



FEBRUARY, 2024



The

HINDU & EXPRESS NOTES

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1st February 2024

RBI action against Paytm Payments Bank: probable causes, effects-Indian Express Explained

Economy

Key Takeaways:

1. **RBI's Restriction:** RBI has limited Paytm Payments Bank's core services, including account and wallet services, effective from end of February 2024, but hasn't cancelled its license.
2. **Impact on Customers:** Over 100 million KYC-verified customers of Paytm will face limitations in services, although they can still withdraw or use their existing balances.
3. **Reasons for Action:** The RBI's decision is likely due to persistent non-compliance issues related to KYC and IT security, and concerns over data access by Chinese stakeholders in the parent company, One97 Communications.
4. **Background of Scrutiny:** RBI has been scrutinizing Paytm since 2018 for compliance issues, particularly KYC norms and the relationship with its parent company.
5. **Previous RBI Actions:** RBI previously stopped Paytm from onboarding new customers in 2022 and imposed a fine in 2023 for regulatory deficiencies.
6. **Impact on Stakeholders:** This action affects not only customers but also stakeholders, highlighting concerns over foreign investments, especially from China.
7. **Regulatory Compliance:** The situation underscores the need for strict adherence to regulatory norms in the fintech sector, particularly regarding KYC and data security.
8. **Broader Implications:** This may lead to more stringent regulations in the fintech sector, especially concerning foreign investments and compliance.

Mains easy language

The Reserve Bank of India (RBI) has imposed significant restrictions on Paytm Payments Bank, barring it from offering key services like account creation and wallet services from February 2024. This decision, crucially, does not revoke Paytm's license but severely limits its operational scope. Paytm, a major player in India's fintech sector with over 100 million KYC-verified customers, faces a substantial impact from this move. Customers can withdraw or use existing funds, but will experience restricted access to Paytm's broader services.

The RBI's action is attributed to persistent non-compliance issues with Paytm, particularly concerning Know Your Customer (KYC) norms and IT security. There are also concerns regarding data access by Chinese stakeholders in Paytm's parent company, One97 Communications, in the backdrop of geopolitical tensions between India and China. Previous regulatory actions by the RBI include stopping new customer onboarding in 2022 and imposing fines in 2023 for compliance failures. This situation highlights the critical importance of regulatory adherence in the financial technology sector, especially in areas of customer data security and foreign investment scrutiny. The move by RBI could signal a trend towards more stringent regulation in the fintech industry, emphasizing compliance and data privacy.

What to watch in Budget-Indian Express Explained

Economy



| Clear your doubts now.



Key Takeaways:

1. **Interim Nature of Budget:** This is an interim budget presented before the Lok Sabha elections, which means it might not include major policy changes but will focus on government achievements and set the stage for the full budget in July.
2. **Revenue and Expenditure Breakdown:** Watch for the pie charts showing how the government earns (revenue sources) and spends (expenditures). These charts offer insights into the government's financial health and spending priorities.
3. **Shift in Financial Health:** Comparisons of the revenue and expenditure charts across years reveal changes in the government's financial position, such as increased reliance on borrowings and alterations in spending on sectors like defense and subsidies.
4. **Nominal vs Real Increases:** Distinguishing between nominal (not adjusted for inflation) and real (adjusted for inflation) figures is crucial. A nominal increase in budget allocations might not mean an actual increase in spending power due to inflation.
5. **Fiscal Deficit and Revenue Deficit:** The fiscal deficit (the amount borrowed to meet expenses) and the revenue deficit (gap between everyday expenses and income) are key indicators of fiscal health. While the FRBM Act targeted to limit fiscal deficit to 3% of GDP, the focus on revenue deficit has lessened, affecting fiscal prudence.
6. **Budget Estimates vs Revised Estimates:** Understanding the difference between Budget Estimates (projections made at the start of the year) and Revised Estimates (updated figures based on actual data) is important to assess the government's financial accuracy and performance.
7. **Analysis of Growth Rates:** The nominal GDP growth rate is a critical figure in the budget as it forms the base for many calculations, including fiscal deficit targets. It's essential to analyze whether growth rates presented are nominal or real to understand the actual economic growth.

Mains easy language:

The 2024-25 Union Budget, presented as an interim one by Finance Minister Nirmala Sitharaman before the Lok Sabha elections, plays a crucial role in outlining the government's fiscal strategy and priorities. This budget is expected to focus on showcasing the government's achievements and setting the groundwork for the full budget presentation post-elections. A critical aspect of understanding this budget is through the analysis of the government's revenue sources and expenditure patterns, which will be depicted in detailed pie charts. These charts are essential for assessing the shifts in fiscal health, particularly noting the increased reliance on government borrowings and any changes in spending priorities, especially in sectors like defense and subsidies. Distinguishing between nominal and real figures is another key aspect, as nominal figures can be misleading about the actual spending power or economic growth when not adjusted for inflation. The fiscal deficit, which indicates the amount the government borrows to meet its expenses, and the revenue deficit, highlighting the gap between everyday expenses and earnings, are crucial for evaluating the government's fiscal discipline. Additionally, comparing Budget Estimates with Revised Estimates provides insights into the government's accuracy in fiscal planning and management. This interim budget serves as a precursor to the full budget and offers a glimpse into the government's economic approach in a crucial election year.

[WHY BIRD FLU DEATHS OF ANTARCTIC PENGUINS IS A FLASHING DANGER SIGN-Indian Express Explained](#)

Science

Key Takeaways:

1. **First Detection in Antarctic Penguins:** H5N1 was confirmed in two gentoo penguins found dead on Sea Lion Island in the Falkland Islands, marking the first time this virus has been detected in Antarctic penguins.
2. **Widespread Penguin Deaths:** More than 200 dead or dying gentoo chicks have been reported on Sea Lion Island, indicating a potentially extensive outbreak among the penguin population.



| Clear your doubts now.



- 3. Penguins Under Threat:** Penguins in Antarctica already face multiple threats, including climate change, pollution, and commercial fishing. Some species are listed as vulnerable or near threatened, making them particularly susceptible to additional stressors like disease outbreaks.
- 4. Lack of Existing Immunity:** Before the arrival of H5N1 in the Antarctic region, highly pathogenic bird flu viruses had not been documented in the area, suggesting that local penguin populations likely have little or no existing immunity to the virus.
- 5. Rapid Spread Potential:** Penguins breed in large, crowded colonies, which could facilitate rapid virus transmission and lead to mass mortalities.
- 6. Spread Beyond Penguins:** The virus has already affected various bird species and marine mammals in South America, with significant fatalities reported among seals and sea lions. There's a concern that similar impacts could occur in Antarctica.
- 7. Global Scientific Concern:** Scientists globally are worried about the spread of H5N1 in Antarctica, given the region's critical role as a breeding ground for over 100 million birds and marine mammals. The potential impact on these populations could be immense.

Mains easy language

The recent detection of the H5N1 bird flu virus in Antarctic penguins, specifically on Sea Lion Island in the Falkland Islands, is a significant environmental concern. This marks the first time this highly lethal virus has been found in the region, with over 200 dead or dying gentoo chicks reported. This development is particularly worrying because penguins, already under threat from climate change, pollution, and commercial fishing, are likely to have little to no immunity against this novel pathogen.

The spread of H5N1 in Antarctica poses a severe risk due to the dense breeding colonies of penguins, which can facilitate rapid transmission and potentially lead to mass die-offs. The situation is further exacerbated by the virus's impact beyond penguins, as seen in South America where it has affected various bird species and marine mammals, including seals and sea lions, leading to significant fatalities.

Global scientific communities are deeply concerned about this outbreak. Antarctica is a crucial breeding ground for over 100 million birds and marine mammals, and the introduction of a pathogen like H5N1 could have devastating consequences. This situation serves as a stark reminder of the fragility of wildlife ecosystems and the escalating impact of emerging infectious diseases, highlighting the need for urgent attention and action to protect these vulnerable species and their habitats.

Marathon, not sprint-Indian Express Editorial

Economy

Key Takeaways:

- 1. Robust Economic Growth:** India's economy is expected to grow by 7.3% this fiscal year, outpacing earlier forecasts. This positions India as the fastest-growing major economy, despite global challenges like the Russia-Ukraine conflict and Middle East crisis.
- 2. Fiscal Policy and Infrastructure Investment:** The government's fiscal policy, which shifted from pandemic-related welfare to public investment in infrastructure, has been crucial in the post-pandemic recovery. This strategic focus has increased the economy's productive capacity while adhering to a reducing fiscal deficit-to-GDP ratio.
- 3. Fiscal Deficit Reduction Goals:** The government aims to reduce the fiscal deficit to 4.5% of GDP by 2025-26. Achieving this in an election year, particularly with the interim budget, indicates a continuation of fiscal conservatism.
- 4. Agriculture and Food Inflation Challenges:** High food inflation and the underperformance of the agriculture and rural economy pose significant challenges. These sectors have a disproportionate impact on the GDP due to their influence on the consumption basket and the large population dependent on agriculture.



| Clear your doubts now.



- 5. Monetary Policy and Inflation Control:** The Reserve Bank of India (RBI) is focused on controlling overall demand through interest rate adjustments to manage inflation, particularly food inflation. Despite a quick correction in core inflation, headline inflation remains a concern.
- 6. Climate Change and Economic Growth Balance:** With India facing increasing climatic vulnerabilities, there is a critical need to address climate change effectively without compromising growth prospects. This includes a focus on energy transition and sustainable development alongside maintaining strong macroeconomic fundamentals and continued reforms.

Mains easy language

India's economy is projected to grow by 7.3% this fiscal year, surpassing the earlier prediction of 6.5%. This robust growth, amidst global challenges like the Russia-Ukraine conflict and Middle East crisis, positions India as the fastest-growing major economy. The government's fiscal policy has been instrumental in this post-pandemic recovery, shifting from a welfare-centric approach during the pandemic to a public investment-driven strategy in infrastructure. This shift has enhanced the economy's productive capacity while maintaining a reducing fiscal deficit-to-GDP ratio.

However, challenges loom, particularly in agriculture and food inflation. These sectors significantly impact GDP due to their influence on the consumption basket and the population's dependence on agriculture. The Reserve Bank of India's focus on controlling demand to manage inflation, especially food inflation, remains a pivotal aspect of India's economic strategy.

Climate change also poses a significant challenge. India, facing increasing climatic vulnerabilities, needs to balance addressing climate change with sustaining economic growth. This includes managing energy transitions and sustainable development without compromising macroeconomic stability. The pursuit of these goals and continued reforms will be critical for transforming India's current growth trajectory into long-term, sustainable development.

[What makes the India-France 'strategic partnership' tick-The Hindu Editorial](#)

International relations

Key Takeaways:

- 1. High-Level Visits Demonstrate Close Ties:** Frequent visits by top leaders, including French President Emmanuel Macron's attendance as the chief guest at India's Republic Day and Prime Minister Narendra Modi's visit to France, underscore the depth of the India-France Strategic Partnership.
- 2. Origins in Nuclear Cooperation:** The partnership originated in 1998, with France being the first P-5 country to engage in dialogue with India following its nuclear tests. France's support for India's bid for a permanent seat in the UN Security Council marked a key moment in this relationship.
- 3. Shared Value of Strategic Autonomy:** Both nations value strategic autonomy. India's approach of non-alignment and France's independent stance within NATO, despite being a founding member, highlight their parallel views on maintaining sovereign decision-making in international affairs.
- 4. Expanding Partnership Scope:** Initially focused on nuclear, space, and defense, the partnership has expanded to include counter-terrorism, intelligence sharing, cybersecurity, and global challenges like climate change and multilateral institution reform.
- 5. Significant Defense Collaborations:** Notable defense collaborations include the construction of Scorpene submarines and the acquisition of Rafale aircraft. These projects not only enhance military capabilities but also contribute to India's self-reliance in defense.





- 6. Education and Business Ties:** Increasing numbers of Indian students in France and collaborative efforts in higher education reflect growing people-to-people ties. Additionally, the presence of French companies in India and Indian businesses in France strengthens economic relations.
- 7. Mature Handling of Differences:** The strategic partnership is characterized by a mature approach to handling differences, where any disagreements are addressed privately rather than publicly. This approach underscores the resilience and depth of the India-France relationship.

Mains easy language

The India-France 'Strategic Partnership' has evolved into a significant bilateral relationship, marked by mutual respect and shared values of strategic autonomy. French President Emmanuel Macron's frequent visits to India, including his role as the chief guest at India's Republic Day this year, and Prime Minister Narendra Modi's visit to France, exemplify the closeness of this partnership. The origins of this partnership trace back to 1998 when France was the first P-5 country to engage in dialogue with India post its nuclear tests. France's support for India's claim for a permanent seat in the UN Security Council and its understanding of India's security needs have been pivotal. Both nations value strategic autonomy, with India's non-alignment and France's independent stance within NATO.

The partnership has expanded beyond the initial nuclear, space, and defense pillars to include counter-terrorism, intelligence sharing, and cybersecurity. Notable defense collaborations include the building of Scorpene submarines and the Rafale aircraft deal. Moreover, the recent India-France Defense Industrial Road map aligns with India's goal of self-reliance ('atmanirbharta'). The challenge for both countries lies in extending their partnership beyond government domains into commercial and civilian spaces. This includes increasing the number of Indian students in France, collaboration in higher education, and fostering business ties. The 'Strategic Partnership' signifies a mature relationship where differences, if any, are addressed privately, reflecting a resilient bond nurtured over the past quarter-century.

[Winners and losers-The Hindu Editorial](#)

International relations

Key Takeaways:

- 1. Imran Khan's Political Downfall:** Former Pakistani Prime Minister Imran Khan has been handed consecutive jail sentences in two separate cases, marking a significant reversal from his victorious 2018 election, which was marred by accusations of military-backed electoral rigging.
- 2. Military's Dominant Role:** The Pakistani military's influence in the country's politics is evident in both Khan's rise to power and his subsequent downfall. This pattern is also reflected in the political journey of Nawaz Sharif, the leader of the Pakistan Muslim League-Nawaz (PML-N), who was forced to resign, went into exile, and has now returned to lead his party.
- 3. Allegations and Trials:** Khan's fall from grace involved allegations of a conspiracy to oust him, involving the U.S. and the military. He faces charges in the 'Cipher case' for leaking state secrets and in the Toshakhana case for retaining gifts received during his tenure.
- 4. Weakening of PTI:** Khan's party, Pakistan Tehreek-e-Insaf (PTI), is experiencing significant repression, with many leaders jailed or under pressure, and even barred from using its iconic symbol in elections. This has led many PTI members to contest as independents.
- 5. Impact on Democracy:** The unfolding political events in Pakistan, amidst severe economic challenges, highlight the military's continued dominance in the country's politics. This scenario portrays the military as the ultimate beneficiary, while the real loser appears to be Pakistan's democracy.

Mains easy language



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The recent political developments in Pakistan, particularly surrounding former Prime Minister Imran Khan, underscore the significant influence of the military in the nation's politics. Khan, who ascended to power in 2018 with his party, Pakistan Tehreek-e-Insaf (PTI), amidst accusations of military-backed electoral rigging, has recently been handed jail sentences in two separate cases. This dramatic shift in his political fortunes exemplifies the reversal of roles in Pakistan's complex political landscape, which is heavily influenced by the military. The influence of the military is further highlighted by the political trajectory of Nawaz Sharif, leader of the Pakistan Muslim League-Nawaz (PML-N). Sharif, who was forced to resign and later went into exile following the Panama Papers scandal, has now made a comeback, leading the PML-N. This change in Sharif's fortunes, paralleling Khan's downfall, indicates the deep involvement of the military in shaping political outcomes. Khan's fall from power in April 2022, after a fallout with the military establishment, was marked by allegations of a U.S.-military conspiracy against him. The trials, particularly the 'Cipher case' and the Toshakhana case, have been marred by criticisms regarding their legal proceedings. Meanwhile, the PTI faces severe repression, with many leaders jailed or pressured to leave, and the party is barred from using its symbol in elections. These political events in Pakistan, occurring amidst significant economic challenges, reveal the military as the primary power broker. While political figures like Sharif may appear to gain temporarily, the real casualty in these developments is Pakistan's democracy, which continues to be undermined by the pervasive influence of the military.

Rising tensions in the Korean peninsula-The Hindu Text and Context

International relations

Key Takeaways:

1. **North Korea's New Stance:** North Korea has rebranded South Korea as an enemy state, moving away from its goal of Korean reunification. This is reflected in changes to its constitution and the dismantling of reunification symbols.
2. **Increased Military Tests:** North Korea has ramped up missile testing, including advanced hypersonic weapons and nuclear-capable drones, significantly enhancing its military capabilities.
3. **South Korea's Reaction:** Under President Yoon Suk Yeol's conservative leadership, South Korea, in coordination with the U.S. and Japan, has intensified military drills to counter North Korean threats.
4. **Impact on International Security:** The increasing tensions are worsening the global security environment, intensifying major power rivalries, especially among the U.S., China, and Russia.
5. **North Korea's Global Alignments:** North Korea is deepening ties with China and Russia, aligning more with the Sino-Russian axis, evident in high-level visits and strategic cooperation.
6. **Global Conflict Dynamics:** The situation in the Korean Peninsula is unfolding amid global conflicts like the Russia-Ukraine war, potentially impacting strategic competitions involving major world powers.

Mains easy language

The Korean Peninsula is experiencing heightened tensions due to North Korea's aggressive posturing and actions against South Korea. North Korea has officially declared South Korea an enemy state, abandoning its goal of reunification. This shift is symbolized by significant changes in its constitution and the dismantling of structures related to reunification. North Korea has notably increased its missile testing activities, including advanced technologies like hypersonic weapons and nuclear-capable underwater drones. These developments significantly boost its military capabilities, posing new challenges to regional stability. In response, South Korea, under the conservative leadership of President Yoon Suk Yeol, has adopted a more assertive stance. Collaborating closely with the United States and Japan, South Korea has engaged in joint military exercises aimed at countering the threats from the North. These exercises have been focused on enhancing preparedness against missile and underwater threats from North Korea. The escalating situation is aggravating the international security environment, intensifying major power rivalries, particularly involving the U.S., China, and Russia. North Korea's alignment with China and Russia has



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deepened, evident from high-level diplomatic exchanges and strategic cooperation, especially in the wake of the Russia-Ukraine conflict. This realignment in the Korean Peninsula has significant implications for global strategic dynamics, potentially affecting the balance of power in the region and beyond.

