventions, we can create an education system that truly leaves no child behind. This is not just about fairness; it is about unlocking the potential of millions of young minds who think differently. As we stand at the cusp of becoming a global superpower, the time to act is now. Our children are counting on us.

- **Mental Health Consequences:** Students with learning disabilities frequently experience higher rates of anxiety and depression. Many suffer silently, unable to articulate their struggles, which contributes to a sense of failure and hopelessness.
- **The Need for Teacher Training and Policy Implementation**
 - **Importance of Teacher Training:** For effective support, teacher training programs must focus on neurodiversity and adaptive teaching methods. Current B.Ed programs often lack this critical emphasis, limiting teachers' ability to support diverse learning needs.
 - **Challenges of NEP 2020:** The **National Education Policy (NEP), 2020**, sets important standards for inclusivity, but translating these into practical strategies in the classroom remains challenging. Enhanced motivation and specialized training for teachers are essential for successful implementation.
 - **Early Identification Programs:** Establishing comprehensive programs for early identification and intervention is vital. While countries like Finland have successful models, India must develop tailored strategies to address its unique challenges and demographics.
- **Leveraging Technology and Cultural Shift**
 - **Role of Technology:** Technological tools, such as text-to-speech software and AI learning aids, can greatly assist students with learning disabilities. Initiatives like **PM e-Vidya** and **DIKSHA** aim to enhance access to digital education, yet ensuring equitable access remains a significant challenge.
 - **Cultural Awareness:** Changing societal perceptions about learning disabilities is crucial. Public awareness campaigns and educational films can help destigmatize these conditions, while parents play a key role in recognizing early signs and advocating for necessary support.
 - **Collaborative Efforts:** A concerted approach involving government bodies, NGOs, and educational institutions is needed to develop effective solutions. Incentivizing teachers to pursue specialized training in neurodiversity will help create an inclusive educational environment.

4. The burgeoning expenditure of elections GS 2 (Elections)

- **Why in News:**
 - The estimated total expenditure for the upcoming U.S. presidential and Congressional elections in November 2024 is approximately **\$16 billion** (around **₹1,36,000 crores**).
 - In contrast, the total expenditure by various political parties for the recent general election to the Lok Sabha in India was about **₹1,00,000 crores**, according to the Centre for Media Studies (CMS). This raises various debates surrounding campaign finance (election expenditure) in India.
- **Legislations Governing Campaign Finance in India**
 - **Background**
 - The issue of election funding was not specifically addressed during the Constituent Assembly debates (1946-1950).
 - The first significant laws governing election funding were the **Representation of People Act, 1950**, and **Representation of People Act, 1951**.
 - **Representation of People Act, 1951**
 - It does not impose limits on expenditure for political party leaders in disseminating messages.
 - Candidates must maintain accounts of their election expenditures, but political parties are not required to maintain such accounts for promoting official programs.
 - However, parties must disclose contributions over ₹20,000 to income tax authorities and cannot accept donations from government companies or foreign sources.

The burgeoning expenditure of elections

What is the difference between the election expenditure limits for candidates and political parties in India? How does the US handle election financing, and what role do Super PACs play? Why is curbing the illegal distribution of cash so vital crucial?

EXPLANER	THE GIST
<p>Background:</p> <p>The story so far: The total expenditure for U.S. presidential and Congressional elections in November 2024 is estimated at around U.S. \$16 billion (equivalent to ₹1,36,000 crores). According to the Centre for Media Studies (CMS), the total expenditure by various political parties for the general election to Lok Sabha this year was around ₹1,00,000 crores.</p> <p>What are the limits in India? The election expenditure limit for candidates in 10 Lok Sabha constituencies in larger States and 7 Lok Sabha constituencies in smaller States, with respect to Legislative Assemblies, for an ₹40 lakh and ₹20 lakh for larger and smaller States respectively. These limits are set, from time to time, by the Election Commission (EC). There are no limits on the expenditure of political parties during elections.</p> <p>What are international standards? In the U.S., the financing for elections happens primarily by contributions from individuals, corporations, and political action committees (PACs). While there are limits on individual and corporate contributions to candidates, various judgments of the U.S. Supreme Court have resulted in the creation of Super PACs on which there are no limits for spending. Out of the estimated expenditure in the November 2024 election cycle, around \$5.3 billion is expected to be spent on the presidential election. The balance is around \$10.5 billion in elections to the House of Representatives and Senate of the U.S.</p> <p>What are the challenges? Elections across the world democracies have become very expensive. Such increased expenditure that is met primarily through large donations creates an unhealthy nexus between the elected representatives and donors who seek favours. This acts as an entry barrier into electoral politics for many well-meaning citizens.</p> <p>What can be possible reforms? The Indragiri Gupta Committee (1990) and the Law Commission report (1998) have advised for free funding of elections. This would mean the government</p>	<p>partially bears the election expenditures of candidates nominated by recognised political parties. However, the feasibility and mechanism for implementing this measure are doubtful in the present context.</p> <p>Simultaneous elections are treated as a panacea for addressing the issue of rising election expenditures. There are challenges on account of principles of federalism and constitutional amendments to this idea that need to be debated. It must also be noted that this mechanism may run in campaign and thereby expenditure to some extent. However, without curbing the illegal distribution of cash to voters, any form of simultaneous election will not have a significant impact on election expenditure.</p> <p>In this regard, certain practical steps to create a level playing field regarding election expenditure can be implemented if they are followed. These are based on the EC's 2016 report on 'Proposed Electoral Reforms'. Firstly, the law must be amended to explicitly prohibit financial assistance by a political party to its candidate should also be within the candidate's prescribed election expenditure limits. Secondly, there should be a ceiling on political party expenditure. This may be kept at not more than the expenditure ceiling limit provided for a candidate multiplied by the number of constituencies in which the party is contesting the election. Finally, additional funds may be apportioned to High Courts for the speedy disposal of election-related cases, which would act as a deterrent against violating these norms. These reforms would require bipartisan political support and need to be expeditiously implemented.</p> <p>Background: It is a former IAS officer and author of 'Polity Simplified'. News expressed are personal.</p>

- **Election and Other Related Laws (Amendment) Act, 2003**
 - The 2003 Amendment introduced Section 29C, requiring political party treasurers to prepare annual financial reports detailing donations over ₹20,000.
 - These reports must be submitted to the Election Commission before submitting audited accounts to the Income Tax authorities.
 - Non-compliance leads to disqualification from tax relief under the Income Tax Act.
- **Companies Act, 1956**
 - Under Section 293-A of the Companies Act, 1956, corporate contributions to political parties are **limited to five percent of the company's average net profits over the last three years**
- **Foreign Contribution (Regulation) Act, 1976**
 - FCRA prohibits political organizations from receiving foreign contributions.
- **Income Tax Act, 1961**
 - Under the Income Tax Act, 1961, contributions to political parties are deductible from income tax calculations.
 - Section 13A mandates that political parties submit annual audited accounts to the Income Tax authorities by a specified date.
- **Election expenditure limit in India**
 - **Existing limit**
 - The election expenditure limit for candidates is ₹95 lakh per Lok Sabha constituency in larger States and ₹75 lakh in smaller States.
 - With respect to Legislative Assemblies, they are ₹40 lakh and ₹28 lakh for larger and smaller States respectively.
 - These limits are set, from time to time, by the Election Commission (EC). There are no limits on the expenditure of political parties during elections.
 - **Purpose and Reality of Expenditure Limits**
 - While limits aim to minimize the influence of wealth in elections and ensure a level playing field, the effectiveness is questionable.
 - The Representation of the People Act mandates candidates keep accurate spending records within these limits and submit affidavits post-election.
 - However, analysis from the Association for Democratic Reforms (ADR) shows most candidates report spending far below the limits, raising doubts about transparency.
- **Associated challenge**
 - **Political Party Spending — The "Elephant in the Room"**
 - Currently, no cap exists on political parties' expenditures during elections, which can indirectly favor wealthy candidates.
 - Experts argue that real reform requires transparency in party finances and internal democratization to achieve genuine equality for all candidates.
 - **Possible gap between actual and reported costs**
 - The official expenditures declared by the BJP and Congress for the 2019 election were ₹1,264 crores and ₹820 crores, respectively. However, according to a report by the CMS, ₹50,000 crore was spent by various parties during the 2019 election.
 - The report suggests that 35% of this money was spent on campaigns and publicity, while 25% was illegally distributed among voters.
 - **Unholy nexus between the elected representatives and donors**
 - Elections across the world democracies have become very expensive.
 - Such increased expenditure that is met primarily through large donations creates an unholy nexus between the elected representatives and donors who seek favours.
 - **Creates an entry barrier into electoral politics**
 - Expensive elections act as an entry barrier into electoral politics for many well-meaning citizens.