[The great Indian Internet shutdown: how access to the world wide web is curtailed-The Hindu Text and Context](#)

Science and technology

Key Takeaways:

1. **Extensive Economic Loss:** In 2020, India experienced 129 instances of Internet suspension, leading to an economic loss of approximately \$2.8 billion, impacting 10.3 million individuals.
2. **Supreme Court Ruling on Internet Access:** The Supreme Court of India declared Internet access a fundamental right under the Indian Constitution in the Anuradha Bhasin vs Union of India case. It emphasized that any government-imposed Internet restrictions must be temporary, lawful, necessary, and proportionate.
3. **Increasing Trend of Internet Shutdowns:** Despite the Supreme Court ruling, the frequency of Internet shutdowns in India increased, accounting for over 70% of the global economic loss due to such suspensions.
4. **Non-Compliance with Legal Guidelines:** The Indian government's compliance with the Supreme Court's guidelines on Internet suspension has been low. Orders restricting Internet access are often not published, hindering legal challenges and diminishing public trust.
5. **Impact Beyond Economics:** Internet suspensions in India affect more than just the economy; they have psychological, social, and journalistic consequences, often stifling democratic exercises like the right to protest.
6. **Disproportionate Effect on Lower Socio-Economic Groups:** Most Internet users in India rely on mobile data, and restrictions tend to disproportionately affect individuals from lower socio-economic backgrounds, exacerbating digital inequality.

Mains easy language

The Indian economy suffered significant losses due to extensive Internet shutdowns, with 129 instances in 2020 affecting 10.3 million people and costing about \$2.8 billion. Despite the Supreme Court of India declaring Internet access a fundamental right in the Anuradha Bhasin vs Union of India case, and stating that any Internet restrictions must be temporary, lawful, and proportionate, compliance with these guidelines has been low. The subsequent year saw even more Internet shutdowns, with India accounting for over 70% of the global economic loss due to these suspensions. Recent examples include restrictions in Jammu and Kashmir following the death of separatist leader Syed Ali Shah Geelani, and in Haryana during farmers' protests. However, the publication of government orders for these shutdowns is not common, leading to challenges in legal redress and undermining public trust in the government. The Supreme Court's directives have not been fully incorporated into statutory rules, contributing to non-compliance and lack of awareness among officials. Internet suspensions impact not just the economy, but also have psychological, social, and journalistic repercussions. They are often justified on grounds of preventing misinformation, but this can paradoxically increase reliance on offline rumors. Most Internet users in India rely on mobile data services, and restrictions disproportionately affect those from lower socio-economic backgrounds. To mitigate these issues and shed the tag of the "internet shutdown capital" of the world, more faithful compliance with the Supreme Court's guidelines and a commitment to transparency are essential.

[Scientists fuse brain-like tissue with electronics to make computer-The Hindu Science](#)

Science and technology

Key Takeaways:



| Clear your doubts now.



1. **Brain Tissue-Electronics Fusion:** Scientists have created a breakthrough 'organoid neural network' by integrating brain-like tissue with electronics, enhancing neuromorphic computing capabilities, including voice recognition and complex problem-solving.
2. **Brain's Efficiency vs. AI Hardware:** The human brain is significantly more efficient than AI hardware, using only 20 W for tasks that AI would require 8 MW to perform. This is because the brain combines memory storage and data processing, unlike separate units in AI systems.
3. **Advancements in Biocomputing:** This research marks a significant step in biocomputing, using biological components for computational tasks. Earlier experiments include training brain cells to play a video game, demonstrating early capabilities of this technology.
4. **Capabilities of Organoid Neural Network:** Developed from human pluripotent stem cells, this network successfully performed speech recognition and mathematical predictions, showing higher efficiency and accuracy compared to traditional artificial neural networks.
5. **Technical and Ethical Challenges:** The technology faces challenges in maintaining organoid uniformity and raises ethical concerns about the consciousness and dignity of organoids derived from human cells.
6. **Future Potential:** This innovative approach could provide deep insights into neural learning, development, and cognitive processes related to neurodegenerative diseases, with the potential to revolutionize computing and biomedical fields in the future.

Mains easy language

Scientists have achieved a significant breakthrough in neuromorphic computing by creating an 'organoid neural network', fusing brain-like tissue with electronics. This innovative system, which can recognize voices and solve complex mathematical problems, represents a substantial advancement in integrating biological components into computational processes. Unlike AI hardware, where memory and processing units are distinct, this network mimics the human brain's efficiency by combining these functions, utilizing significantly less energy. The network was developed using brain organoids formed from human pluripotent stem cells, capable of developing into various types of brain cells. This approach showcased not only the potential for high accuracy in tasks like speech recognition but also did so with less training compared to traditional artificial neural networks. However, this technology faces challenges in ensuring uniformity and functionality of the organoids. Ethical concerns regarding the consciousness of these organoids and the dignity of their human cell donors also arise. Despite these challenges, the research holds great promise for future applications. It could offer profound insights into learning mechanisms, neural development, and the cognitive implications of neurodegenerative diseases, potentially revolutionizing both computing and biomedical research.

2nd February 2024

Interim Budget 2024 — in campaign mode-The Hindu Editorial

Economy

Key Takeaways:

1. **Election-Oriented Budget:** Anticipated to reflect upcoming election dynamics, the budget aligned with expectations for a strategic, election-focused presentation.
2. **Economic Survey Review:** Highlighted the period 2014-2024 as transformative, contrasting sharply with pre-Modi government economic developments.
3. **Budget Speech Focus:** Dominated by government achievements and welfare schemes, reflecting an election campaign tone and focus.
4. **Fiscal Performance Analysis:** Revealed discrepancies between projected and actual spending, especially in welfare programs, indicating overestimated projections or election-influenced spending increases.



| Clear your doubts now.



5. **Rural and Agricultural Spending:** Actual spending in critical areas like rural development and agriculture, including key schemes, was lower than budgeted or revised estimates.
6. **Claims vs. Reality of Welfare Schemes:** Government's rhetoric on welfare support contrasted with actual budget allocations and spending, particularly in food subsidy and rural welfare.
7. **Macroeconomic Claims:** Claimed effective financial management, especially in non-tax revenues, but faced skepticism regarding disinvestment targets.
8. **Fiscal Deficit and Financial Prudence:** Aimed to balance budget commitments with fiscal prudence, keeping the fiscal deficit marginally lower than projected.
9. **Uncertain Voter Reaction:** While emphasizing welfare and fiscal responsibility, the impact of these strategies on voter sentiment in the upcoming elections remains uncertain.

Mains easy language

The Interim Budget for 2024-25, presented in the context of the upcoming elections, strategically focused on showcasing the government's achievements and welfare schemes, reflecting an election campaign tone. This budget was anticipated to align with the election dynamics, especially considering Prime Minister Narendra Modi's earlier statement about presenting a full budget post-election victory.

A significant aspect of the budget was the emphasis on the period 2014-2024 in the interim Economic Survey. This period was portrayed as a transformative era in economic growth, contrasting sharply with the economic developments of the pre-Modi government era. However, the budget speech and subsequent analysis revealed notable discrepancies between the government's claims and actual expenditures, particularly in key welfare programs such as MGNREGA and PM-KISAN. These discrepancies indicated either overestimated projections or a potential increase in spending influenced by the upcoming elections. Despite the government's emphasis on welfare schemes and fiscal prudence, there remains uncertainty about how these strategies will influence voter sentiment and decisions in the forthcoming elections. While the budget aims to combine welfare initiatives with economic caution, the effectiveness of this approach in swaying voters and maintaining fiscal stability is yet to be seen.

[A political, feel-good statement-The Hindu Editorial](#)

Economy

Key Takeaways:

1. **Political Overtones:** The Budget is presented as a political, feel-good statement, highlighting the achievements of the current regime while glossing over critical issues like employment and wage growth.
2. **Focus on Public Investment:** It credits post-COVID growth revival to public infrastructure investment, with a plan to continue this trend. However, it suggests only a moderate expansion in public investment to prevent crowding out private sector investment.
3. **Innovation and State Loans:** The Budget extends the interest-free loan scheme to States, and proposes a similar initiative for private sector innovation and R&D, aiming to boost India's lagging R&D expenditure.
4. **Solar Energy and FDI Claims:** It highlights a new scheme for rooftop solar installations but raises concerns about its execution. The Budget's claim of increased FDI inflow is questioned, pointing to a discrepancy between the reported numbers and the actual impact on the economy.
5. **Employment and Wage Challenges:** Official statistics indicate a grim employment situation, with stagnant regular salaried employment and declining real wages in agriculture, suggesting inequitable growth benefits.



| Clear your doubts now.



6. **Premature De-Industrialization and Dependency on China:** The Budget fails to address the issue of premature de-industrialization and growing dependence on China for industrial inputs, which are critical concerns for India's long-term economic strategy and national security.

Mains easy language

The Budget, presented amid impending elections, is a politically charged statement focusing on the current regime's successes while overlooking significant shortcomings such as employment and wage growth. It emphasizes post-COVID recovery through public infrastructure investment, proposing a moderate expansion to avoid crowding out private investments. The Budget extends interest-free loans to States and introduces a similar scheme for private sector innovation, aiming to enhance India's stagnant R&D expenditure. However, the Budget's portrayal of increased FDI inflows is questioned, and its effectiveness in addressing critical economic aspects is doubtful. Concerns include a challenging employment landscape with stagnant wage growth and increasing dependency on sectors like agriculture. It also fails to address the issue of India's growing trade deficit with China, reflecting a concerning dependence on Chinese industrial inputs. This omission is significant, considering the strategic implications and the necessity for a robust domestic manufacturing sector for long-term economic stability and growth.

[Ignoring an agricultural sector in distress-The Hindu Editorial](#)

Economy

Key Takeaways:

1. **Neglect of Agricultural Distress:** The Budget fails to address the ongoing distress in agriculture, offering no clear plans or intentions to revive agricultural growth from its long-term slump.
2. **Income and Profitability Issues:** Official data indicates a decrease in farmers' incomes due to declining agricultural prices and insufficient rise in Minimum Support Prices (MSP). Additionally, promises to double real incomes of farmers by 2022 have not been fulfilled.
3. **Rural Unemployment and Wages:** There has been a significant increase in rural unemployment, particularly among women. Rural wages have stagnated since 2016-17 and even declined post-2020-21, affecting the agricultural labor market.
4. **Public Investment Stagnation:** Public investment in agriculture, including specific areas like agricultural research and extension, has been stagnant or even declining over the past decade. This has impacted capital investment in agriculture.
5. **Misrepresentation of Agricultural Performance:** The Budget and the Finance Ministry's report focus on absolute numbers in agricultural production, overlooking the decline in growth rates of crop production and yield.
6. **Budget Cuts in Key Agricultural Areas:** The Budget for 2024-25 proposes cuts in critical areas of agriculture, including reductions in fertilizer subsidies, food subsidies, and allocations for key schemes like the Pradhan Mantri Gram Sadak Yojana and MGNREGS.

Mains easy language

The recent Budget has overlooked the critical distress in India's agricultural sector, failing to propose any substantial measures for its revival. This neglect is highlighted by several key issues. First, there's a marked decline in farmers' incomes, exacerbated by reduced agricultural prices and insufficient increases in Minimum Support Prices (MSP). Promises to double farmers' incomes by 2022 have remained unfulfilled, with real incomes actually falling due to high input costs. Rural unemployment, particularly among women, has increased, resulting in an influx of labor into an already struggling agricultural sector. This surge in labor has not translated into wage growth; in fact, real wages in rural areas have been stagnant or declining since 2016-17. Public investment in agriculture has been consistently inadequate, contributing to stagnant capital investment in the sector. The Budget's portrayal of agricultural performance, focusing on production increases, fails to acknowledge the slowdown in growth rates. Critical schemes like the Pradhan Mantri Gram Sadak Yojana and MGNREGS face budget cuts,





further indicating a lack of strategic focus on agriculture. Overall, the Budget paints an inaccurately optimistic picture of the agricultural sector, ignoring its multifaceted challenges.

[Concerns over GDP, spending cuts; fiscal deficit is bright spot-Indian Express Explained](#)

Economy

Key Takeaways:

1. **Muted GDP Growth Outlook:** The Budget reveals a tepid growth rate in nominal GDP, which is not good news for India's real growth rate. The nominal GDP growth is slower this year, raising concerns about the real GDP growth and its calculation amidst controversy over inflation estimates.
2. **Reduction in Fiscal Deficit:** A bright spot in the Budget is the narrowing of the fiscal deficit, even beyond the government's target. The deficit reduction is significant as it impacts borrowing costs for the private sector, though it raises questions about how this fiscal consolidation is achieved and its effect on economic growth.
3. **Capital Expenditure Target Not Met:** The government's ambitious target of Rs 10 lakh crore for capital expenditure was not met, reaching only Rs 9.5 lakh crore. This shortfall in capex is part of the reason for the reduced fiscal deficit and raises concerns about the overall economic momentum.
4. **Cuts in Health and Education Spending:** Revised estimates show cutbacks in critical areas like health and education. Such reductions are concerning for a developing economy where investment in these sectors is crucial for long-term development.
5. **Reductions in Core Welfare Schemes:** There have been significant cuts in key government schemes, particularly those aimed at disadvantaged sections of society, like SCs, STs, and minorities. This suggests a scaling back of welfare measures, which could impact vulnerable groups.
6. **Income Tax as Major Revenue Source:** Income tax is projected to be the largest source of revenue for the government, overtaking corporate tax and GST. This shift indicates a reliance on direct taxation for revenue generation.

Mains easy language

The Union Budget for 2024-25, presented by Finance Minister Nirmala Sitharaman, offered a nuanced fiscal outlook. Key highlights include a muted GDP growth forecast, underscoring concerns about India's real economic expansion. Notably, the nominal GDP growth is slower, raising questions about the real growth rate and inflation estimates. A significant achievement, however, is the reduction in fiscal deficit, surpassing the government's target. This reduction, while beneficial in lowering borrowing costs for the private sector, prompts queries about the methods of fiscal consolidation and their impact on growth.

One concerning aspect is the failure to meet the ambitious Rs 10 lakh crore target for capital expenditure, a shortfall that contributes to the reduced fiscal deficit. This underachievement may affect overall economic momentum. Additionally, the Budget reveals cutbacks in vital areas such as health, education, and core welfare schemes, particularly those targeting disadvantaged societal groups. This scaling back of welfare measures could have far-reaching implications. Lastly, a shift in revenue generation is observed, with income tax becoming a major contributor, surpassing corporate tax and GST. This reliance on direct taxation indicates a new direction in revenue strategy.

[Tax buoyancy helps Centre align with its fiscal roadmap-Indian Express Explained](#)

Economy

Key Takeaways:



| Clear your doubts now.



1. **Fiscal Deficit Goals:** The government aims to limit the fiscal deficit to 5.8% of GDP for FY24, slightly lower than the previously budgeted 5.9%. Looking ahead, the plan is to reduce the fiscal deficit to below 4.5% by FY26. This ambitious target is underpinned by robust tax revenue growth.
2. **Surge in Direct Tax Revenues:** Direct tax revenues, including income tax and Securities Transaction Tax (STT), have seen a substantial increase. Income tax is expected to exceed the Budget estimate for this financial year by 13.5%, and STT revenue is projected to surpass the budget estimate by 15.8%.
3. **Projected Growth in Tax Collections:** For FY25, direct tax collections are estimated to rise by 13.1% to Rs 21.99 lakh crore. This is a continuation of the trend observed in FY24, where direct tax revenues are expected to grow by 17.2%.
4. **Income Tax Over Corporate Tax:** Income tax collections in FY24 have shown a significant uptick, poised to exceed corporate tax collections, reversing the trend seen in the Budget estimates for FY23-24.
5. **Growth in Gross Tax Revenue:** The government's gross tax revenue is estimated to grow by 11.5% to Rs 38.31 lakh crore in the next financial year, with net tax revenues expected to increase by nearly 12% to Rs 26.02 lakh crore in FY25.
6. **Tax Buoyancy and Indirect Taxes:** Tax buoyancy is at 1.2 for FY24 and expected to be 1.1 for FY25, reflecting strong tax revenue growth. On the indirect taxes front, Central Goods and Services Tax (CGST) collections are estimated to grow by 13% in FY25.

Mains easy language

The government's fiscal roadmap for FY24 and beyond is notably reinforced by strong tax buoyancy, with revised estimates indicating a positive trend. The fiscal deficit target has been adjusted to 5.8% of the GDP for FY24, slightly below the earlier projection of 5.9%, with an ambitious goal to reduce it to below 4.5% by FY26. This strategy hinges on robust tax revenue growth, particularly in direct taxes. Direct tax revenues, including income tax and Securities Transaction Tax (STT), have surged, with income tax expected to exceed the budget estimate by 13.5% for this financial year. A significant growth in direct tax collections is projected for FY25, estimated at a 13.1% increase. Additionally, income tax collections have notably surpassed corporate tax revenues, a reversal from previous trends. The government's gross tax revenue is poised for an 11.5% growth in the next financial year, with net tax revenues forecasted to grow nearly 12%. Indirect taxes, including CGST, are also expected to see substantial growth. The overall tax buoyancy remains high, with figures of 1.2 for FY24 and an anticipated 1.1 for FY25, underpinning the government's fiscal consolidation efforts. This robust growth in tax revenues, particularly in direct taxes, presents a feasible path for achieving the targeted fiscal deficit reduction, despite the challenges posed by moderate GDP growth rates.

[‘Negotiating BITs with trade partners to boost FDI’-Indian Express Explained](#)

Economy

Key Takeaways:

1. **Renegotiation of BITs:** Finance Minister Nirmala Sitharaman announced that India is actively negotiating new Bilateral Investment Treaties with various trade partners to enhance FDI inflows. This shift comes after new BITs declined post-2016 due to India's adoption of a model BIT.
2. **Economic Integration Efforts:** India's focus on renegotiating BITs aligns with its broader economic integration goals with Western nations, including the United Kingdom and the European Union, through free trade agreements and investment treaties.
3. **Addressing FDI Inflow Challenges:** The renegotiation of BITs is crucial as India scores low in the ease of enforcing contracts, a factor that has been detrimental to FDI inflows.



| Clear your doubts now.