• Way forward

○ Advocacy for State Funding of Election

- The Indrajit Gupta Committee (1998) and the Law Commission report (1999) have proposed state funding of elections,
- They suggested that the government should partially cover the election expenses of candidates nominated by recognized political parties.
- However, doubts remain regarding the feasibility and implementation of this measure in the current context.

○ Simultaneous Elections as a Solution

- Simultaneous elections are often viewed as a potential solution to the rising costs of elections.
- While this approach may help reduce campaign and publicity expenditures, it faces **challenges related to federalism and the need for constitutional amendments**.
- Moreover, without effective measures to curb illegal cash distribution to voters, simultaneous elections alone may not significantly impact overall election expenditures.

○ Proposed Electoral Reforms

- The Election Commission's 2016 report on proposed electoral reforms outlines practical steps to create a more equitable environment concerning election expenditures:
 - **Regulating Financial Assistance:** Amend the law to ensure that any financial assistance provided by political parties to their candidates falls within the candidates' prescribed expenditure limits.
 - **Ceiling on Party Expenditures:** Establish a ceiling on the total expenditures of political parties, set at no more than the expenditure limit for individual candidates multiplied by the number of candidates from that party contesting the election.
 - **Expediting Legal Processes:** Appoint additional judges in High Courts to facilitate the speedy disposal of election-related cases, serving as a deterrent against violations of expenditure norms.
- **Need for Bipartisan Support**
 - These reforms require bipartisan political support and prompt implementation to be effective in addressing the challenges associated with election financing in India.

5. What Challenges does India Face in Fertilizer Imports? GS 3 (Agriculture)

- **Why in News:** India is currently grappling with significant challenges in meeting its fertilizer demands due to dependency on imports, especially amidst the ongoing Ukraine and Gaza crises, which could further impact fertilizer availability and prices.

• About Fertilizers:

- A fertilizer is a **chemical product either mined or manufactured material containing one or more essential plant nutrients that are immediately or potentially available in sufficiently good amounts**.
- Fertilizers have played an essential role in agricultural production, providing vital nutrients for crops, increasing demands over the years.
- As an agrarian country, India is home to numerous small and marginal farmers and is often plagued by low productivity and low quality.
- Crops are mainly rain-fed and cultivated on a single piece of land over time, decreasing soil fertility in many regions.
- Thereby, increasing quantities of nitrogen fertilizers have been used in the country

What challenges does India face in fertilizer imports?

What impact has the conflict in Ukraine had on the global fertilizer market and its effects on India?

A. M. Jeyaraj

The story so far: The crisis continuing in Ukraine and Gaza, experts and policy makers are concerned about the production capacity of fertilizers. India is not commensurate with its demand and supply is met through imports. According to the report, about 20% of the domestic requirement of urea, 30-40% of the domestic requirement of DAP, and 80-90% of Potassium (K2O or Potash) is met through imports.

How has India's fertilizer production changed? In 2022, India's yearly consumption of all major chemical fertilizers was approximately 79.25 lakh metric tonnes (LMT), comprising 34.75 LMT of urea, 32.41 LMT of DAP, 25.01 LMT of NPK, and 6.04 LMT of Potash. The country produced 425.14 LMT of chemical fertilizers in 2022, resulting in a shortfall of 16.72 LMT relative to demand, while NPK is not produced here. In 2022, India produced 209.72 LMT of urea, 42.22 LMT

of DAP, 89.67 LMT of NPK, and 53.34 LMT of single super phosphate (SSP). Total production in 2022 was 585.14 LMT, indicating an increase of only about 50 LMT over seven years. In the case of urea, the most consumed fertiliser, in 2020-21, the production was 244.88 LMT and the use was 326.96 LMT. In 2021-22, the country produced 240.08 LMT of urea and consumed 310.11 LMT. In 2022-23, the figure was 255.72 LMT and 342.72 LMT, respectively.

The Centre allocated ₹ 1.79 lakh crore as fertilizer subsidy under the Budget estimates for 2022-23. Out of this, for indigenous NPK fertilizers, the subsidy amount was ₹ 25,500 crore and ₹ 18,000 crore for imported NPK fertilizers. For indigenous urea, the subsidy was ₹ 1,00,000 crore while the subsidy for imported urea was ₹ 1,00,000 crore.

What is the situation in Ukraine and Gaza? It is said that he does not see any

stability in fertilizer markets now due to the disturbance in Ukraine and Gaza. It is primarily because of the impact of the crisis on the price of urea, which will spill over to the products such as fertilizers. According to an answer provided in Lok

Sabha, in 2018-19, 2019-20, and 2020-21, India's fertilizer imports were mostly from countries such as China, Russia, Saudi Arabia, U.S., China, Iran and Egypt. The worsening situation in West Asia and the ongoing conflict in Russia and Ukraine could impact imports from these regions.

What can India do? Experts like Dr. Suresh have been asking India to enhance its fertilizer production capacity and to shift the farming systems to reduce dependency on imported fertilizers while waiting better use of the existing fertilizers. Suggestions such as using organic manure, shifting to natural farming, and enhancing the capacity of fertilizer factories have also been made to the government.

The Standing Committee of Parliament also pressed up the need for policy initiatives aimed at creating an environment that would facilitate investments in the public, co-operative, and private sector engaged in the manufacturing and marketing of fertilizers.

Commenting on the new investment policy, implemented in 2022, to stimulate fertilizer production, the committee said it is satisfying to note that six new urea plants have since been set up each having an annual production capacity of 2.7 LMT, thereby adding India's production capacity of 76.2 LMT per annum. The three manufacturing units are located in the state of Andhra Pradesh, one in Odisha, and two in Uttar Pradesh.

Concluding, India's Minister of Fertilizers, Chemicals and Petrochemicals, Dr. Jyoti Basu, has been received by setting up of new gas-based 'Greenfield units', the panel had noted.

THE GIST

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- **Macro & Micro Elements in Fertilizers:**
 - **Macro Nutrients:** Nitrogen (N), Phosphorus (P), Potash (K), Calcium, Sulfur (S), and Magnesium are known as macro-nutrients (required in comparatively larger amounts).
 - **Micro Nutrients:** Iron (Fe), Zinc (Zn), Copper, Boron, Manganese Molybdenum, Chloride, and others are the micro-nutrients (required in a smaller quantity) for the growth and development of crop plants.
 - Among the various types, **NPK** (nitrogen, phosphorus, and potassium) fertilizers are the most common ones, and **Urea** stands as the most highly consumed fertilizer in India.
 - **India is the second-largest consumer of fertilizers globally, with an annual consumption of more than 55.0 million metric ton.**
- **Current Fertilizer Import Scenario:**
 - India's domestic fertilizer production does not meet its full demand, creating a dependency on imports. As per the **2023 Standing Committee of Parliament report:**
 - **Urea:** 20% of the domestic requirement is imported.
 - **Diammonium Phosphate (DAP):** 50-60% of the demand is met through imports.
 - **Muriate of Potash (MOP):** 100% dependency on imports.
 - The report stresses a need for self-reliance in fertilizer production to stabilize supplies.
- **Production and Consumption Trends:**
 - India's **annual fertilizer consumption in 2021-22 was 579.67 lakh metric tonnes (LMT)**, with
 - **Urea:** 341.73 LMT
 - **DAP:** 92.64 LMT
 - **MOP:** 23.93 LMT
 - **NPK (Nitrogen, Phosphorus, and Potassium):** 121.37 LMT
 - Domestic production for the year totalled **435. 95 LMT**, leaving a shortfall of **143.72 LMT**. Notably, MOP is entirely imported due to the lack of local production.
- **Impact of the Ukraine and Gaza Conflicts:**
 - Experts, at the **Food and Agriculture Organization (FAO)**, highlighted potential volatility in fertilizer prices due to the Ukraine and Gaza conflicts. This unrest could:
 - Affect **oil prices**, impacting petroleum-based fertilizer production.
 - Disrupt imports from **Russia** and **West Asia**, two significant suppliers for India's fertilizer imports.
- **Financial Burden of Fertilizer Subsidies:**
 - The Indian government has allocated substantial funds to support fertilizer affordability. In the **2023-24 Budget:**
 - **Total subsidy:** ₹1.79 lakh crore.
 - **Indigenous Urea subsidy:** ₹1.04 lakh crore.
 - **Imported Urea subsidy:** ₹31,000 crore.
 - **Indigenous P&K Fertilizer subsidy:** ₹25,500 crore.
 - **Imported P&K Fertilizer subsidy:** ₹18,500 crore.
 - These subsidies, while necessary for farmers, impose a heavy financial burden on the government.
- **Strategic Initiatives for Self-Reliance:**
 - Experts recommend increasing India's production capacity and reducing reliance on imports:
 - **New Urea Plants:** Since the **2012 investment policy**, six new urea plants have been established, adding **76.2 LMT** to India's production capacity. Currently, **36 urea plants** operate, with recent additions like **Ramgundam, Gorakhpur, Sindri, and Barauni** facilities.
 - **Shift to Sustainable Fertilizers:** Emphasis on **nano urea** and **natural farming** could reduce chemical fertilizer usage and dependency.
 - **Investment in Domestic Production:** The Standing Committee suggests fostering a favorable environment for investments from public, cooperative, and private sectors in fertilizer manufacturing.
- **Policy Recommendations and Future Outlook:**
 - The Standing Committee recommends:
 - Increasing incentives for fertilizer manufacturing within India.
 - Encouraging use of **nano urea** and shifting focus to organic and sustainable farming practices.