4. **Clause of Local Remedies:** India's insistence on an 'exhaustion of local remedies' clause in the model BIT, which mandates resolving investment-related disputes locally before international arbitration, has been a point of contention with trade partners. This clause is seen as contributing to delays in dispute resolution.
5. **Current State of BITs:** India previously had BITs with 83 countries or regions but suspended agreements with 68 of them, seeking renegotiation based on the 2016 model BIT. This suspension was triggered by defeats in several high-profile investor-state disputes.
6. **FDI Equity Inflows Decline:** There has been a 24% decline in FDI equity inflows in India from April to September 2023, along with a contraction of total FDI during this period, influenced by geopolitical issues and economic setbacks in developed countries.

Mains easy language

India's strategic shift towards renegotiating Bilateral Investment Treaties (BITs) signifies a key move to enhance foreign direct investment (FDI) inflows, as highlighted in Finance Minister Nirmala Sitharaman's Interim Budget speech. This reorientation follows a decline in new BITs post-2016, when India adopted a model BIT that emphasized resolving investment disputes locally before international arbitration. This insistence on 'exhaustion of local remedies' has been contentious among trade partners, contributing to delays in dispute resolution and impacting India's FDI attractiveness. The country's efforts to renegotiate BITs align with its broader economic integration objectives with Western nations like the UK and the EU. Despite India's low ranking in ease of enforcing contracts, the government is determined to improve the investment climate. However, recent data indicates a decline in FDI equity inflows and total FDI, attributed to geopolitical issues and economic challenges in developed nations. India's move to renegotiate BITs, therefore, is a crucial step in addressing these challenges and enhancing its appeal as a lucrative investment destination.

['Trade corridor will be strategic game-changer'-Indian Express Explained](#)

Economy

Key Takeaways:

1. **Strategic Significance of IMEC:** Positioned as a strategic and economic game-changer, IMEC aims to create a new trade route integrating India, West Asia, and Europe. This initiative gains importance as traditional maritime corridors like the Red Sea route face disruptions due to global conflicts.
2. **Impact on Indian Trade:** IMEC's development is crucial for India, especially given the current disruptions in the Red Sea route used for Indian exports to Europe and other regions. These disruptions have forced global shipping lines to opt for longer, more expensive routes, directly impacting India's trade dynamics.
3. **Geopolitical Challenges:** The corridor faces significant challenges due to ongoing conflicts in West Asia, particularly the tensions between Jordan and Israel, which are crucial to the corridor's infrastructure development. These regional disputes pose potential delays to the IMEC project.
4. **Counter to China's BRI:** IMEC is seen as a strategic response to China's Belt and Road Initiative (BRI), offering an alternative in terms of trade routes and regional connectivity. This positions IMEC as a significant player in the global geopolitical landscape.
5. **Future Prospects Amidst Global Tensions:** While IMEC is projected to be a transformative trade corridor, its short-term progress is likely to be impacted by the current geopolitical focus on conflicts like the Russia-Ukraine war and Israel-Palestine tensions. The political climate in 2024, an election year in many countries, including India, may also influence its development.

Mains easy language

The India-Middle East-Europe Economic Corridor (IMEC), highlighted in Finance Minister Nirmala Sitharaman's Interim Budget speech, is poised to be a strategic pivot in global trade dynamics.



| Clear your doubts now.



IMEC emerges at a critical juncture as traditional trade routes, particularly the Red Sea maritime corridor, face disruptions due to the ongoing Russia-Ukraine conflict and tensions in West Asia. This new corridor, integrating India with West Asia and Europe, is anticipated to significantly impact Indian exports, offering a vital alternative to the currently hindered traditional routes. However, IMEC's realization faces geopolitical challenges, particularly due to the conflict in West Asia, with key regions like Jordan and Israel, essential for the corridor's infrastructure, embroiled in disputes. Additionally, IMEC is positioned as a counter to China's Belt and Road Initiative, signifying its strategic importance in the global trade arena. The successful implementation of IMEC, however, might be influenced by the global focus on existing conflicts and the political climate of 2024, marked by elections in numerous countries, including India. In essence, while IMEC holds the promise of reshaping trade pathways, its fruition will require navigating a complex web of regional and global geopolitical challenges.

[Job guarantee scheme outlay stays at `86,000 cr, no change in PM-Kisan-Indian Express Explained](#)

Economy

Key Takeaways:

- 1. Stagnant MGNREGA Allocation:** Finance Minister Nirmala Sitharaman has allocated Rs 86,000 crore for MGNREGA in the 2024-25 Interim Budget, maintaining it at the same level as the revised estimate for 2023-24. Despite only Rs 60,000 crore being initially allocated in the 2023-24 Budget, the amount was increased due to robust demand for work under the scheme.
- 2. Continued High Demand for MGNREGA:** The scheme, which guarantees 100 days of unskilled manual work per financial year to rural households, has continued to see high demand. The fiscal year 2023-24 is expected to generate 300 crore-plus person-days of employment, one of the highest after the pandemic years.
- 3. PM-Kisan Scheme Unchanged:** The PM-Kisan scheme, which provides income support to farmer families, has retained its outlay of Rs 60,000 crore for 2024-25, the same as the current fiscal year's budget and revised estimate. Contrary to expectations, there was no increase in the annual payment under PM-Kisan in the Interim Budget.
- 4. Response to Ground Demand:** Sitharaman emphasized that the allocation for MGNREGA is based on ground demand rather than trends. However, there were comments from the CAG on the implementation of MGNREGA in some states.
- 5. Expansion of Lakhpati Didi Target:** In a separate announcement, the Finance Minister stated the decision to enhance the target for the Lakhpati Didi initiative from 2 crore to 3 crore.

Mains easy language

The Interim Budget for 2024-25, presented by Finance Minister Nirmala Sitharaman, maintained a consistent approach towards major welfare schemes. The allocation for the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) remains unchanged at Rs 86,000 crore, mirroring the revised estimate for 2023-24. This decision follows a significant increase from the initial Rs 60,000 crore in the 2023-24 Budget due to high work demand under the scheme. Despite expectations for enhancement, the Pradhan Mantri Kisan Samman Nidhi (PM-Kisan) also retains its allocation at Rs 60,000 crore, similar to the current fiscal's budget. The sustained high demand for MGNREGA jobs, especially in the post-pandemic period, indicates the scheme's continued relevance in providing rural employment. Sitharaman emphasized that MGNREGA's funding is determined by actual demand from the ground, not by trend analysis, acknowledging the scheme's responsiveness to rural employment needs. Additionally, the Budget includes an expansion of the Lakhpati Didi initiative, increasing its target from 2 crore to 3 crore, showcasing a commitment to furthering rural welfare and women's empowerment. These decisions collectively reflect the government's focus on maintaining stability in welfare expenditures while responding to grassroots requirements.

[Budget Carries Confidence Of Continuity,empowers Viksit Bharat pillars:PM-Indian Express Explained](#)

Economy



| Clear your doubts now.



Key Takeaways:

Prime Minister Narendra Modi's remarks on the Interim Budget for 2024-25 highlight its role in shaping the future of India and empowering the key pillars of 'Viksit Bharat' - the poor, youth, women, and farmers.

1. **Inclusive and Innovative Budget:** Modi described the Interim Budget as inclusive and innovative, emphasizing its continuity and focus on building the country's future, particularly strengthening the foundation of 'Viksit Bharat' by 2047.
2. **Focus on Research and Innovation:** The Budget announces a significant fund of Rs 1 lakh crore for research and innovation, demonstrating a commitment to nurturing a knowledge-driven economy. Additionally, there's an expansion in tax exemption for start-ups, encouraging entrepreneurial ventures and innovation.
3. **Record Capital Expenditure:** The Budget allocates a historic high of Rs 11 lakh crore for capital expenditure, seen as a balance between fiscal prudence and infrastructure development. This investment is expected to build modern infrastructure and create employment opportunities, especially for the youth.
4. **Enhancing Public Transport:** Modi highlighted the plan to manufacture and induct 40,000 modern coaches under the 'Vande Bharat standard' into passenger trains, aiming to improve travel experience for millions of passengers.
5. **Empowerment and Income Opportunities:** The Budget focuses on empowering the poor and middle class and creating new income opportunities. Initiatives like the rooftop solar campaign, which allows families to earn additional income by selling surplus electricity, are steps towards this goal.
6. **Tax Relief and Agricultural Reforms:** The Budget includes an income tax remission scheme for nearly one crore middle-class individuals and introduces significant measures for farmers. These include the use of Nano DAP, new schemes for livestock, expansion of PM Matsya Sampada Yojana, and the Aatmanirbhar Oil Seed Abhiyan, aimed at increasing farmers' income and reducing expenses.

Mains easy language

Prime Minister Narendra Modi's appraisal of the Interim Budget for 2024-25 underscores its role in building a future-oriented India, with a particular focus on the main pillars of 'Viksit Bharat' - the poor, youth, women, and farmers. He labels the Budget as inclusive and innovative, emphasizing its continuity in national development and empowerment. Significant is the allocation of Rs 1 lakh crore for research and innovation, reflecting the government's commitment to a knowledge-driven economy. This is complemented by extended tax exemptions for startups, fostering an environment conducive to entrepreneurial growth. The record capital expenditure of Rs 11 lakh crore aims to balance fiscal responsibility with the need for modern infrastructure, promising enhanced employment opportunities, especially for the youth. The Budget also focuses on empowering the poor and middle class through initiatives like the rooftop solar campaign, enabling families to generate additional income. For farmers, the introduction of new schemes and the expansion of existing ones aim to increase income and reduce costs. The inclusion of an income tax remission scheme offers relief to nearly one crore middle-class individuals. Overall, the Budget envisages a holistic approach to development, targeting critical areas of innovation, infrastructure, empowerment, and fiscal efficiency, laying a foundation for a prosperous and self-reliant India.

3rd February 2024

[Multidimensional poverty: meaning, numbers-Indian Express Explained](#)

Sociology

Key Takeaways:

1. **Broader Definition of Poverty:** Multidimensional poverty goes beyond income-based measures, encompassing deprivations in health, education, and standard of living. This approach provides a more holistic view of poverty.



| Clear your doubts now.



- 2. Significant Reduction in India:** According to the NITI Aayog report, India has seen a considerable decline in multidimensional poverty, from 29.17% in 2013-14 to 11.28% in 2022-23, implying that around 25 crore people have been lifted out of poverty.
- 3. State-Level Progress:** Some states, notably Uttar Pradesh, Bihar, and Madhya Pradesh, have shown remarkable progress in reducing multidimensional poverty, highlighting the effectiveness of targeted regional policies.
- 4. Customization of MPI for India:** The Indian MPI includes additional indicators like maternal health and bank account ownership, reflecting India's specific developmental priorities and challenges.
- 5. Methodological Considerations:** The MPI figures for India are based on interpolation for 2013-14 and extrapolation for 2022-23 from the National Family Health Survey data, indicating a reliance on estimated rather than directly measured data.
- 6. Impact of Government Policies:** The reduction in multidimensional poverty is indicative of the positive impact of various government initiatives and policies aimed at improving health, education, and living standards, particularly in the past decade.

Mains easy language

The concept of Multidimensional Poverty (MPI) extends beyond traditional income-based poverty measurements, encompassing deprivations in health, education, and standard of living. In a significant development, India has reported a substantial reduction in multidimensional poverty. According to a NITI Aayog report, the rate of multidimensional poverty in India has declined from 29.17% in 2013-14 to 11.28% in 2022-23. This translates to approximately 25 crore people being lifted out of poverty. The MPI in India includes unique indicators like maternal health and bank accounts, aligning with national priorities. This tailored approach reflects a deeper understanding of poverty in the Indian context. The data, derived from the National Family Health Survey, required interpolation and extrapolation for specific years, highlighting methodological complexities. The notable progress in states like Uttar Pradesh, Bihar, and Madhya Pradesh underscores the impact of targeted regional policies. This remarkable reduction in multidimensional poverty over the past decade is indicative of the effectiveness of government initiatives aimed at improving health, education, and living standards across the country.

[Pirates of the Arabian Sea, their crime, and how maritime forces respond to it-Indian Express Explained](#)

Internal security

Key Takeaways:

- 1. High-Risk Regions Due to Weak Maritime Policing:** Piracy thrives in regions with weak maritime forces, such as the west coast of Africa, Gulf of Aden, Horn of Africa, Bangladesh, and the Strait of Malacca.
- 2. Strategic and Vulnerable Maritime Locations:** These areas are prone to piracy due to heavy shipping traffic, geographical chokepoints, and anchorage points where ships are stationary and vulnerable.
- 3. Underlying Land-Based Issues:** Factors like poor governance, unemployment, and poverty in nearby coastal regions contribute significantly to the rise in piracy, as they push individuals towards criminal activities at sea.
- 4. Complex Legal and Jurisdictional Challenges:** The presence of international waters and multiple jurisdictions complicates legal actions against pirates, making coordinated international response challenging.
- 5. Role of the Indian Navy:** The Indian Navy has played a significant role in anti-piracy operations, especially off the Horn of Africa and the Gulf of Aden, effectively reducing piracy incidents in these areas.
- 6. Need for a Holistic Approach:** While maritime forces effectively contain piracy at sea, addressing the root causes of piracy requires a land-based approach, focusing on improving governance and economic conditions in the regions prone to piracy.



| Clear your doubts now.



Mains easy language

Piracy in the Arabian Sea and its adjacent waters has emerged as a significant maritime challenge, driven by a combination of factors. Firstly, these regions, including the west coast of Africa, Gulf of Aden, Horn of Africa, Bangladesh, and the Strait of Malacca, are poorly policed due to weak maritime forces. This lack of enforcement makes them prime targets for pirate attacks. Secondly, the strategic location of these areas as major shipping lanes and choke points exacerbates their vulnerability. Ships often slow down or converge in these regions, making them easy targets. Another critical factor contributing to piracy is the land-based turmoil, including poor governance, unemployment, and poverty in nearby areas. These issues drive individuals towards piracy as a means of livelihood. The situation is further complicated by the legal and jurisdictional complexities of these international waters, posing challenges in coordinating anti-piracy efforts. The Indian Navy has been a key player in combating piracy, especially off the Horn of Africa and the Gulf of Aden. Their continuous patrols and interventions have significantly reduced piracy incidents. However, the long-term solution to piracy lies beyond maritime enforcement. Addressing the root causes on land, such as improving governance and economic conditions, is crucial for a sustainable resolution of the piracy problem.

Hearing over in AMU minority status case: 3 key arguments before-Indian Express Explained

1. Statute and Minority Status:

- Petitioners: Argued that a university's recognition by statute should not negate its minority status, highlighting a contradiction in the Azeez Basha judgment.
- Respondents: Claimed that AMU surrendered its minority status during British rule, as recognized in Azeez Basha.

2. Role of Administration:

- Petitioners: Insisted that the composition of an institution's administration should not impact its minority status.
- Respondents: Pointed out that the British government's initial control over AMU is significant in determining its status.

3. 1981 Amendment's Relevance:

- Petitioners: Suggested that the amendment becomes redundant if Azeez Basha is overruled, but needs re-examination if upheld.
- Respondents: Emphasized the importance of considering the 1981 amendment in the case.

Mains easy language

The Supreme Court of India recently concluded hearings on whether Aligarh Muslim University (AMU) can claim minority status under Article 30 of the Constitution. This pivotal case revisits the 1967 Azeez Basha verdict, where AMU was deemed not a minority institution. The current seven-judge bench's decision will have far-reaching implications for educational institutions seeking minority status in India. Key arguments focused on the impact of statutes on minority status, the influence of administrative control, and the relevance of the 1981 AMU Act amendment. Petitioners argued that statutory recognition, as in AMU's case, should not negate minority status. They contended that this interpretation makes Article 30 ineffective and subordinates a fundamental right to a statute. Conversely, respondents asserted that AMU had relinquished its minority status during British rule. The administration's role in an institution's minority status was also debated. Petitioners held that the administration's composition does not affect minority status, while respondents highlighted British government control in AMU's establishment. Additionally, the 1981 amendment's role, which stated AMU was established by the Muslim community, was discussed, with petitioners viewing it as redundant if Azeez Basha is overruled. This case's outcome will clarify criteria for minority status under Article 30 and set a precedent for similar institutions in India.

A reality check for budget-Indian Express Editorial

Economy

Key Takeaways:



| Clear your doubts now.



1. **Rural Economic Distress:** There's an evident crisis in the rural economy, marked by subdued demand and increasing unemployment. The budget fails to address these issues adequately.
2. **Conservative Fiscal Approach:** The government has taken a conservative stance on major social welfare spending, resulting in a reduced fiscal deficit but not sufficiently addressing glaring economic issues.
3. **Stagnation in Wages and Employment:** Data indicates that real wages, especially in agriculture and non-farm sectors, have grown minimally or declined. This has led to deepening rural distress and stagnating farm incomes, contradicting claims of progress in alleviating poverty.
4. **Shift in Workforce Dynamics:** The budget does not adequately address the reversal in workforce structural transformation, with an increase in agricultural employment indicating a return to less productive sectors due to lack of opportunities elsewhere.
5. **Limited Social Sector Investment:** Major heads like agriculture, rural development, nutrition, education, and health have seen stagnant or declining real-term investments, despite their critical role in reviving the rural economy and stimulating demand.
6. **Challenges in Reviving the Economy:** The government's cutbacks in social welfare spending, particularly in agriculture and rural development, are likely to exacerbate rural distress, hampering efforts to revive demand and stimulate private sector investment.

Mains easy language

The latest pre-election budget in India has raised concerns for not adequately reflecting the country's economic reality or providing a clear vision for future governance. While Finance Minister Nirmala Sitharaman highlighted the government's achievements, the budget falls short in addressing critical economic challenges, particularly the rural distress marked by subdued demand and lack of employment opportunities. Contrary to the government's claims of lifting 25 crore people out of poverty and recovering from economic slowdowns, the budget reveals conservative fiscal policies, especially in social welfare spending. This cautious approach has helped reduce the fiscal deficit but has not addressed key economic issues effectively. Data on real wages indicates minimal growth or decline in agricultural and non-farm sectors, contradicting the claims of poverty reduction and economic progress. The budget also fails to confront the reversal in workforce structural transformation, with an increase in agricultural employment indicating a fallback to less productive sectors. Investment in crucial areas like agriculture, rural development, nutrition, education, and health remains stagnant or declining in real terms. This cutback in social welfare spending, particularly in vital sectors, is likely to exacerbate rural distress and hinder efforts to stimulate demand and private sector investment. Overall, the budget's conservative spending priorities and lack of substantial measures to address rural economic challenges suggest a limited vision for reviving and sustaining long-term economic growth.