- Investing in infrastructure to better utilize existing fertilizers efficiently.
- By expanding production capacities and promoting sustainable agricultural practices, India could gradually reduce its dependency on imported fertilizers, stabilizing the domestic market and insulating it from global disruptions.

6. Aadhaar cannot be used as proof of date of birth: SC
GS 2 (Governance)

- **Why in News:** The Supreme Court's recent ruling on Aadhaar cards not being valid proof of age has garnered significant attention, particularly in relation to compensation claims for motor vehicle accidents. The case involved the family of a man who died in an accident, with the compensation amount hinging on his age as listed on various documents, including his Aadhaar card and School Leaving Certificate.
 - **Why Did the Court Issue This Ruling?**
 - The ruling was prompted by a compensation dispute involving the deceased's age.
 - Initially, the Punjab & Haryana High Court used the age listed on the Aadhaar card to calculate compensation, applying a specific multiplier based on that age.
 - However, the family contended that the School Leaving Certificate indicated a different age, warranting a higher compensation amount.
 - The Supreme Court criticized the lower court's reliance on the Aadhaar card, referencing established legal precedents and provisions that designate specific documents (like the School Leaving Certificate) as valid proof of age.
 - The court emphasized the importance of using verified educational documents rather than Aadhaar, which was primarily intended as proof of identity.
 - **What Did the SC Say Now?**
 - The Supreme Court, in its judgement, reiterated that Aadhaar should not be considered proof of age. It cited:
 - **Section 94 of the Juvenile Justice (Care and Protection of Children) Act, 2015:** This section specifies that matriculation or equivalent certificates are acceptable for determining age.
 - **Previous Supreme Court Rulings:** The court referred to a 2018 ruling that characterized Aadhaar as proof of identity, explicitly stating it does not serve as proof of date of birth.
 - The court overturned the Punjab & Haryana High Court's decision, establishing that the School Leaving Certificate should be used to determine the age for calculating compensation, ultimately awarding the family Rs 15 lakh based on the correct multiplier.
 - **Impact**
 - The ruling has significant implications for how Aadhaar is utilized in legal and administrative contexts.
 - Aadhaar was mooted first as a "unique ID (UID) for below-poverty-line families" to access government schemes, and then as a national exercise to register and issue unique IDs to every resident in India.
 - It reinforces the notion that while Aadhaar serves as a crucial tool for identity verification, it is not a comprehensive solution for all identification needs, particularly those requiring age verification.
 - This decision may lead to a reevaluation of Aadhaar's role in various administrative processes and bolster the reliance on more traditional forms of documentation for specific legal purposes.
 - Additionally, it underscores the ongoing dialogue regarding privacy and the appropriate use of personal data in India's legal framework.

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7. Airbus C295 Aircraft Project Recent events of importance

- **Why in News:** Prime Minister Narendra Modi and his Spanish counterpart, President Pedro Sanchez recently inaugurated **India's first private military transport aircraft production plant** in Gujarat's Vadodra. It is India's first final assembly line in the private aviation industry.
- **About the Plant**
 - The facility is set to manufacture the **Airbus C295 aircraft**, a crucial addition to the Indian Air Force's tactical airlift capabilities.
 - The plant, located on the Tata Advanced Systems Limited (TASL) campus in Vadodara, is the first final assembly line in India's private aviation industry.
 - **Key details include:**
 - **Production Capacity:** A total of 56 C295 aircraft are planned, with the first 16 delivered in fly-away condition from Spain. The remaining 40 will be assembled locally.
 - **Job Creation:** The project is expected to create over 3,000 direct jobs and support more than 15,000 indirect jobs across the supply chain.
 - **Infrastructure Development:** The establishment includes training and maintenance facilities, enhancing India's aerospace infrastructure.
 - **Airbus C295 aircraft** can perform various missions including troop transport, cargo airlift, and maritime patrol.
- **About Airbus C295 aircraft**
 - C295 aircraft was initially manufactured by Spanish aerospace company CASA. It is now part of the **European multinational Airbus Defence and Space division**.
 - The C-295 is a transport aircraft which has the capacity to carry up to 71 troops or 50 paratroopers.
 - The aircraft has a load capacity of around 5-10 tonne and boasts of contemporary technology which will replace the Indian Air Force's Avro-748 planes.
 - **Maximum cruise speed:** 260 knots
 - The C-295 is fitted with a retractable landing gear and features an unobstructed 12.69-meter-long pressurised cabin.
 - It can cruise up to an altitude of 30,000 ft while retaining excellent low-level flight characteristics.
 - **Usage:**
 - Known to be a superior aircraft, it can also be used for logistic operations to locations that are not accessible to current heavier aircraft.
 - The aircraft can airdrop paratroops and loads, and also be used for casualty or medical evacuation.
 - The C-295 can perform special missions as well as disaster response and maritime patrol duties.

Why the C-295 transport planes matter for the IAF

MAN AMAN SINGH CHHINA
CHANDIGARH, OCTOBER 28

ON MONDAY, Prime Minister Narendra Modi and Spanish Prime Minister Pedro Sanchez inaugurated a plant in Gujarat's Vadodara, where Tata Advanced Systems Ltd (TASL) will manufacture the C-295 aircraft for the Indian Air Force (IAF). According to the government's press release, it is India's first private sector final assembly line for military aircraft.

Aircraft and its capabilities

The C-295 is a transport aircraft originally produced by a Spanish aircraft manufacturer that is now part of Airbus. It is manufactured at Airbus's plant in Spain.

In September 2021, India signed a Rs 21,935 crore deal with Airbus Defence and Space to procure 56 C-295 aircraft to replace the IAF's ageing Avro-748s, which entered service in the early 1960s. The acquisition would support IAF's air transport capabilities, aiding it in carrying troops and material to different parts of the country.

The aircraft has a capacity of 5-10 tonnes and a maximum speed of 480 kmph. It has a rear ramp door for quick reaction and para-dropping troops and cargo. It can also carry out short take-offs and landings on semi-prepared surfaces. Defence Minister Rajnath Singh said in a post on X last year that the C-295's induction "will bolster medium lift tactical capability of the IAF".

At present, the IAF has a Soviet-origin An-32 aircraft fleet to haul a limited number of troops and supplies over short distances. However, these aircraft were inducted in the 1980s and many are on the verge of being phased out due to the wear and tear. The C-295 will help bridge the gap.

ber of troops and supplies over short distances. However, these aircraft were inducted in the 1980s and many are on the verge of being phased out due to the wear and tear. The C-295 will help bridge the gap.

The deal, what comes after

Under the agreement, Airbus will deliver the first 16 aircraft in fly-away condition, made in Spain. The remaining 40 aircraft will be manufactured by TASL in India as part of an industrial partnership under the 'Make in India' initiative.

The first Made-in-India aircraft will be rolled out of the manufacturing facility in September 2026. The other 39 aircraft will have to be produced by August 2031.

In 2022, TASL set up a factory in Hyderabad, where major airframe components were manufactured from 2023 onwards. After those sections of the aircraft were assembled, they were transported to the Vadodara facility to be fitted with the critical components and readied for testing and deliveries.

All 56 aircraft will be fitted with an indigenous electronic warfare suite to be developed by Bharat Electronics Ltd and Bharat Dynamics Limited. Barring components such as the engine and avionics, Airbus will transfer manufacturing technology to TASL on most other components, so that 95 per cent of the aircraft is made in India within the next few years.

Former Defence Secretary Ajay Kumar had said earlier that the indigenous content of the planes will be the highest ever in India. Private MSMEs will also contribute to this programme.

8. Centre to begin census from 2025 GS 2 (Governance)

• Why in News:

- The Centre is reportedly preparing to conduct the Census, which was delayed in 2021 due to Covid-19. Although official confirmation is pending, **the Census is expected to begin next year.**
- This exercise is crucial as it ties into **two major issues: delimitation of Parliamentary constituencies, stalled for five decades, and the implementation of women's reservation in Parliament.**
- India's Census, which has followed a decadal schedule since 1881, missed its 2021 mark for the first time. While the pandemic was largely over by 2022, allowing a Census in 2023 or 2024, the government appears to have postponed it to align with planned constituency reorganisation.