LANGUAGE & LEARNING-Indian Express Editorial

Sociology

Key Takeaways:

1. **Enhanced Language Requirement:** Students up to Class X will now study three languages instead of two, with at least two being native Indian languages. At the higher secondary level, the requirement is two languages, with at least one native Indian language.
2. **Increased Subject Requirements:** Secondary-level students will have to clear ten subjects, up from the current five, and high school students will need to pass six subjects instead of five.
3. **Integration of Academic and Vocational Education:** The new system encourages combining academic training with vocational education, rewarding skills obtained outside the classroom through a credit bank system.



| Clear your doubts now.



- 4. Concerns Over Language Policy:** The three-language formula is politically sensitive, particularly in South India with its history of language-based sub-nationalism. There are concerns about the imposition of Hindi and the scarcity of teachers in other Indian languages.
- 5. Need for Diverse Linguistic Representation:** The CBSE's proposal should encourage broader discussions on integrating India's linguistic diversity into school curricula.
- 6. Consultation and Sensitivity:** The CBSE has not yet specified a timeline for implementing the new system. It is essential to conduct extensive consultations to respect all sensitivities and avoid reopening old fault lines.

Mains easy language

The Central Board of Secondary Education (CBSE) in India has proposed a major overhaul in its academic framework for secondary and higher secondary education, in line with the National Education Policy (NEP) 2020. This reform includes an increased focus on language learning, with students required to study three languages until Class X, and two languages at the higher secondary level, ensuring at least one native Indian language is included. The new framework also increases the number of subjects that students must clear, with secondary-level students needing to pass ten subjects instead of the current five, and high school students requiring six subjects instead of five. This shift aims to integrate academic and vocational education, rewarding skills gained outside the classroom through a credit bank system. While this reform is a positive step towards enhancing skill acquisition and recognizing the value of hands-on training, it raises concerns about linguistic diversity and the potential burden on students. The CBSE's plan, still without a specific timeline for implementation, calls for careful consideration of linguistic sensitivities, especially given the historical context of language-based sub-nationalism in regions like South India. For a successful rollout, extensive consultations are crucial to ensure that the new system is inclusive and does not reopen old fault lines.

Exposing India's financial markets to the vultures-The Hindu Editorial

Economy

Key Takeaways:

- 1. Increased Global Exposure:** The inclusion of Indian LCGBs in global indices is expected to attract international investment, providing access to larger financial resources and potentially stabilizing funds tracking indices.
- 2. Potential Benefits:** Proponents argue that this move could lower public borrowing costs, relieve local financial institutions' balance sheets, and finance current account and fiscal deficits.
- 3. Exchange Rate Risk Transfer:** Borrowing in local currency transfers exchange rate risks to international lenders, which could protect India from external debt crises seen in other emerging economies.
- 4. Risks and Autonomy Loss:** However, this integration poses significant risks, including loss of control over long-term rates and increased exposure to global financial volatility. Emerging economies could face heightened interest rate risks, especially during global financial distress.
- 5. Misconceptions About Stability:** Contrary to the belief that foreign inflows into LCBMs provide stable funding, these investments are often volatile and subject to rapid changes due to exchange rate fluctuations and global financial conditions.
- 6. Lessons from Malaysia and Türkiye:** Experiences of Malaysia during the Asian financial crisis and Türkiye more recently highlight the dangers of speculative activities in offshore markets, leading to financial instability.





7. **Underestimation of Risks:** The enthusiasm for internationalizing bond markets and currencies of emerging economies often overlooks the inherent risks and instability of global financial markets. This could lead to increased exchange rate volatility and boom-bust cycles in capital flows.

Mains easy language

The inclusion of Indian local currency government bonds (LCGBs) in global indices like J.P. Morgan's and Bloomberg's marks a pivotal step in India's financial market integration with the global economy. Initiated in 2019, this move aims to attract international investment and is part of a broader strategy to internationalize the Indian rupee. The expected benefits include access to larger financial resources, potentially lower public borrowing costs, and alleviation of balance sheet pressures on local financial institutions. Additionally, borrowing in local currency transfers exchange rate risks to international lenders, ostensibly protecting India from the kind of external debt crises that have afflicted other emerging economies. However, this integration poses significant risks. It could lead to a loss of autonomy in controlling long-term rates and increase exposure to global financial volatility. Contrary to the belief in stable funding from foreign inflows, investments in local currency bond markets (LCBMs) are often volatile. The experiences of Malaysia and Türkiye demonstrate the dangers of speculative activities in offshore markets, which can lead to financial instability. In conclusion, the enthusiasm for integrating India's financial markets into the global system overlooks inherent risks, potentially leading to increased exchange rate volatility and destabilizing capital flow cycles. The move necessitates careful management to avoid severe economic repercussions, echoing lessons from other emerging economies that have faced crises due to poorly managed financial integration.

4th February 2024

India Made typhoid vaccine efficacy lasts for 4 years: study-The Hindu Science

Science

Key Takeaways:

- 1. Long-Term Efficacy:** The vaccine demonstrates substantial efficacy over a period of 4.3 years, with varying effectiveness based on age:
 - For children aged 9 months to 2 years, the efficacy is 70.6%.
 - For children aged 2-4 years, the efficacy increases to 79.6%.
 - For children aged 5-12 years, the efficacy is 79.3%.
- 2. Study Design:** This Phase-3 trial, conducted in Malawi, Africa (a typhoid fever-endemic region), involved 28,130 children aged between 9 months and 12 years. It was a randomized, controlled, double-blind trial – the first of its kind for studying long-term efficacy of the typhoid vaccine in this age group.
- 3. Vaccination and Control Groups:** Half of the participants received the typhoid vaccine, while the other half received a control vaccine (MenA meningococcal vaccine). The study maintained double-blind conditions, where neither the researchers nor the participants knew who received which vaccine.
- 4. Incidence of Typhoid:** During the follow-up period, only 24 children who received the typhoid vaccine were diagnosed with typhoid fever, compared to 110 children in the control group. This demonstrates the vaccine's effectiveness in preventing the disease.
- 5. Durability of Protection:** The study emphasizes the importance of the vaccine's durability, especially for children under two years, as the incidence of typhoid fever was similar across all age groups in the control group.
- 6. Vaccine Efficacy Over Time:** The cumulative vaccine efficacy was found to be over 77% even after four years, with only a 1.3% reduction per year.



| Clear your doubts now.



7. Cost-effectiveness: The study presents the vaccine as highly cost-effective, with a need to vaccinate 163 children to prevent one case of typhoid fever.

8. Additional Observations:

- The vaccine's immune response is robust in individuals older than six months.
- There is a possibility of typhoid rebound in children aged 5-15 years due to waning protection, highlighting the need for longer-duration efficacy studies.
- The potential benefits of a second vaccine dose are still unknown, and an immunogenicity study for a booster dose is underway in Malawi.

Mains easy language

The phase-3 trial of Bharat Biotech's Typbar typhoid vaccine, conducted in Malawi, Africa, has demonstrated significant long-term efficacy. Involving 28,130 children aged between 9 months and 12 years, this randomized, controlled, double-blind study revealed the vaccine's effectiveness over 4.3 years. The efficacy varied by age group: 70.6% in children aged 9 months to 2 years, 79.6% in those aged 2-4 years, and 79.3% in the 5-12 year age group. The trial, unique for its focus on long-term efficacy in a typhoid-endemic setting, showed a notable reduction in typhoid cases among vaccinated children compared to the control group. The study highlighted the durability of the vaccine, particularly for children under two years, and its cost-effectiveness, requiring vaccination of 163 children to prevent one typhoid case. The cumulative efficacy remained high over time, with only a 1.3% annual decrease. Published in The Lancet, these findings underscore the vaccine's potential in combating typhoid, especially in high-risk regions. The study also points to the need for further research on the benefits of a booster dose and the possibility of a typhoid rebound in older children due to waning immunity.

Why is fiscal consolidation so important?-The Hindu FAQ

Economy

Key Takeaways:

1. **Fiscal Deficit Defined:** Fiscal deficit occurs when a government's expenditures surpass its revenues, necessitating borrowing or asset sales to fund the gap. For 2024-25, India's expected revenues are estimated at ₹30.8 lakh crore, against an expenditure of ₹47.66 lakh crore.
2. **Fiscal Deficit vs. National Debt:** Fiscal deficit is a yearly measure, while national debt accumulates over time, representing the total debt owed by the government. A higher fiscal deficit as a percentage of GDP implies a greater challenge in repaying lenders.
3. **Funding the Fiscal Deficit:** The government primarily borrows from the bond market to fund its deficit. For 2024-25, the Centre plans to borrow ₹14.13 lakh crore, a decrease from the previous year, anticipating higher GST collections.
4. **Impact of Monetary Policy:** Central banks, like RBI, indirectly influence government borrowing by purchasing bonds and affecting the money supply, which can lead to inflation.
5. **Significance of Fiscal Discipline:** Maintaining a low fiscal deficit is crucial for several reasons:
 - It's directly linked to inflation, as excessive deficit can lead to increased money supply and inflation.
 - It reflects fiscal discipline, influencing the government's bond ratings and borrowing costs.
 - It impacts the government's ability to manage public debt. A high fiscal deficit can hinder a government's debt management and access to international markets.



| Clear your doubts now.



- 6. Ambitious Deficit Targets:** The government's projections to reduce the fiscal deficit are seen as ambitious, considering the need to balance budget constraints with growth initiatives. The Centre aims to boost tax revenues by 11.5% in 2024-25, while reducing subsidies on fertilizers and food.
- 7. Challenges Ahead:** Achieving these targets might be challenging, as it relies on accurate projections and the balance between raising taxes and stimulating economic growth. High taxes can dampen economic activity, while failure to meet deficit targets can lead to fiscal instability.

Mains easy language

In the recent Union Budget, Finance Minister Nirmala Sitharaman announced a goal to reduce India's fiscal deficit to 5.1% of GDP in 2024-25, aiming for a further reduction to below 4.5% by 2025-26. This target is notably ambitious compared to analysts' expectations of a deficit around 5.3% to 5.4% of GDP. Fiscal deficit, the difference between the government's revenue and expenditure, is a crucial indicator of economic health. For 2024-25, India's government revenue is projected at ₹30.8 lakh crore against an expenditure of ₹47.66 lakh crore. To fund this deficit, the government relies primarily on borrowing from the bond market, with an expected borrowing of ₹14.13 lakh crore for 2024-25. This borrowing strategy, while essential, is influenced by various factors including monetary policy and inflation rates. The fiscal deficit directly impacts inflation, as excessive government borrowing can lead to an increased money supply. Maintaining a low fiscal deficit is vital for economic stability. It not only reflects fiscal discipline, affecting government bond ratings and borrowing costs, but also impacts the ability to manage national debt. High fiscal deficits can limit a government's debt management capabilities and access to international markets.

The ambitious targets set by the Indian government indicate a strong commitment to fiscal discipline. However, achieving these goals will require a delicate balance between enhancing revenue through increased tax collections and managing expenditure, particularly in subsidies. High taxes can potentially hinder economic activity, while unmet deficit targets may lead to fiscal instability. This balancing act between fiscal responsibility and economic growth remains a significant challenge for the government.

[The dispute over Varanasi, Mathura mosques-The Hindu FAQ](#)

Polity

Key Takeaways:

- 1. Objective of the Places of Worship Act:** This Act was implemented to maintain communal harmony by preserving the religious character of places of worship as it existed at the time of India's independence. The Ayodhya dispute was excluded from this Act.
- 2. Act's Main Features:** It prohibits the conversion of any place of worship and declares that all legal proceedings related to changing the character of a place of worship as of August 15, 1947, will cease. However, it doesn't apply to ancient and historical monuments, already settled disputes, and places converted by acquiescence.
- 3. Gyanvapi Mosque Case:** Hindu worshippers have filed suits claiming the right to worship within the Gyanvapi mosque compound in Varanasi, asserting the presence of Hindu deities. They argue that a Hindu temple was demolished to build the mosque, a claim supported by an ASI report.
- 4. Mathura Case:** The dispute revolves around the Shahi Idgah mosque, adjacent to the Krishna Janmabhoomi Temple. Current suits challenge a 1968 compromise and a 1974 decree, alleging them to be fraudulent and demanding the land be transferred to the deity.
- 5. Legal Interpretation and Exceptions:** Courts have not barred these suits under the Act. In Varanasi, the courts ruled that the suits aim to assert the right of Hindu worship and don't seek to convert the mosque. In Mathura, the challenge is to a pre-1991 agreement, thus considered outside the Act's purview.



| Clear your doubts now.



- 6. Religious Character Determination:** The Allahabad High Court noted that the Act doesn't define 'religious character' and that evidence must be examined to determine the religious character of a structure.
- 7. Challenges to the Act:** Both mosque committees argue that the Act prohibits these litigations, but courts have so far disagreed, allowing the cases to proceed.

Mains easy language

The Places of Worship (Special Provisions) Act, 1991, is under scrutiny due to ongoing legal challenges regarding the religious status of mosques in Varanasi and Mathura. This Act, enacted to preserve the religious character of places of worship as of August 15, 1947, aimed to maintain communal harmony by preventing alterations in the status of such sites. In Varanasi, the Gyanvapi mosque case involves Hindu worshippers claiming rights to worship within the mosque compound, asserting the presence of Hindu deities and a historical temple demolished for the mosque's construction. The court has allowed this case to proceed, ruling that it doesn't seek to convert the mosque but asserts the right to worship. The Mathura dispute centers on the Shahi Idgah mosque, with suits challenging a 1968 compromise and a 1974 decree as fraudulent, seeking land transfer to the deity. The courts have ruled these suits are not barred by the Act, as they challenge an agreement predating the Act. These cases highlight a critical aspect of the Act – its interpretation and the exceptions within its scope. The ongoing legal proceedings suggest that the Act's provisions might not be absolute in barring suits concerning the religious character of places of worship, leading to significant implications for religious harmony and legal precedent in India.

[Why are nations revising rules for foreign students?-The Hindu FAQ](#)

International relations

Key Takeaways:

- Changes in Student Visa Requirements:** Canada has increased its Guaranteed Investment Certificate (GIC) requirement from 10,000 to over 20,635 Canadian dollars. The U.K. plans to restrict dependents for international students from 2024. Similarly, Germany and Australia have also raised their GIC amounts.
- Reasons for the Changes:** The adjustments are a response to rising living costs and inflation in these countries. In Canada, the significant hike in GIC is to ensure students can afford their living expenses.
- Impact on Indian Students:** These changes, particularly in Canada, aim to address the issue of 'diploma mills' and limit student visas to genuinely interested students. This has led to a cap on student visas, impacting many Indian students.
- Influence of Political Factors:** Last year's political turmoil between India and Canada seems to have played a role in these policy revisions, though not explicitly stated.
- Shifting Preferences of Indian Students:** With these tightened rules, Indian students are increasingly looking towards countries like Germany, and newer destinations like Taiwan and Israel, for their higher education.

Mains easy language

Nations such as Canada and the U.K. are revising their rules for foreign students, significantly affecting Indian students' aspirations for higher education abroad. These changes are primarily due to economic factors and possibly influenced by last year's political tensions between India and Canada. Canada has notably increased its Guaranteed Investment Certificate (GIC) requirement from 10,000 to 20,635 Canadian dollars, while the U.K. plans to impose restrictions on dependents accompanying international students from 2024. Germany and Australia have similarly raised their financial requirements. These measures reflect an adjustment to higher living costs and inflation in these countries. The impact on Indian students is considerable, especially with Canada's tightening of visa rules following a surge in Indian students enrolled in diploma courses. The Canadian government aims to curb the issue of 'diploma mills' and ensure genuine academic pursuits. Consequently, there's a cap on student visas, which particularly affects Indian students seeking



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diploma courses. The shift in visa policies has led to changing preferences among Indian students. While interest in traditional destinations like Canada has waned, countries like Germany, Taiwan, and Israel are becoming more attractive as they seek to draw Indian talent.

In summary, economic adjustments and political factors are driving changes in foreign student policies, leading to a diversification of destination choices among Indian students seeking international education.

5th February 2024

CROWN JEWEL THAT WAS-Indian Express Editorial

Economy

Key takeaways:

1. **Appellate Body (AB) Paralysis:** Since 2019, the WTO's Appellate Body, a crucial component of the DSM, has been crippled. This is primarily due to the United States blocking new appointments following several dispute losses, effectively stalling the dispute resolution process.
2. **Exploitation of Loopholes:** With the AB dysfunctional, countries have been able to avoid compliance with WTO panel rulings by appealing into a non-functioning system, thereby weakening the enforcement capacity of the WTO.
3. **Commitment to Restoration:** The 12th WTO ministerial meeting saw a commitment to restoring a fully functional DSM by 2024, with developing countries like India advocating strongly for the AB's return to its pre-2019 state.
4. **Three Potential Solutions:** Developing countries are considering three main options to address the DSM crisis: joining the EU-led MPIA, accepting a diluted AB with limited powers, or adopting an opt-out option for the AB, allowing countries to choose whether to participate in its jurisdiction.
5. **Challenges with Proposed Solutions:** Each proposed solution has drawbacks, such as the voluntary nature of the MPIA, the reduced effectiveness of a diluted AB, and the potential alteration of the DSM's nature with an opt-out option for the AB.
6. **Preference for AB Restoration:** Despite these challenges, the ideal and preferred outcome for developing countries is the full restoration of the AB as it functioned until 2019, maintaining the integrity and efficacy of the WTO's dispute settlement process.