• Census in India

○ About

- Population Census provides basic statistics on state of human resources, demography, culture and economic structure at local, regional and national level.
- Beginning in the year 1872, when the first census was conducted non-synchronously, the census enumeration exercise in India is carried out in every 10 years.
- The first synchronous census was taken under British rule in 1881, by W.C. Plowden, Census Commissioner of India.
- The responsibility of conducting the decadal census rests with the Office of the **Registrar General and Census Commissioner of India**, Ministry of Home Affairs.

○ Legal/Constitutional basis of Census

- Population census is listed in **Union List (entry 69)** of Seventh Schedule in Indian Constitution.
- Census is conducted under the provisions of the **Census Act, 1948.**

○ Process of census enumeration

- The Census Operations in India have been carried out in two phases:
 - Houselisting and Housing Census and
 - Population Enumeration.
- The Population Enumeration follows the Housing Census within a gap of six to eight months.
- In Population Enumeration phase each person is enumerated and her/his individual particulars like Age, Marital status, Religion, mother tongue etc.

• Census and delimitation

○ Delimitation and Its Suspension

- Delimitation, mandated by the Constitution, adjusts the number of Parliamentary and Assembly constituencies based on population, ensuring equal representation.
- It ensures a fair division of geographical areas so that all political parties or candidates contesting elections have a level playing field in terms of a number of voters.
- **Article 82 and Article 170** of the Constitution empowers the Parliament to readjust the allocation of seats in the Lok Sabha and the Legislative Assemblies of States respectively, after every census.
- However, this process has been suspended since 1976 due to political disagreements.

The next Census

The much-delayed Census could be held soon. The Census findings will be crucial in shaping the future delimitation exercise as well as reservation of Parliamentary seats for women

AMITABH SINHA
NEW DELHI, OCTOBER 28

THE CENTRE, it seems, is finally preparing to conduct the census which it could not carry out in 2021 because of the Covid-19 pandemic. Though an official announcement is yet to be made, sources have indicated that the exercise might begin next year. This Census is linked to two other important outcomes – the delimitation of Parliamentary constituencies, which has been on hold for the last five decades, and the implementation of women's reservation in Parliament. The year 2021 marked the first time India's Census missed its decadal schedule since it was first carried out in 1881. But the pandemic was very much over by 2022, and that could have enabled the start of the Census process in 2023 or 2024. The government seems to have deliberately delayed starting the Census to ensure that the delimitation or reorganisation of Parliamentary constituencies is carried out immediately after it. However, a Census completed by 2026, or maybe even later, will allow for an immediate delimitation.

The delimitation angle

Delimitation, a Constitutional mandate, is supposed to happen after every Census. The process adjusts the number of constituencies of Parliament and state Assemblies in accordance with the latest population figures, to ensure that the number of people represented by any Member of Parliament or Member of Legislative Assembly is roughly the same. However, this exercise has been suspended since 1976 due to lack of political consensus. If the standard logic of delimitation were to be followed, the wide divergence in population growth trends in various states would mean that some would see the number of Parliamentary constituencies reduce, while others would see an increase. Southern states have argued that this would amount to penalising them for successfully meeting population control objectives. A delimitation exercise in 2002, following the 2001 Census, involved only the redrawing of existing boundaries of constituencies, and not a change in the number of constituencies. As of now, delimitation is suspended till at least 2026. The 84th Constitutional Amendment of 2001 said that the next delimitation can be held only based on the Census conducted after 2026. Therefore, even if the 2021 Census had been held on time, or in 2023 or 2024, delimitation could have been done only after the 2031 Census. If the Census, which takes two years to complete, begins next year, delimitation can be carried out immediately thereafter.



Census department officials taking a count of the homeless people in Chandigarh as part of the 2011 exercise. (Express)

Once in a decade

The Census has happened in the first year of every decade since it was first held. There is a Constitutional mandate that a Census – it is mentioned as item 69 in the Union List of subjects, meaning only the central government is empowered to undertake the exercise. There are repeated references to the Census in the Constitution of India in the context of the reorganisation of constituencies for Parliament and State Assemblies. But it does not say when the Census has to be carried out, or what the frequency of this exercise should be. The Census of India Act of 1948, which provides the legal framework for it, also does not mention its timing or periodicity.

Therefore, there is no Constitutional or legal requirement for a Census every 10 years. However, the British administration carried it out in the first year of every decade, and this convention was maintained after independence. Most other countries also follow a similar cycle for their Census. Some, like Australia, carry out a Census after every five years.

Schedule for delimitation

India's Census is a two-step process involving a house-listing and numbering exercise, followed by population enumeration, house-holding and numbering are done in the year before the Census year, usually between April and September. Population enumeration happens between the second and fourth weeks of February in the Census year.

The numbers revealed represent the population of India as of midnight on March 1 in the Census year. To account for the births and deaths during the enumeration period in February, the enumerators return to the households in the first week of March to make revisions. The preliminary results of the Census, particularly population totals, are released within a few months, usually in the same year the Census is carried out. The full results take one to two years to come out. Interestingly, a Census that begins in 2023 and is completed in 2026 might not enable an immediate delimitation. The language of the 84th Constitutional amendment says delimitation can happen only on data from the first Census "taken after the year 2026". This would suggest that the population enumeration part of the Census has to be carried out after 2026. Therefore, if the Census exercise has to begin next year and the government wants to begin the delimitation process afterwards, in time for the 2029 Lok Sabha elections, an amendment to the existing provision may be required.

However, Constitutional requirements are likely to be the least of the problems encountered in conducting delimitation. The suspension of delimitation was caused by sharp disagreements among the political parties, which continued to delay. Southern states, which would see their seats in Parliament reduced if current populations are accounted for, might want to put off delimitation again – unless they are compensated in some other way.

The recommendations of the 18th Finance Commission might be a crucial element here. The Finance Commission, a body constituted every five years, recommends the devolution of financial resources between the Centre and States. The 18th Finance Commission is supposed to submit its report by the end of next year. Further, the Parliament approved the 18th Constitutional Amendment last year, reserving 33 per cent of seats in the Lok Sabha and State Assemblies for women. However, it is supposed to come into effect only after the seats in Lok Sabha and State Assemblies are modified, following the delimitation exercise.

Caste Census demand
There is also an expectation that the next Census may collect caste data as well to delineate the need for a separate caste census, which has been demanded by some political parties in recent years. The collection of caste data in the Census would not be unprecedented. Some information related to caste was obtained until the 1941 Census and the practice was discontinued only in independent India. In some earlier years, information on caste or sex of people belonging to all religions was obtained in the Census. In other years, only the caste data of Hindus was collected. The practice was discontinued from the 1951 Census onwards, and only data on Scheduled Caste or Tribes has been collected since then.

- Following a 2001 Census, the 2002 delimitation exercise only redrew constituency boundaries without changing their number.
- Southern states oppose delimitation, fearing that changes would reduce their representation despite their success in population control.
- As of the **84th Constitutional Amendment (2001)**, **delimitation is postponed until at least 2026, thus making 2031 the earliest opportunity for it if based on the Census.**
- **Immediate delimitation might not be possible**
 - The 84th Constitutional Amendment restricts delimitation based on Census data from the first Census "taken after the year 2026."
 - Thus, even if the Census begins in 2025 and completes in 2026, immediate delimitation might not be possible unless the amendment is revised.
 - An amendment to the existing provision may be required if delimitation is to proceed in time for the 2029 Lok Sabha elections.
- **Challenges of Political Consensus and Southern States' Concerns**
 - The suspension of delimitation since 1976 stems from political disagreements, especially with Southern states.
 - These states argue that accounting for current population figures would unfairly reduce their Parliamentary representation, penalizing them for successful population control.
 - Their support for delimitation may hinge on receiving compensations or other reassurances.
 - Additionally, **the 128th Constitutional Amendment**, passed to reserve 33% of seats in Parliament and State Assemblies for women, **requires a delimitation exercise before implementation, further tying delimitation to upcoming political reforms.**
- **Role of the 16th Finance Commission**
 - The 16th Finance Commission, due to submit its report next year, will address the distribution of financial resources between the Centre and states, which could impact state-level negotiations regarding delimitation.
- **Demand for Caste Data in Upcoming Census**
 - **The demand**
 - There is a growing expectation that the next Census may include caste data, addressing demands from some political parties for a caste census.
 - Caste census means inclusion of caste-wise tabulation of India's population in the Census exercise.
 - **Background**
 - Caste was enumerated in British India Censuses (1881-1931).
 - Post-Independence, **the 1951 Census excluded caste enumeration except for SCs and STs, who continue to be counted.**
 - Caste data were collected for the 2011 census but the data was never made public
 - In 1961, the GOI recommended states conduct their own surveys for state-specific OBC lists, as there were no central reservations for OBCs at that time.
 - Though Census is a Union subject, **the Collection of Statistics Act, 2008 allows States and local bodies to gather necessary data, as seen in Karnataka (2015) and Bihar (2023).**