Mains easy language

The World Trade Organization's (WTO) dispute settlement mechanism (DSM), once its most effective tool, faces a significant crisis. Central to this issue is the paralysis of the Appellate Body (AB), primarily due to the United States blocking new appointments after losing several disputes. This has led to a loophole where countries appeal WTO panel rulings into a non-functional system, effectively rendering the WTO's enforcement mechanism powerless. The 12th WTO ministerial meeting saw a commitment to restoring a fully functional DSM by 2024, with developing countries, including India, advocating for the AB's restoration to its pre-2019 state. To address this crisis, three main solutions have emerged: joining the European Union-led Multi-party Interim Appeal Arbitration Arrangement (MPIA), accepting a diluted AB with limited powers, or adopting an opt-out option for the AB. However, each solution has significant drawbacks, such as the MPIA's voluntary nature, the reduced efficacy of a weakened AB, and the altered nature of the DSM with an opt-out option. Despite these challenges, the ideal outcome for many developing nations remains the full restoration of the AB, ensuring the WTO's dispute resolution process remains robust and effective.

Changing gears to grow-Indian Express Editorial

Economy

Key takeaways



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1. **Viksit Bharat Sankalp by 2047:** PM Modi's development vision focuses on sustainable growth for the poor, farmers, women, and youth, differing from the opposition's emphasis on caste.
2. **Post-Covid Economic Recovery:** Under Modi's government, India's economy is set to outpace global and G20 growth, with over 7% annual growth projected from FY22 to FY24.
3. **Agricultural Sector Concerns:** Despite overall growth, the agricultural sector faces slower growth, with issues like increased labor force due to reverse migration and declining real wages in rural areas.
4. **Progress in Inclusive Growth:** There's notable reduction in poverty and inflation control, but achieving inclusive growth in rural sectors remains a challenge.
5. **Focus on Fiscal and Sustainable Development:** The government aims to rationalize subsidies and redirect resources towards sustainable development and environmental sustainability.
6. **Integration of Government Schemes:** Proposing to synchronize MGNREGA with the PM Awas Yojana in rural areas could improve housing and employment, aligning with Modi's vision and potentially influencing the upcoming elections.

Mains easy language

As India approaches its parliamentary elections, Prime Minister Narendra Modi's development agenda, Viksit Bharat Sankalp by 2047, emphasizes sustainable and inclusive growth. Contrasting with the opposition's caste-centric promises, Modi's focus is on empowering the poor, farmers, women, and youth. Under his leadership, India has shown robust post-Covid economic recovery, projecting over 7% annual growth from FY22 to FY24, significantly higher than global and G20 averages.

However, the agricultural sector, employing a large workforce, faces challenges with slower growth and issues like reverse migration and declining rural wages. While multidimensional poverty has reduced significantly, achieving comprehensive inclusive growth, particularly in rural areas, remains a challenge. The government's strategy for inclusive and sustainable growth involves reorienting subsidies towards development and environmental sustainability. The FY25 budget reflects this shift, with increased allocations for sectors like fisheries, animal husbandry, and dairying. A notable proposal is the integration of MGNREGA with the PM Awas Yojana in rural areas, aiming to improve housing and employment. This innovative approach aligns with Modi's vision of 'Ram Rajya' and could be instrumental in garnering support in the upcoming elections.

[What changes CBSE has proposed for Class 10 and 12, why-Indian Express Explained](#)

Sociology

Key takeaways

1. **Credit System Introduction:** CBSE plans to implement a credit system from Class 9 onwards, aligning with the National Education Policy 2020. Students will need to accumulate credits to progress to higher classes and for university eligibility.
2. **Academic Framework Redesign:** The academic year will consist of 1,200 notional learning hours, equating to 40 credits. This includes both in-school academic learning and outside experiential learning.
3. **Curriculum Changes:** Students in Classes 9 and 10 will study 10 subjects, including three languages (two of which must be Indian) and seven core subjects. Classes 11 and 12 students will take six subjects, including at least one Indian language.
4. **Exam Reforms:** The CBSE will conduct external exams for core subjects. Subjects like art education, physical education, and vocational education will have combined internal and board assessments.
5. **Broader Subject Choices:** The new system increases the number of subjects and includes a wider range of languages and core subjects, promoting a more comprehensive education.



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- 6. Class 12 Group Categorization:** Subjects are divided into four groups, with students required to choose from at least two groups. This includes external exams for certain subjects and a mix of internal and board exams for others.

Mains easy language

The Central Board of Secondary Education (CBSE) is set to overhaul the academic framework for Classes 9 to 12, integrating a credit system as recommended by the National Education Policy 2020. This initiative aims to blend vocational and general education, enhancing academic mobility and equivalence. Under this new system, students must accumulate specific credits to progress through grades, with these credits stored digitally in an Academic Bank of Credits. The proposed framework redefines an academic year as comprising 1,200 notional learning hours, equivalent to 40 credits, encompassing both in-school academic and external experiential learning. The curriculum expands to include 10 subjects for Classes 9 and 10, with a mandatory mix of three languages (including two Indian languages) and seven core subjects. For Classes 11 and 12, the requirement is six subjects, including at least one Indian language. Examination patterns will also change, with CBSE conducting external exams for core subjects, and a combination of internal and board assessments for others. This restructuring aims to provide a more rounded education and align India's secondary education system with global standards.

Dealing with govt debt-Indian Express Explained

Economy

Key takeaways

- 1. Debt Levels:** The Modi-led NDA government is expected to conclude its second term with public debt exceeding 80% of India's GDP. This is a considerable increase from previous years, with IMF data showing a rise from 75% in 2019-20 to a peak of 88.5% in 2020-21.
- 2. Public Debt Composition:** Government debt includes domestic and foreign loans raised by the Centre and states, plus liabilities against small savings schemes, provident funds, and special securities.
- 3. Fiscal Responsibility and Budget Management (FRBM) Law:** This law aimed to reduce general government debt to 60% of GDP by 2024-25, with the Centre's liabilities not exceeding 40%. However, current figures far exceed these targets.
- 4. Causes of Debt Spike:** The Covid-induced economic disruptions led to increased borrowing to fund public health and social safety net expenditures, amidst reduced revenues.
- 5. Interest Payments:** The rising debt levels have resulted in increased interest payments, putting further strain on the government's finances.
- 6. Debt Management Strategies:** The government needs to focus on fiscal consolidation to manage borrowings and debt levels. Additionally, leveraging the 'denominator effect' where high nominal GDP growth can help reduce the debt-to-GDP ratio is crucial.
- 7. Growth and Inflation:** Encouraging GDP growth, both real output increases and controlled inflation, is essential for effectively managing the government's debt woes.

Mains easy language

The next Indian government, to be elected in the 2024 Lok Sabha polls, faces the daunting task of managing the substantial government debt accumulated in the wake of the Covid-19 pandemic. The current debt-to-GDP ratio, significantly increased during the Modi-led NDA government's tenure, stands at over 80%, a notable rise from the previous years. This situation stems from heightened borrowings necessitated by pandemic-related economic disruptions and increased spending on public health and social safety nets. Key challenges include adhering to the Fiscal Responsibility and Budget Management (FRBM) Act's targets, which aimed to reduce general government debt to 60% of GDP, a goal currently surpassed. The government's approach to tackling this issue involves a blend of fiscal consolidation





and stimulating GDP growth. Effective debt management will require not only stringent fiscal discipline to control further borrowing but also strategies to boost economic output and manage inflation, thereby leveraging growth to mitigate the debt burden.

[NORTHERN IRELAND GETS NEW GOVT:THE DEADLOCK, AND THE RESOLUTION-Indian Express Explained](#)

International relations

Key takeaways

1. **End of Two-Year Deadlock:** Northern Ireland has successfully formed a new government, breaking a two-year impasse caused primarily by trade issues post-Brexit.
2. **Michelle O'Neill's Historical Leadership:** Michelle O'Neill of Sinn Féin, a party historically linked to the Irish Republican Army, becomes the first minister, marking a significant moment in Northern Ireland's political history.
3. **Impact of Brexit:** The deadlock was a direct consequence of new trade rules necessitated by Brexit, particularly affecting Northern Ireland due to its land border with the EU member, the Republic of Ireland.
4. **Trade Arrangement Controversy:** The arrangement to avoid a hard border between Northern Ireland and Ireland led to checks between Great Britain and Northern Ireland, which was opposed by unionists as it seemingly weakened Northern Ireland's ties with the UK.
5. **Democratic Unionist Party's (DUP) Resistance:** The DUP's refusal to function in Stormont, led by Sir Jeffrey Donaldson, was a key factor in the government's collapse, stemming from dissatisfaction with the Brexit-induced trade arrangements.
6. **New Deal as a Solution:** The resolution came through a new deal that introduced a UK Internal Market channel for reduced checks and customs paperwork, an "Internal Market Guarantee" for smoother transit of goods, and a significant financial package to bolster Northern Ireland's economy.

Mains easy language

Northern Ireland has finally formed a functional government after a two-year paralysis, resolving a deadlock that arose from Brexit-induced trade issues. Michelle O'Neill of Sinn Féin, a party historically linked to the Irish Republican Army, has become the first minister, marking a significant political development. The deadlock stemmed from post-Brexit trade rules, particularly affecting Northern Ireland due to its unique position sharing a land border with the EU member, the Republic of Ireland. The primary issue was the introduction of checks between Great Britain and Northern Ireland to avoid a hard border with Ireland, leading to unionist discontent as it appeared to weaken Northern Ireland's ties with the UK. The Democratic Unionist Party (DUP) halted the functioning of Stormont in protest. The deadlock was eventually resolved through a new deal that included a UK Internal Market channel for reduced checks, an "Internal Market Guarantee" for goods transit, and a substantial financial package for Northern Ireland's economy. This breakthrough is a critical step in addressing the challenges brought by Brexit and stabilizing Northern Ireland's political landscape.

[Unending woes-The Hindu Editorial](#)

International relations

Key takeaways

1. **Arrests and Detentions:** There's a high frequency of Indian fishermen being arrested by the Sri Lankan Navy for crossing into their waters, leading to increased detentions compared to previous years.
2. **Livelihood Impact:** The confiscation of fishing gear and boats by Sri Lanka severely affects the fishermen's livelihood, with boats often rendered unusable by the time they are returned.



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- 3. Bottom Trawling Issue:** The contentious practice of bottom trawling by Tamil Nadu fishermen, banned by Sri Lanka, continues despite India's commitment to promote deep-sea fishing.
- 4. Maritime Boundary Challenges:** The proximity of the International Maritime Boundary Line to the Indian coast leads to frequent unintentional crossings by Indian fishermen, compounded by restrictions on where they can fish.
- 5. Diplomatic and Humanitarian Efforts:** The issue, recognized as a humanitarian concern, has seen inconsistent diplomatic efforts and requires more effective resolution strategies.
- 6. Need for Cooperative Action:** There's an urgent need for practical action to encourage deep-sea fishing, discourage bottom trawling, and foster cooperation for a sustainable solution in the Palk Bay.

Mains easy language

The Palk Bay conflict, involving Indian and Sri Lankan fishermen, is a significant humanitarian and geopolitical issue. Indian fishermen, primarily from Tamil Nadu and Puducherry, are frequently detained by the Sri Lankan Navy for allegedly crossing into Sri Lankan waters, with the number of detentions rising alarmingly. This has severely impacted their livelihoods, especially given the confiscation and subsequent deterioration of their fishing vessels and gear. A central point of contention is the practice of bottom trawling, used by Tamil Nadu fishermen but banned by Sri Lanka due to its environmental destructiveness. Despite India's commitments to curb this practice and shift towards deep-sea fishing, compliance has been lacking. The proximity of the International Maritime Boundary Line to the Indian coast complicates matters, leading to inadvertent boundary crossings. Diplomatic efforts, including a Joint Working Group and ministerial meetings, have been inconsistent and ineffective in resolving these tensions. To alleviate this long-standing conflict, concerted and cooperative actions are needed. These should focus on promoting sustainable fishing practices, respecting maritime boundaries, and establishing a consistent diplomatic dialogue, recognizing the issue's humanitarian and livelihood implications.

The importance of keeping personally identifiable information safe-The Hindu Text and Context Science and technology

Key takeaways

- 1. Definition of PII:** PII is any data that can identify an individual, including Aadhaar, PAN, voter ID, passport details, contact information, and biometrics. It varies by country and can include non-PII elements combined with additional data.
- 2. Sensitive vs. Non-Sensitive PII:** Sensitive PII, like bank details or government IDs, can cause harm if exposed, whereas non-sensitive PII, like zip codes or gender, is publicly available and less risky.
- 3. Risks of PII Exposure:** Exposed PII can lead to targeted cyberattacks, identity theft, fraudulent activities, and the selling of information on the dark web.
- 4. Recent PII Breaches:** Instances of PII compromise include the Telegram bot revealing CoWIN registration data and claims of 815 million Indian citizens' data being sold online. The Indian government has denied these allegations but has taken investigative actions.
- 5. Protective Measures:** Individuals can protect their PII by using secure connections (HTTPS), VPNs on public networks, careful management of personal documents, and monitoring bank transactions and credit scores for unusual activities.

Mains easy language

The critical vulnerability in the Ministry of Corporate Affairs' online portal, exposing the personal data of over 98 lakh individuals, underscores the importance of protecting Personally Identifiable Information (PII). PII encompasses data that can identify an individual, including sensitive information like Aadhaar, PAN, and contact details, which if exposed, can lead to serious privacy breaches and cybercrimes. The risks associated with PII exposure are manifold, ranging from targeted cyberattacks and identity theft to the illegal selling





of information on the dark web. Recent incidents, such as the exposure of CoWIN registration data and the alleged sale of Indian citizens' data, highlight the growing threat landscape. While the Indian government has denied some breach claims, the incidents have prompted investigations and raised awareness about data security. Individual measures to safeguard PII include using secure internet connections, VPNs in public networks, and cautious sharing of personal information, especially on social media. Regular monitoring of bank transactions and credit scores is also vital to detect any misuse of PII. This incident serves as a reminder of the need for robust cybersecurity practices and vigilant personal data management to mitigate the risks associated with PII exposure

[The scientists in Japan who scared flies to understand fear-The Hindu Science](#)

Science

Key takeaways

1. **Innovative Research Method:** Researchers in Japan, led by Dr. Masato Tsuji, created a unique mini theatre to show horror movies to flies, aiming to study their brain responses to simulated fear.
2. **Focus on Fear-Like Responses:** The study revealed that flies display fear-like responses, which can be observed and measured, offering a model to understand the neural and molecular basis of fear.
3. **Identification of a Key Neurochemical:** The research identified tachykinin as the neurochemical responsible for activating aversion behavior in flies. Flies lacking the ability to release this neurochemical did not exhibit avoidance behavior.
4. **Neural Activity Oscillation:** The study found that fear-like states in flies correspond with oscillating neural activity, a phenomenon rare in fruit flies but increasingly observed with advanced recording technologies.
5. **Implications for Human Psychiatry:** The insights gained from this research could be relevant to understanding and treating human psychiatric conditions like phobias and anxiety disorders, which are often rooted in exaggerated fear responses.
6. **Future Research Directions:** The team aims to further map the fear circuit in flies, especially how visual information in the brain elicits fear responses, potentially contributing to more comprehensive treatments for fear-based disorders in humans.

Mains easy language

In a unique study by Dr. Masato Tsuji and his team at the University of Tokyo, fruit flies were subjected to a mini theater experience, showing them simulated horror scenarios to understand fear responses. This innovative approach aims to shed light on the neural and molecular mechanisms underlying fear, with potential implications for treating psychiatric disorders rooted in exaggerated fear, such as phobias and anxiety. The researchers discovered that flies, when exposed to a combination of visual threats and air puffs, exhibit behaviors resembling fear-like emotional states. Significantly, they pinpointed the neurochemical tachykinin as a crucial factor in activating these fear-like responses. The absence of tachykinin in certain mutant flies resulted in a lack of avoidance behavior, highlighting its vital role. This study's findings are not just confined to the understanding of fear in flies; they also open potential avenues for exploring treatment options for fear-based psychiatric conditions in humans. The observed similarity in fear mechanisms across species suggests a possible universal biological basis for fear, offering a path to novel therapeutic strategies. The team's future endeavors aim to further unravel the fear circuit in flies, particularly focusing on how visual information triggers fear responses, potentially contributing to a deeper comprehension of fear and its treatment in humans.

6th February 2024

[PAYMENT BLOCKED-Indian Express Editorial](#)

Economy



| Clear your doubts now.



Key takeaways

1. **RBI's Regulatory Actions:** Paytm Payments Bank faces restrictions from the RBI, including a ban on accepting new deposits and conducting credit transactions, following audit reports of persistent non-compliance and supervisory concerns.
2. **History of Regulatory Challenges:** This isn't Paytm Payments Bank's first encounter with regulatory issues. In 2022, the RBI had halted its new customer onboarding, and a significant fine was imposed for regulatory compliance deficiencies.
3. **Impact on Business and Shares:** These measures have negatively impacted One97 Communications, Paytm's parent company, leading to a decline in share value and posing challenges in maintaining and establishing financial relationships.
4. **Paytm's Customer Base:** As a major fintech entity, Paytm has a substantial user base with millions of wallets and bank accounts, underlining its significant market presence.
5. **Trader Concerns and Advisories:** The Confederation of All India Traders has advised a shift to alternate payment modes due to potential disruptions caused by these regulatory measures.
6. **Balancing Regulation and Innovation:** The situation calls for a balanced approach in regulatory actions, ensuring compliance without excessively stifling innovation in the digital finance sector.
7. **Need for Transparency in Regulation:** Regulatory interventions should be transparent and mindful of the broader impact on users, balancing financial system stability with the encouragement of technological advancements.

Mains easy language

The Reserve Bank of India's (RBI) recent stringent measures against Paytm Payments Bank, including a ban on accepting new deposits and conducting credit transactions, underscore the complexities of regulatory compliance in the fintech sector. Stemming from a comprehensive audit report that highlighted persistent non-compliances and supervisory concerns, these actions have had a significant impact on Paytm's business operations and its parent company, One97 Communications, evidenced by a notable drop in share value.

This regulatory scrutiny is not new for Paytm Payments Bank, which faced similar challenges in 2022, including a halt in new customer onboarding and a substantial fine for compliance deficiencies. These recurring issues highlight the importance of adhering to regulatory norms in the rapidly evolving digital finance landscape.

The RBI's actions have also raised concerns among traders and customers, prompting advisories for alternative payment methods due to potential service disruptions. While regulatory measures are essential for ensuring stability and compliance in the financial system, they must be balanced to avoid stifling innovation. The need for transparency and consideration of the broader implications for users is critical, as regulatory interventions in digital finance can have far-reaching effects on millions of users and the trajectory of technological advancement.

This situation in Uttar Pradesh reflects the ongoing challenge of managing regulatory oversight in a way that supports the growth and innovation of digital financial services while ensuring compliance and stability.

[What Pakistan needs& won't get-Indian Express Editorial](#)

International relations

Key takeaways

1. **Convictions of Imran Khan:** Imran Khan and Shah Mahmood Qureshi were convicted in both the cipher and Toshakhana cases, leading to imprisonment and raising concerns about the legal proceedings' impartiality.
2. **Pattern of Political Influence:** These legal actions against Khan resemble the army's historical influence in politics, similar to the treatment of Nawaz Sharif before the 2018 elections, indicating a potential repeat of political manipulation.



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- 3. Election Commission's Role:** The Election Commission's measures against PTI, including stripping its election symbol, suggest administrative challenges that could disadvantage the party in upcoming elections.
- 4. Nawaz Sharif's Political Comeback:** Nawaz Sharif's increasing popularity and potential return to the prime ministerial role, supported by his daughter Maryam's active campaigning, indicate a significant shift in political dynamics.
- 5. Army's Involvement in Civil Affairs:** Army Chief Asim Munir's active role in areas such as economic management reflects the army's continued influence over civilian government affairs.
- 6. Pakistan's Multifaceted Challenges:** The country is grappling with economic instability, terrorism, and strained relationships with neighboring countries, necessitating a strong, independent government.
- 7. Uncertain Electoral Outcomes:** The upcoming election is unlikely to significantly change Pakistan's need for a government free from army interference, despite the country's pressing need for stable and effective governance.

Mains easy language

Recent developments in Pakistan's political arena, particularly concerning former Prime Minister Imran Khan, have highlighted the ongoing complexities and the significant influence of the army in the country's politics. Imran Khan and Shah Mahmood Qureshi's convictions in the cipher and Toshakhana cases have raised concerns about the impartiality of legal proceedings and potential political manipulation, reminiscent of Nawaz Sharif's experience before the 2018 elections. The Election Commission's decision to strip PTI of its election symbol and other administrative challenges faced by the party suggest a potential disadvantage in the upcoming elections. Meanwhile, Nawaz Sharif's rising popularity and his potential return as prime minister, with support from his daughter Maryam's active campaigning, mark a notable shift in the political landscape.

The involvement of Army Chief Asim Munir in areas like economic management underscores the army's continued influence over civilian affairs. This situation comes as Pakistan grapples with economic instability, terrorism, and strained relationships with neighboring countries, underscoring the need for a strong, independent government. However, the upcoming election is unlikely to bring about significant change in Pakistan's governance, particularly in terms of reducing the army's interference. This situation leaves Pakistan facing a continued challenge in achieving stable, effective governance free from military influence.

[What's in Bill to stop cheating in job exams-Indian Express Explained](#)

Governance

Key takeaways

- 1. Aim of the Bill:** To bring greater transparency, fairness, and credibility to public examinations in India.
- 2. Definition of Unfair Means:** The bill specifies at least 15 actions as unfair means, including question paper leakage, unauthorized access to papers, tampering with answer sheets, and assisting candidates in an unauthorized manner.
- 3. Scope of Application:** The bill applies to exams conducted by major bodies like the UPSC, SSC, RRBs, IBPS, NTA, and central government departments and offices.
- 4. Punishments:** The bill proposes stringent punishments, including imprisonment (3 to 5 years) and heavy fines (up to Rs 10 lakh for individuals and Rs 1 crore for service providers). These offenses are non-bailable and non-compoundable.
- 5. Response to Exam Cheating Scandals:** This bill is a response to the widespread issue of question paper leaks and other forms of cheating in government recruitment exams.





6. **Protection for Candidates:** The bill ensures that candidates are not unjustly penalized under its provisions and are protected under existing administrative rules of the respective examination authority.
7. **Model for States:** The bill is intended as a model for state governments to adopt similar measures for state-level public examinations.
8. **Overall Goal:** To deter unfair practices in public examinations and ensure a level playing field for all candidates.

Mains easy language

The "Public Examinations (Prevention of Unfair Means) Bill, 2024," introduced in the Lok Sabha, is a significant legislative step towards ensuring integrity in India's public examination system. The bill targets the rampant issue of cheating and malpractices, which have plagued various recruitment exams nationwide. It outlines a comprehensive list of actions deemed as "unfair means," including the leakage of question papers, unauthorized access to exam materials, tampering with answer sheets, and providing illicit assistance to candidates. These measures address both traditional forms of cheating and more sophisticated methods involving technology. The bill's scope extends to examinations conducted by major bodies like the UPSC, SSC, RRBs, IBPS, and NTA, as well as central government departments. A key aspect of the proposed law is its stringent punitive measures. Offenses are classified as non-bailable and non-compoundable, with penalties ranging from three to five years in prison and substantial fines. This strict approach reflects the government's commitment to upholding the meritocracy and fairness in public sector recruitment.

This legislation is not just a reactive measure to past incidents but also a proactive approach to safeguard the future of millions of aspirants. By setting a precedent at the national level, it also serves as a model for states, encouraging them to adopt similar measures for state-level examinations. The bill, thus, aims to reassure the youth that their efforts and aspirations are valued and protected in a fair and transparent examination system.

Snow leopard count: why this Himalayan feat is the first step in securing the cat-Indian Express Explained

Environment

Key takeaways

1. **Snow Leopard Population:** The SPAI estimated that there are 718 snow leopards in India, spread across Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh.
2. **Extensive Study Area:** The assessment covered around 1 lakh sq km of the higher Himalayan terrains, a significant portion of the snow leopard's habitat in India.
3. **Challenges in Assessment:** The study faced challenges due to the difficult terrain snow leopards inhabit and the complexities in identifying individual leopards from camera trap photos. The unique thick fur patterns of snow leopards required a manual evaluation approach for accurate identification.
4. **Methodology:** The assessment was carried out with the collaboration of the Wildlife Institute of India, Nature Conservation Foundation, and WWF-India. It involved analyzing photos from 1,971 camera trap locations to identify 241 unique individuals, which was then extrapolated to estimate the total population.
5. **Regional Breakdown:** The study provided detailed estimates for each region. For example, in Ladakh, 126 unique adult individuals were identified, estimating the population to be 477 across 47,572 sq km.
6. **Significance:** This count is a significant update from previous estimates and suggests overall population stability of snow leopards in India.
7. **Conservation Implications:** The findings highlight the need for informed conservation strategies and policies, considering the increasing human impact on snow leopard habitats due to infrastructure development and tourism.



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8. **Future Outlook:** This assessment is just the beginning of a deeper understanding of snow leopard ecology, including their dispersion, land-use patterns, and mortality trends, essential for their long-term conservation.

Mains easy language

The Snow Leopard Population Assessment in India (SPAI), a comprehensive study conducted between 2019 and 2023, has estimated the presence of 718 snow leopards across various regions including Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh. This assessment marks a significant stride in understanding these elusive creatures, often termed the “ghosts of the mountains” due to their mastery of stealth and camouflage. Undertaken over a vast expanse of the higher Himalayan terrains (about 1 lakh sq km), the study faced formidable challenges. The rugged and inaccessible habitat of the snow leopard, situated above the treeline at altitudes between 10,500 feet and 17,000 feet, made the assessment demanding. The identification of individual leopards from camera trap photos was particularly challenging, requiring manual evaluation due to the intricacy of their fur patterns. Collaboration between the Wildlife Institute of India, Nature Conservation Foundation, and WWF-India led to the development of a unique estimation protocol. The methodology involved analyzing photographs from 1,971 camera trap locations, identifying 241 unique individuals, and extrapolating this data to estimate the total population. This assessment not only updates previous estimates but also sets the stage for more informed conservation strategies. It underscores the importance of understanding snow leopard ecology, including dispersion, land-use patterns, and mortality trends, which are crucial for the species' survival amidst increasing human impacts on their habitat. This study is pivotal for the future conservation and policy-making for snow leopards in India, integrating ecological knowledge with practical conservation needs.

Controversy over two age-old Assamese traditions, now with Gauhati HC-Indian Express Explained

Polity

Key takeaways

1. **Court's Directive:** The Gauhati High Court ordered to prevent buffalo fights outside the approved period in Assam, responding to a plea by PETA India.
2. **Cultural Traditions:** These fights, part of the Magh Bihu festival, are traditional events in Assam with historical significance.
3. **Legal Background:** Following the Supreme Court's 2014 ruling against using animals in events like jallikattu, these fights were initially halted. However, the Supreme Court later allowed them under specific conditions.
4. **Government's Revival Efforts:** The Assam government framed SOPs for conducting these fights to minimize animal cruelty, setting specific guidelines and timeframes.
5. **PETA's Challenge:** PETA India has filed petitions against these events, citing animal welfare concerns and alleging instances of cruelty during these fights.
6. **Recent Court Action:** The court's recent directive was in response to a buffalo fight scheduled outside the government-stipulated time, emphasizing adherence to the guidelines.

Mains easy language

The Gauhati High Court's directive to prevent buffalo fights outside the designated period in Assam highlights the ongoing controversy surrounding traditional buffalo and bulbuli (songbird) fights, integral to the Magh Bihu festival. This intervention came in response to a plea by PETA India, which challenges these age-old practices on ethical grounds. Historically, these fights have been a significant part of Assamese culture, especially during Magh Bihu. However, they faced legal challenges after the Supreme Court's 2014 judgment against the use of animals in events like jallikattu. This ruling led to a temporary cessation of such events in Assam, until the Supreme Court's revised decision permitted them under specific conditions. The Assam government, aligning with this decision, formulated SOPs to ensure these events occur without deliberate cruelty to animals. These guidelines included stipulated timeframes and prohibitions against harmful



| Clear your doubts now.



practices. PETA India's petitions against these traditions, citing instances of cruelty and ethical concerns, led to the Gauhati High Court's recent intervention. The court's action, particularly against a buffalo fight planned outside the approved period, underscores the need for compliance with the government's guidelines, balancing cultural preservation with animal welfare. This situation reflects the complex interplay between traditional practices and modern ethical considerations in India.

[An Uttar Pradesh model to tackle malnutrition-The Hindu Editorial](#)

Sociology

Key takeaways

- 1. Women-Led Enterprises for Nutrition:** The model involves self-help groups of women who produce fortified and nutritious foods for pregnant and breastfeeding mothers and children. These groups play a crucial role in the production and distribution of take-home rations under the Integrated Child Development Services (ICDS) program.
- 2. Decentralized Production:** A shift from a centralized model to a decentralized one allows local women's groups to produce different variants of take-home rations, using automated equipment with significant production capacity.
- 3. Impact on Livelihood and Nutrition:** This initiative has created livelihood opportunities for over 4,000 women and reaches 12 million ICDS beneficiaries, demonstrating a significant impact on both community employment and nutritional health.
- 4. Pilot Projects and Expansion:** Initiated with pilot projects in Unnao and Fatehpur, the model has successfully expanded to 202 production units across 43 districts in Uttar Pradesh.
- 5. Quality and Diversity in Nutrition:** The take-home rations are formulated to be nutritious, including high-quality ingredients and catering to different age groups. The program also addresses the monotony of food options and emphasizes food safety and quality.
- 6. Empowerment and Economic Benefits:** The project empowers women economically and contributes to the local economy, as several ingredients are locally sourced. Each woman involved in the project is expected to generate additional income, enhancing their financial independence.
- 7. Technological Integration:** An app-based solution is being developed to support the production of take-home rations, and a pilot project uses QR codes to strengthen the supply chain and track ration delivery.

Mains easy language

Uttar Pradesh's innovative approach to tackling malnutrition is a prime example of combining women's empowerment with community-based initiatives. In a collaborative effort between the Department of Women and Child Development and the Uttar Pradesh State Rural Livelihood Mission, decentralized production units for take-home rations have been established, operated by women's self-help groups. These micro-enterprises produce fortified and nutritious foods targeted at pregnant and breastfeeding mothers and children, distributed through the Integrated Child Development Services (ICDS) program.

The model has proven its feasibility and effectiveness, initially demonstrated by the United Nations World Food Programme through pilot plants in Unnao and Fatehpur. This success led to the expansion of the project across Uttar Pradesh, now encompassing 202 production units in 43 districts and empowering over 4,000 women while reaching 12 million beneficiaries. This approach not only addresses malnutrition but also creates significant livelihood opportunities for women, fostering economic empowerment at a grassroots level. By shifting from a centralized to a decentralized model, the project enhances local women's roles in producing specific caloric value rations, aiming to generate substantial additional monthly income for each participant. Furthermore, this initiative has redefined the quality and variety of nutrition provided, with a focus on high-quality ingredients and diverse food formulations to cater to different groups. It represents a scalable, multi-stakeholder approach that leverages community strengths to address critical health issues effectively.





Myanmar's civil war and India's interests-The Hindu Text and Context

International relations

Key takeaways

1. **Impact on Kaladan Project:** The recent capture of Paletwa by the Arakan Army in Myanmar's Chin State affects India's Kaladan Multimodal Transit Transport Project (KMTP), crucial for northeast India's connectivity and economic development.
2. **Complex Ethnic Dynamics:** The conflict in Paletwa involves intricate ethnic dynamics between the Chin and Arakan communities, complicating the situation for India's project in the region.
3. **Security Challenges for India:** The Arakan Army's control over areas near the Indian border, including incidents like the kidnapping of Indian workers, poses direct security challenges to India's interests and projects in Myanmar.
4. **China's Growing Influence:** China's support for the Arakan Army and other Ethnic Armed Organizations (EAOs) in Myanmar, as part of its strategic investments, presents a geopolitical challenge to India's endeavors in the region.
5. **Need for a Nuanced Approach:** India needs a balanced strategy that combines humanitarian and developmental assistance with security considerations, engaging with a variety of ethnic groups and local stakeholders to ensure the success of projects like KMTP.
6. **Strategic and Geopolitical Implications:** The situation in Myanmar has significant strategic and geopolitical implications for India, especially in the context of China's influence and the security of northeastern India.

Mains easy language

The civil war in Myanmar, particularly the Arakan Army's control of Paletwa, poses significant challenges for India's interests, notably the Kaladan Multimodal Transit Transport Project (KMTP). This project is vital for enhancing Northeast India's connectivity and reducing dependency on the Siliguri Corridor. The capture of Paletwa by the Arakan Army has heightened the geopolitical complexity in the region, directly impacting the project's progress and India's strategic interests. The conflict in Myanmar is marked by intricate ethnic dynamics between the Chin and Arakan communities. This complexity is exacerbated by the involvement of various Ethnic Armed Organizations (EAOs), including the Arakan Army, which has previously shown hostility towards Indian interests, evident in the kidnapping of Indian workers. Compounding these challenges is China's growing influence in Myanmar. China's support for the Arakan Army and other EAOs, as part of its broader strategic interests in the region, poses a direct threat to India's projects and influence in Myanmar.

India's response requires a nuanced approach that balances humanitarian and developmental support with strategic and security considerations. Engagement with a broad spectrum of ethnic organizations and local communities is crucial for the success of projects like KMTP. This complex situation underscores the need for India to adapt its foreign policy and regional strategies to navigate the challenges posed by Myanmar's civil war and China's expanding footprint in the region.

The unusual cabbage mutation that could boost crop yield-The Hindu Science

Science

Key takeaways

1. **Discovery of Male-Sterility:** The mutation, discovered four decades ago, caused the affected cabbage plants to lose the ability to produce pollen. This led to seeds that were only a result of cross-pollination, resulting in hybrid seeds.
2. **Heterosis or Hybrid Vigor:** The resultant hybrid seeds from these male-sterile plants demonstrated hybrid vigor or heterosis, producing more robust plants and larger yields.



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- 3. Genetic Mutation Identified:** The researchers found that the mutation (named Ms-cd1) is dominant and involves the loss of a single DNA base-pair in the plant's genome, affecting the plant's ability to produce pollen.
- 4. Implications for Crop Yield:** This discovery is significant for agriculture as it facilitates the production of hybrid seeds, which are known to yield better crops. It simplifies the process of creating male-sterile plants necessary for producing these hybrids.
- 5. Broader Applicability:** The successful introduction of the mutant gene into other species such as rice, tomato, and arabidopsis suggests that this mechanism for inducing male sterility could be applied across a wide range of crops, potentially revolutionizing agricultural practices for numerous plant species.

Mains easy language

Forty-four years ago, a naturally occurring mutation was discovered in a cabbage plant that rendered it unable to produce pollen, leading to a significant advancement in plant genetics and agricultural practices. This mutation, now identified as a single DNA base-pair deletion named Ms-cd1, results in male sterility in plants, a condition that facilitates cross-pollination and the production of hybrid seeds. These hybrid seeds exhibit hybrid vigor or heterosis, which is known to produce more robust plants and potentially larger yields. The study published in Nature Communications by researchers from the Chinese Academy of Agricultural Sciences demonstrates that this simple yet impactful genetic alteration can be applied across various plant species, including rice, tomato, and arabidopsis. This discovery is pivotal in the field of agriculture as it offers a new, efficient method for producing hybrid seeds, which are crucial for enhancing crop yields. The broader application of this mutation across different plant species suggests a universal mechanism to induce male sterility, thereby revolutionizing agricultural practices and potentially addressing global food security challenges. The research marks a significant milestone in leveraging plant genetics to boost agricultural productivity.

China bets on open-source chips to evade sanctions-The Hindu Science

Science and technology

Key takeaways

- 1. Adoption of RISC-V Architecture:** China is utilizing RISC-V, an open-source instruction set architecture, for enhancing chip performance, particularly in areas like cloud computing and smart cars.
- 2. Strategic Shift Due to Sanctions:** The move towards RISC-V is driven by US and UK export controls that limit China's access to advanced x86 and Arm chip designs, pushing China to seek alternatives.
- 3. Investment in RISC-V Projects:** Beijing and various Chinese state entities have invested at least \$50 million in RISC-V related projects from 2018 to 2023, indicating significant commitment to this technology.
- 4. Applications and Advancements:** RISC-V chips developed in China are being used in self-driving cars, artificial intelligence, and data storage, showcasing the architecture's versatility and potential.
- 5. Comparison with x86 and Arm Architectures:** Unlike the proprietary and complex architectures of x86 and Arm, RISC-V offers a simpler, more energy-efficient, and customizable framework, making it an attractive option for China.
- 6. Geopolitical and Technological Implications:** China's focus on RISC-V is a strategic move to gain technological self-reliance and counter Western dominance in the semiconductor industry, potentially reshaping the global chip market.

Mains easy language

China's recent pivot to open-source chip technology, specifically using the RISC-V standard, represents a significant strategic move in the global semiconductor market, driven largely by the need to circumvent US sanctions and reduce reliance on Western chip architectures. This shift is evident in the People's Liberation Army's Academy of Military Sciences leveraging RISC-V for developing chips with enhanced



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performance in applications like cloud computing and smart vehicles. The transition to RISC-V, an open-source instruction set architecture, marks a stark contrast to the dominant, Western-controlled x86 and Arm standards, which face export restrictions from the US and UK, limiting China's access to the most advanced designs. These restrictions have propelled China's investment in RISC-V related projects, with at least \$50 million allocated between 2018 and 2023 by Beijing and various state entities. RISC-V offers a simpler, more energy-efficient framework compared to the complex, proprietary structures of x86 and Arm, allowing for greater customization and adaptability. This flexibility is crucial for China's ambitions in technological self-reliance and poses a potential challenge to the current Western dominance in chip architectures. China's focus on RISC-V, therefore, not only highlights its strategic adaptation to international sanctions but also underscores its aspiration to reshape the global semiconductor landscape and establish a more self-sufficient technological ecosystem.

7th February 2024

The General's Raj-Indian Express Editorial

International relations

Key takeaways

1. **General Asim Munir's Control:** Regardless of election outcomes, General Munir is effectively controlling Pakistan, indicating a deep involvement in its governance.
2. **Imran Khan's Decline:** Munir played a significant role in the political downfall of former Prime Minister Imran Khan, using various strategies to diminish his influence.
3. **Economic Reforms:** Munir advocates for major economic reforms in Pakistan, but their success and political costs are uncertain.
4. **Army's Dominance Challenged:** Khan's popularity, especially among the youth, challenges the army's traditional dominance in Pakistan's politics.
5. **Foreign Relations and Security:** Munir faces challenges in managing relations with major powers and addressing security concerns like the resurgence of TTP and issues with the Taliban in Kabul.
6. **Pakistan's Strategic Position:** Pakistan's strategic and economic position has declined, contrasting with its past global alliances and current economic standing compared to neighboring countries.
7. **India-Pakistan Dynamics:** India faces new considerations in its approach to Pakistan under Munir's leadership, given Pakistan's evolving internal and external challenges.

Mains easy language

In Pakistan, Army Chief General Asim Munir has become the central figure in the country's politics, effectively holding control regardless of the election outcomes. His role has overshadowed the significance of electing a prime minister, indicating his deep involvement in governance. Munir is notably responsible for the political downfall of former Prime Minister Imran Khan, employing various strategies to reduce his influence and challenge his popularity.

Munir is also pushing for significant economic reforms, a move that previous political classes have avoided. However, the success and political implications of these reforms are uncertain. Additionally, Khan's sustained popularity, particularly among younger Pakistanis, poses a challenge to the army's traditional dominance in the country's political landscape. On the international front, Munir faces complex challenges in managing relations with key global players like the United States, China, and Saudi Arabia, as well as addressing internal security issues, including the resurgence of the Tehreek-e-Taliban Pakistan (TTP) and tensions with the Taliban government in Kabul. Pakistan's strategic and economic position has declined, particularly in comparison to its past global alliances and its economic





standing relative to neighboring countries like India and Bangladesh. For India, the evolving situation in Pakistan under Munir's leadership necessitates a reassessment of its approach, given Pakistan's internal and external challenges that differ from those faced by Munir's predecessors.

[Uttarakhand civil code: how needle has moved-The key changes for Hindus and Muslims in marriage, inheritance-Indian Express Explained](#)

Polity

Key takeaways

1. **Standardization of Marriage Age:** The UCC aligns the minimum age of marriage for Muslim men and women with the Hindu Marriage Act and the Special Marriage Act, setting it at 21 and 18 years respectively.
2. **Revision of Muslim Succession Laws:** The UCC allows Muslims to bequeath their entire property via a will, diverging from the current limitation of one-third. Intestate succession follows a specified hierarchy of Class-1 and Class-2 heirs.
3. **Prohibition of Polygamy and Certain Practices:** The UCC outlaws bigamy and polygamy. It also criminalizes practices like Iddat and Nikah Halala, with penalties for enforcing these conditions.
4. **Changes in Hindu Property Rights:** The UCC abolishes the distinction between ancestral and self-acquired property in Hindu law. The concept of coparcenary rights is not recognized.
5. **Alteration in Hindu Inheritance Laws:** Both parents are made Class I heirs in Hindu intestate succession, a shift from current laws where only the mother is a Class I heir. This change could impact the distribution of property to children and the widow.

Mains easy language

The Uttarakhand government's introduction of the Uniform Civil Code (UCC) 2024 Bill marks significant shifts in personal laws for Muslims and Hindus. For Muslims, the UCC aligns the marriage age with other existing laws, setting it at 18 for women and 21 for men. This standardization addresses the inconsistency with the Muslim law, which allows marriage at puberty. The Bill also revises succession laws, enabling Muslims to bequeath their entire property through a will, diverging from the current Islamic law that limits this to one-third of the property. For Hindus, the UCC abolishes the distinction between ancestral and self-acquired property, a significant change from existing Hindu Succession Act provisions. Additionally, it modifies inheritance laws by elevating both parents to Class I heirs in intestate succession, contrasting with the current Hindu law where only the mother is a Class I heir. This could potentially redistribute property shares among family members, including siblings. Overall, the UCC seeks to standardize and reform personal laws in Uttarakhand, impacting marriage, divorce, and inheritance practices across communities, reflecting a significant step towards legal uniformity.

[How the Uniform Civil Code came to be included in the Indian Constitution-Indian Express Explained](#)

Polity

Key takeaways

1. **Introduction of UCC in Uttarakhand:** Uttarakhand Chief Minister Pushkar Singh Dhami tabled the UCC Bill, reflecting the BJP's key election promise and a commitment to Article 44 of the Indian Constitution.
2. **Article 44 of the Constitution:** Adopted in 1948, this directive principle calls for the state to strive for a uniform civil code across India, covering personal law subjects like marriage, inheritance, and divorce.
3. **Opposition by All India Muslim League (AIML):** AIML members like Mohammad Ismail Khan and Naziruddin Ahmad opposed the UCC, arguing it could interfere with religious practices and disrupt national harmony.



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- 4. Support from Congress Members:** Congress representatives, including K M Munshi and Alladi Krishnaswamy Iyer, advocated for the UCC, highlighting its role in ensuring equality and secular governance in personal law matters.
- 5. Dr. B.R. Ambedkar's Stance:** As the Chairman of the Drafting Committee, Ambedkar emphasized the already prevalent uniform laws in most aspects of human relationships. He reassured that the UCC would be applied only to those willing to accept it.
- 6. Adoption of Article 44:** Despite opposition, the Constituent Assembly voted against the amendments proposed by AIML members and adopted Article 44, establishing the constitutional basis for the UCC.

Mains easy language

The Uniform Civil Code (UCC) Bill in Uttarakhand, reflecting the BJP's commitment to Article 44 of the Indian Constitution, represents a significant step in Indian law. Article 44, advocating for a uniform civil code across India, was adopted by the Constituent Assembly in 1948 after a heated debate. This directive principle aims to standardize personal laws related to marriage, inheritance, divorce, and adoption across different communities. The All India Muslim League (AIML) initially opposed the UCC, fearing it would interfere with religious freedoms and disrupt communal harmony. They proposed amendments to safeguard community-specific personal laws. However, Congress members, including K M Munshi and Alladi Krishnaswamy Iyer, argued in favor of the UCC. They highlighted its importance in ensuring equality and secular governance, especially in matters affecting women's rights. Dr. B.R. Ambedkar, head of the Drafting Committee, played a crucial role in framing the discussion. He reassured that the UCC would be applied voluntarily, respecting the diversity of religious practices. Ultimately, the Constituent Assembly rejected the AIML's proposed amendments, adopting Article 44 in its current form. This historical context underscores the significance of Uttarakhand's recent move to table the UCC Bill, linking it to a long-standing constitutional vision and the ongoing debate over uniform personal laws in India.

WHAT IS THE ATMOSPHERIC RIVER' BRINGING HEAVY RAIN TO CALIFORNIA-Indian Express Explained

Geography

Key takeaways

- 1. Atmospheric River Explained:** An atmospheric river, like the Pineapple Express affecting California, is a large, narrow band of moisture in the atmosphere that transports water from the tropics to the poles.
- 2. Relief from Drought:** The rainfall from this atmospheric river offers significant relief to California, a region that has faced prolonged drought conditions.
- 3. Varied Impact on Water Storage:** While beneficial, the rainfall's impact on water storage is uneven across the state. Southern California lacks the capacity to fully utilize this moisture compared to the northern part.
- 4. Benefit to Aquatic Life:** The increased rainfall positively impacts aquatic life, aiding species like the Chinook salmon that have struggled during dry periods.
- 5. Risk of Landslides:** The heavy rainfall increases the risk of landslides due to the saturation of the ground.
- 6. Future Wildfire Concerns:** The moisture promotes the growth of grasses and bushes, which could become fuel for wildfires once they dry out, potentially exacerbating future fire risks.

Mains easy language

Southern California is experiencing a deluge of rain due to an atmospheric river, a large moisture-laden air current, often called the Pineapple Express because it originates near Hawaii. This rainfall is quite a boon for the region, which has been grappling with severe drought for many years. The water is crucial, not only for replenishing reservoirs but also for supporting aquatic life like the Chinook salmon, which have struggled during the dry spells. However, this heavy rainfall isn't without its problems. One immediate concern is the increased



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risk of landslides. The ground, overly saturated with water, becomes unstable, leading to potential mudslides. Looking ahead, there's also a paradoxical risk related to wildfires. The rain spurs the growth of grass and bushes, which are initially beneficial. But as these plants dry out in the warmer, dryer months, they turn into kindling for wildfires. This growth, then, sets the stage for potentially larger and more destructive fires in the future. So, while the atmospheric river brings much-needed relief in the short term, it also poses longer-term challenges for the region's environmental management.

Policy must address growth gap-Indian Express Editorial

Economy

Key takeaways

1. **Conservative Budgeting:** The budget has increased total expenditure by a modest 6.1%, the lowest in two decades, with a notable increase in capital expenditure but a reduction in non-interest revenue expenditure.
2. **Fiscal Policy Framework:** The government's fiscal policy aims to reduce the debt-to-GDP ratio while mitigating the impact of reduced expenditure on GDP growth. This involves balancing the primary deficit-GDP ratio, which has decreased from 12.7% in 2021-22 to 11.6% in 2023-24.
3. **Challenges in Developmental Goals:** Despite these fiscal strategies, there are concerns about whether this approach adequately addresses India's developmental challenges, particularly in generating employment in productive modern sectors.
4. **Employment and Earnings Gap:** The Periodic Labour Force Survey data indicates a stagnation in labor earnings and a widening gap between wages, self-employment earnings, and GDP growth. This suggests a worsening income distribution and weak improvements in welfare.
5. **Need for Increased Government Expenditure:** To address the growing gap between labor earnings and GDP growth, there's a need for increased government expenditure. The gap itself could serve as a policy target to align fiscal strategies with developmental objectives.

Mains easy language

The Indian government's Interim Union Budget reflects a cautious fiscal approach, primarily aimed at reducing the country's debt-to-GDP ratio, a policy derived from the FRBM review committee's recommendation. This conservative budgeting, evident in the modest 6.1% increase in total expenditure, marks the lowest rise in two decades, emphasizing capital expenditure while trimming non-interest revenue expenditure.

This fiscal strategy focuses on two main objectives: lowering the debt-GDP ratio and mitigating the adverse effects of expenditure reduction on GDP growth. The policy has led to a decrease in the primary deficit-GDP ratio from 12.7% in 2021-22 to 11.6% in 2023-24, indicating a tighter control on government borrowings and primary deficit since 2021-22. However, this approach raises concerns about its adequacy in addressing India's broader developmental challenges, particularly in terms of fostering employment in productive, modern sectors. The Periodic Labour Force Survey data reveals a worrying trend: a stagnation in labor earnings and a widening gap between wages, self-employment earnings, and GDP growth. This disparity points to deteriorating income distribution and limited welfare improvements. To effectively bridge this growth gap, there's a pressing need for increased government expenditure. The disparity between labor earnings and GDP growth itself could be used as a policy target, necessitating a reevaluation of the current fiscal policy to align it more closely with the country's developmental goals and employment needs.

Union government's reins on Financial transfers to States-The Hindu Editorial

Polity

Key takeaways



| Clear your doubts now.



1. **Reduced Financial Transfers:** Despite the Fourteenth Finance Commission recommending a 42% devolution of Union tax revenues to States, the actual transfer has reduced, with the States' share in the gross tax revenue dropping from 35% in 2015-16 to 30% in 2023-24.
2. **Increased Union Government Revenues:** The Union government has increased its own total revenue, thereby enhancing its discretionary expenditure. This shift has not been channeled through States' budgets, affecting different States in various ways.
3. **Impact of Cess and Surcharge:** A significant factor in this reduction is the collection of cess and surcharge by the Union government, which is not shared with the States. This collection has grown substantially, further decreasing the States' share.
4. **Centrally Sponsored and Central Sector Schemes:** The Union government influences State priorities through Centrally Sponsored Schemes (CSS) and Central Sector Schemes (C Sec Schemes). The financial commitments required by States for CSS can strain their budgets, especially for less wealthy States.
5. **Implications for Federalism:** These developments indicate a centralization of public expenditure and a potential shift towards anti-federal fiscal policies. The Union government retains significant financial power with limited expenditure responsibilities, potentially weakening cooperative federalism.

Mains easy language

Since the Fourteenth Finance Commission award period in 2015-16, there has been a notable shift in the Union government's approach to financial transfers to States in India. Despite the Commission recommending a 42% devolution of Union tax revenues to States, an increase from the previous 32%, the actual financial transfers have decreased. The States' share in the gross tax revenue fell from 35% in 2015-16 to 30% in 2023-24, even as the Union government's gross tax revenue more than doubled.

A key factor in this decline is the Union government's increasing collection of cess and surcharge, which are not shared with the States. This collection has significantly risen, reducing the States' share in revenues. Additionally, the Union government has been channeling more funds into Centrally Sponsored Schemes (CSS) and Central Sector Schemes (C Sec Schemes). While these schemes increase the Union's influence over state priorities, they also require financial commitments from the States, disproportionately affecting less wealthy ones. This strategy of the Union government points towards a centralization of public expenditure and a potential shift towards anti-federal fiscal policies. It indicates a significant concentration of financial power in the hands of the Union government, with limited expenditure responsibilities, which could undermine the principles of cooperative federalism. As a result, there are growing concerns about the equitable distribution of resources among States and the long-term impact on India's federal structure.

[Understanding the delimitation exercise-The Hindu Text and Context](#)

Polity

Key takeaways

1. **Delimitation Process:** Delimitation is the process of determining the number and boundaries of constituencies for Lok Sabha and State Legislative Assemblies. It is based on the Census and is conducted by the Delimitation Commission, as per Articles 82 and 170 of the Constitution.
2. **Current Basis of Delimitation:** The delimitation has been based on the 1971 Census to encourage population control measures and prevent states with higher population growth from gaining more seats. This freeze was intended to last until after the first Census post-2026.
3. **Uneven Population Growth:** Since 1971, there has been significant and uneven population growth across Indian states, raising questions about fair representation in the Lok Sabha.



| Clear your doubts now.



- 4. Potential Options for Redistribution:** Discussions are ongoing about how to redistribute Lok Sabha seats based on the upcoming Census. Options include maintaining the current 543 seats with redistribution or increasing seats to 848.
- 5. Impact on States:** The redistribution or increase in seats could disadvantage certain states, particularly southern and smaller northern states, compared to states like Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan.
- 6. International Practices:** Other federations, like the U.S. and the EU, have different methods for seat allocation in their legislatures, such as capping the number of seats or using degressive proportionality.
- 7. Proposed Solutions:** To balance democratic and federal principles, one solution could be to maintain the current number of Lok Sabha seats while adjusting the number of MLAs in state assemblies based on the latest population figures, without altering Rajya Sabha seats. Additionally, empowering local bodies with more powers and finances is suggested for strengthening grassroots democracy.

Mains easy language

The delimitation exercise in India, crucial for determining Lok Sabha and State Legislative Assembly constituencies, is set for a significant update post the first Census after 2026. This task, defined under Articles 82 and 170 of the Constitution, is performed by the Delimitation Commission. Historically, the delimitation was based on the 1971 Census, a decision aimed at encouraging population control and ensuring states with higher population growth didn't gain disproportionate representation. However, the demographic landscape has changed dramatically since 1971, with uneven population growth across states. This disparity raises concerns about fair representation, particularly disadvantaging southern states and smaller northern states compared to states like Uttar Pradesh and Bihar. The ongoing discussions revolve around whether to redistribute the current 543 Lok Sabha seats or increase them to 848, each option presenting its own set of challenges. Internationally, methods vary. The U.S. caps its House of Representatives seats, redistributing them post-Census without significant changes, while the EU Parliament uses a degressive proportionality method.

In India, a balanced approach could involve maintaining the current number of Lok Sabha seats while adjusting the number of MLAs in state assemblies based on updated population figures. This strategy would respect both democratic representation and federal balance. Additionally, empowering local government bodies could further strengthen democracy at the grassroots level.

[In zodiacal dust mystery, PRL Ahmedabad study points to a familiar source-The Hindu Science](#)

Science

Key takeaways

- 1. Juno's Dust Encounter:** Juno, launched in 2011 to study Jupiter, encountered significant dust impacts around Mars, damaging its solar panels. This incident provided valuable data for studying interplanetary dust.
- 2. Dust Flux Analysis:** Dr. Jayesh P. Pabari analyzed the dust flux, or the flow of dust particles, between 1 and 5 astronomical units (AU) from the Sun. A peak in dust impacts at 1.5 AU was observed.
- 3. Source of Zodiacal Light:** Zodiacal light is a diaphanous glow visible on dark nights, caused by sunlight scattering off dust. The source of this dust has been a mystery in astronomy.
- 4. Mars's Moons as Dust Contributors:** The study suggests that Mars's moons, Deimos and Phobos, could be significant contributors to this dust. Micrometeorites hitting these moons kick up dust clouds, which, due to the moons' low gravity, escape into space or Mars's orbit.
- 5. Potential Confirmation by Future Missions:** Dr. Pabari's findings suggest that future missions to Phobos and Deimos could confirm if these moons are indeed losing more mass than gaining, thereby contributing to zodiacal dust.

Mains easy language



| Clear your doubts now.



The recent study by the Physical Research Laboratory in Ahmedabad, utilizing data from NASA's Juno spacecraft, sheds new light on the source of zodiacal light—a faint, diffuse glow visible in the night sky, caused by sunlight scattering off interplanetary dust. This phenomenon has been a topic of interest and speculation in astronomy for years. Juno, on its mission to Jupiter, encountered a significant number of dust particles near Mars, damaging its solar panels. This incident provided a unique opportunity to gather data on interplanetary dust. Dr. Jayesh P. Pabari analyzed this data, focusing on the dust encountered between 1 and 5 astronomical units from the Sun. His findings revealed a peak in dust impacts at 1.5 AU, suggesting a concentration of dust in the vicinity of Mars. The study proposes that Mars's moons, Deimos and Phobos, are significant contributors to this dust. Micrometeorites striking these moons can dislodge dust particles, which, due to the moons' low gravity, escape into space or get pulled into Mars's orbit. This hypothesis challenges prior assumptions about the sources of interplanetary dust. Dr. Pabari's research points towards the need for further exploration. Future missions to Phobos and Deimos could confirm their role as major contributors to the zodiacal dust, enhancing our understanding of the dynamics of dust movement within our Solar System. This study not only provides insights into the origins of zodiacal light but also underscores the importance of continuous exploration and study of celestial bodies in our Solar System.

8th February 2024

Why Budget plans for deep tech and research funding matter-Indian Express Explained

Science and technology

Key takeaways

- 1. Emphasis on Deep Tech:** The budget highlights investment in disruptive technologies such as AI, biotechnology, and quantum technologies, which are crucial for addressing global challenges.
- 2. Economic and Strategic Impact:** Deep tech investments are aimed at driving economic growth, creating jobs, and establishing global competitiveness.
- 3. Innovation Ecosystem:** The government is creating a supportive environment for innovation, including funding, intellectual property improvements, and fostering industry-academic collaborations.
- 4. Funding Challenges:** Despite the need for extensive funding in deep tech, India's current R&D spending is low compared to the global average, highlighting the importance of private sector involvement.
- 5. Private Sector and NRF Role:** The National Research Foundation aims to boost R&D through private sector partnerships, leveraging initial government funding to attract more private investment.
- 6. 1 Lakh Crore R&D Fund:** This fund aims to provide low-cost loans for R&D, primarily benefiting startups and private ventures, to stimulate the research ecosystem.
- 7. Skepticism in Scientific Community:** There's concern about over-reliance on private funding and historical government underfunding, along with issues in fund disbursement.
- 8. Budget Allocations:** The budget shows minimal increases in funding for key science departments, with some facing budget cuts, raising questions about the commitment to substantial R&D funding.

Mains easy language

The Indian government's Interim Budget, presented by Finance Minister Nirmala Sitharaman, places significant emphasis on deep tech and research, marking a strategic shift towards fostering innovation in advanced technologies like AI, biotechnology, and quantum computing.



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This shift is crucial for addressing global challenges and ensuring economic growth. The announcement of a Rs 1 lakh crore fund for low-cost R&D loans, especially beneficial for startups, signifies a major step in bolstering the research ecosystem.

However, India's R&D spending, currently at about 0.65% of its GDP, remains below the global average. This underscores the importance of private sector involvement, as highlighted by the National Research Foundation's model, which relies on substantial private investment. While these initiatives show promise for stimulating innovation and economic growth, there is skepticism within the scientific community. Concerns center around the over-reliance on private funding and the government's historical underfunding in research. Furthermore, the budget allocations reveal minimal increases in funding for key science departments, with some facing cuts, casting doubt on the depth of the government's commitment to substantial R&D funding. This mixed approach raises questions about the effective implementation and long-term impact of these initiatives on India's innovation landscape.

Picking Election Commissioners-Indian Express Explained

Polity

Key takeaways

- 1. Introduction of Consultative Process:** A new process, involving a committee with the Prime Minister, Lok Sabha Leader of Opposition, and a Union minister, is now used for appointing Election Commissioners, following a Supreme Court verdict.
- 2. Supreme Court's Role:** The Supreme Court's ruling in 2023, responding to petitions for a fairer appointment system, led to the establishment of this consultative process.
- 3. Previous Method of Appointment:** Previously, Election Commissioners were appointed solely by the government, without external consultation.
- 4. Central Government's Resistance:** Initially, the government opposed changes to the appointment process, claiming the existing system did not compromise the Commission's independence.
- 5. Constitutional Basis for Change:** The Court's decision was based on the interpretation of Article 324 of the Constitution, emphasizing the need for a more inclusive appointment process.
- 6. Historical Advocacy for Consultation:** Earlier proposals, like the Dinesh Goswami Committee and the 20th Law Commission, also recommended a consultative process involving judicial and opposition leaders.
- 7. New Legislation Post-Judgment:** After the Supreme Court judgment, the government passed a bill to formalize the new appointment process. However, there are concerns that this new process might not fully align with the Court's intent to ensure the Election Commission's independence.

Mains easy language

The appointment of Election Commissioners in India has undergone a transformative change with the introduction of a consultative process, following a Supreme Court ruling. This new approach replaces the previous system where the government exclusively appointed commissioners without external consultation. The Supreme Court's intervention came after various petitions called for a transparent and fair appointment system. In its 2023 ruling, the Court emphasized the need for independence in the Election Commission's appointments, leading to the establishment of a committee for the selection process. This committee includes the Prime Minister, the Lok Sabha Leader of Opposition, and a Union minister. The change reflects a constitutional interpretation of Article 324, which underscores the need for an inclusive appointment process. This aligns with historical recommendations, such as the Dinesh Goswami Committee and the 20th Law Commission, which had advocated for a consultative approach. However, the government's subsequent legislation to formalize this process has raised concerns. Critics argue that the new method might not fully ensure the Commission's independence, as the composition of the



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selection committee could potentially undermine the reforms intended by the Supreme Court. This ongoing debate highlights the challenges in balancing government authority with the need for an independent electoral body.

[As Pak votes, a short history of its fraught experiments with democracy-Indian Express Explained](#)

International relations

Key takeaways

1. **Delayed Democratic Foundations:** Pakistan's journey to democracy was stalled initially, with the first constitution only coming into effect in 1956, leading to political instability and multiple Prime Ministers in a short span.
2. **Military Coups and Rulers:** The country witnessed its first military coup in 1958 by General Muhammad Ayub Khan. Subsequent coups, including those by General Zia-ul Haq in 1977 and General Pervez Musharraf in 1999, significantly impacted the political landscape.
3. **Impact of the Bangladesh War:** The 1970 elections and the subsequent events led to the Bangladesh war, weakening the military's grip and allowing Zulfikar Ali Bhutto to attempt steering the country in a new direction, albeit unsuccessfully.
4. **Controlled Elections and 'Oversight':** General Zia's rule saw controlled elections in 1985, leading to the rise of a new political structure and the realization by the military that indirect control or 'oversight' could be more effective than direct rule.
5. **Manipulation of Political Processes:** The ISI's involvement in creating alliances and influencing elections, notably in 1988 and 1990, altered the political dynamics, aiding leaders like Nawaz Sharif.
6. **Return to Civilian Rule and Challenges:** After Musharraf's exit in 2008, Pakistan saw a return to civilian rule, but challenges persisted. The PPP managed a full term post-2008, a first in Pakistan's history.
7. **Rise of New Political Forces:** The emergence of Imran Khan's PTI and the fluctuating fortunes of Nawaz Sharif highlight the ongoing political volatility.
8. **Continued Military Influence:** The military's role remains significant, evidenced by Nawaz Sharif's ousting in 2017 and Imran Khan's recent fall from power, indicating a pattern of indirect military influence in politics.

Mains easy language

In its 76-year history, Pakistan has experienced a turbulent democratic journey, marked by political upheaval and military intervention. As it approaches its 12th national election, the country's past reveals a series of challenges to establishing stable democratic governance. Initially, Pakistan's progression to democracy was delayed, with its first constitution only coming into effect in 1956. This period was characterized by political instability, leading to frequent changes in Prime Ministers. The democratic process was further disrupted by military coups, the first led by General Muhammad Ayub Khan in 1958, followed by others, notably by General Zia-ul Haq and General Pervez Musharraf. The elections of 1970, which led to the Bangladesh war, marked a significant turning point. The military's defeat weakened its hold, briefly allowing civilian leaders like Zulfikar Ali Bhutto to emerge. However, Bhutto's regime was short-lived, ending with another military takeover. During the Zia era, the concept of 'oversight' emerged, where the military exerted indirect control over politics, a trend that continued in subsequent years. The ISI's involvement in manipulating political alliances and elections became evident, particularly in the 1988 and 1990 elections, which shaped the rise of leaders like Nawaz Sharif. The return to civilian rule post-2008 saw the PPP completing a full term, a first in Pakistan's history. However, the military's influence persisted, as seen in the ousting of Nawaz Sharif in 2017 and the recent fall of Imran Khan, reflecting an ongoing pattern of military involvement in politics.

Overall, Pakistan's democratic history is marked by a struggle between civilian governance and military control, with the latter often playing a pivotal role in shaping the political landscape.





America's Trump bind-Indian Express Editorial

International relations

Key takeaways

1. **Constitutional Interpretation:** The case hinges on interpreting the 14th Amendment's Section three, which relates to disqualifying individuals from office for participation in insurrection.
2. **Historical Significance:** This Supreme Court case is potentially one of the most consequential in U.S. democracy, directly impacting the eligibility of a former President for re-election.
3. **Partisan Divisions:** The interpretation of this constitutional provision is heavily influenced by current political polarization, dividing constitutional lawyers and the public along partisan lines.
4. **Definition of Insurrection:** A critical aspect of the case is determining whether the January 6 events qualify as an insurrection and, consequently, Trump's involvement in it.
5. **Impact on Democracy:** The case raises significant concerns about the future of American democracy, debating the balance between legal accountability and electoral democracy.
6. **Supreme Court's Legitimacy:** The Court's decision is under intense scrutiny, with its legitimacy at stake due to the perceived political divisions among the justices.
7. **Potential for Political Backlash:** There is a real fear that the Court's ruling, especially if it disqualifies Trump, could lead to political unrest or violence, underscoring the sensitive nature of the decision in the current political climate.

Mains easy language

The U.S. Supreme Court is facing a pivotal case that questions former President Donald Trump's eligibility to run for re-election, centering on the interpretation of the 14th Amendment's Section three. This amendment addresses the disqualification of individuals from office for engaging in insurrection. The case is highly consequential, not just for its legal aspects but also for its potential impact on American democracy. This legal challenge is deeply polarized, reflecting the current partisan divide in the U.S. The core issues include whether the January 6 events constitute an insurrection and Trump's role in it. The decision has broader implications beyond legal interpretation, touching upon the integrity of democratic processes and the rule of law. The Supreme Court's ruling faces scrutiny over its legitimacy, especially given the politically charged atmosphere. A decision leading to Trump's disqualification could trigger political backlash and potentially violence, highlighting the delicate balance between legal judgment and democratic principles. This case underscores the judiciary's critical but challenging role in navigating complex political landscapes in a democracy.

Measuring vikas-Indian Express Editorial

Economy

Key takeaways

1. **Viksit Bharat Concept:** The term "Viksit Bharat" (Developed India) is central to India's aspiration for 2047, as mentioned in the interim budget speech and by the Prime Minister. It symbolizes India's goal of becoming a developed nation by its 100th year of independence.
2. **Meaning and Interpretation:** "Viksit" has multiple interpretations in Sanskrit, translating to 'shining', 'bloomed', or 'developed'. The context here implies India's development in a broad sense.



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- 3. Measuring Development:** Defining and measuring a 'developed' nation involves various metrics like per capita GDP, level of industrialization, service sector significance, and Human Development Index (HDI). These criteria, however, might lead to different conclusions about a country's development status.
- 4. Evolving Global Definitions:** Traditionally, countries were categorized as 'developed', 'developing', or 'least developed'. However, this classification is now seen as oversimplified due to the diversity and complexity of global economies.
- 5. UNCTAD and Sovereign Decisions:** The United Nations Conference on Trade and Development (UNCTAD) categorizes economies based on geographical regions, but this is subject to sovereign decisions, making the distinction somewhat arbitrary.
- 6. Shift in International Perspective:** The United Nations and the World Bank have moved away from the binary developed-developing country classification. The World Bank now uses income-based categories: low-income, lower-middle-income, upper-middle-income, and high-income.
- 7. India's 2047 Aspiration:** To classify India as 'developed' by 2047, various benchmarks could be used: achieving an HDI over 0.800, transitioning to a high-income category as per the World Bank's classification, either in constant or current US dollars.

Mains easy language

The concept of "Viksit Bharat" (Developed India), highlighted in India's interim budget speech, encapsulates the nation's aspiration to achieve developed status by 2047. The term, rooted in Sanskrit, can be interpreted in various ways, but in this context, it signifies India's development journey. Determining what constitutes a 'developed' nation involves multiple metrics such as per capita GDP, level of industrialization, service sector prominence, and Human Development Index (HDI). However, these different criteria may lead to varying assessments of a country's development status.

The global understanding of what makes a country 'developed' has evolved, moving away from traditional binary classifications. Organizations like UNCTAD and the World Bank now use more nuanced categorizations, including income-based groups. For India, reaching the status of 'Viksit Bharat' by 2047 could mean surpassing specific benchmarks such as a high HDI score or attaining a high-income category according to the World Bank's classifications. This ambition reflects India's commitment to significant economic and social progress within a set timeline.

[Downloading child pornography is an offence-The Hindu editorial](#)

Sociology

Key takeaways

- 1. Madras High Court Ruling:** The Madras High Court, in the case of S. Harish vs Inspector of Police, ruled that downloading child pornography is not an offense under Section 67B of the IT Act, 2000. This decision was based on the interpretation that the act of merely watching child pornography in private does not constitute an offense.
- 2. Precedent Cited:** The court referred to a Kerala High Court case where watching pornography in a private space was not considered an offense under Section 292 of the IPC. However, this precedent did not specifically pertain to child pornography.
- 3. Section 67B of the IT Act:** The IT Act's Section 67B(b) penalizes activities involving child pornography, including downloading material depicting children in a sexually explicit manner. The High Court's interpretation focused on whether the accused had published or transmitted such material, rather than just downloading it.
- 4. Lack of Comprehensive Analysis:** The High Court did not analyze all sub-clauses of Section 67B, particularly sub-clause (b), which directly addresses downloading child pornography.



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5. **Question of POCSO Act Application:** The police initially invoked Section 14(1) of the POCSO Act and Section 67B of the IT Act. However, the High Court found no evidence of the accused using children for pornographic purposes, which is required under the POCSO Act.
6. **Need for Legal Consistency:** The judgment highlights a need for consistency between the provisions of the POCSO Act and the IT Act, especially regarding the possession and downloading of child sexual abuse materials (CSAM).
7. **Recommendations and Future Actions:** It is suggested that the term 'child pornography' be replaced with 'CSAM' in Indian laws for clarity and to reflect the lack of consent by minors. Also, an appeal against the Madras High Court's judgment is recommended to avoid setting a problematic precedent.

Mains easy language

The Madras High Court's recent ruling in *S. Harish vs Inspector of Police* has sparked significant legal debate by holding that downloading child pornography does not constitute an offense under Section 67B of the Information Technology (IT) Act, 2000. The court's decision hinged on the interpretation that private viewing of such material isn't punishable, drawing a parallel to a Kerala High Court judgment which ruled that watching adult pornography in private is not an offense under Section 292 of the IPC. However, this comparison overlooks the specific context of child pornography.

Section 67B(b) of the IT Act, aimed at penalizing the depiction of children in obscene or sexually explicit material, includes activities like browsing, downloading, and distributing such content. The Madras High Court's interpretation focused on the creation and transmission aspects, rather than on the act of downloading. This ruling raises questions about the consistency between the POCSO Act and the IT Act, particularly concerning the handling of child sexual abuse materials (CSAM). The judgment underscores the need to revisit and align these legal frameworks, ensuring they comprehensively address all forms of child sexual exploitation. Additionally, it's suggested that legal terminology be updated to reflect the non-consensual nature of child pornography, advocating for the use of 'CSAM' in Indian laws. The judgment's potential to set a problematic precedent makes it imperative for the state government to appeal against this decision, emphasizing the seriousness of crimes involving child pornography.

Road map for Fiscal consolidation-The Hindu Editorial

Economy

Key takeaways

1. **Budget Focus:** The 2024-25 interim Budget maintains existing tax rates but emphasizes increased capital expenditures and fiscal consolidation.
2. **Tax Revenue and Growth:** Tax revenue buoyancy is estimated at 1.33, indicating room for increased spending or deficit reduction. Nominal GDP growth for 2024-25 is conservatively estimated at 10.5%.
3. **Capital Expenditure Increase:** The Budget continues the trend of increasing capital expenditures, crucial for driving investment. It projects an 11.1% increase compared to the 2023-24 Budget Estimates.
4. **GDP Growth and Capital Expenditure:** To achieve a 7% real GDP growth, capital expenditure growth and private sector investment need to increase in tandem with State government investments.
5. **Fiscal Deficit Target:** The fiscal deficit is expected to decrease to 5.1% in 2024-25. However, a clear roadmap is needed to reach a 3% fiscal deficit for the Central government and 6% combined with State governments.
6. **Household Savings and Fiscal Policy:** The feasible fiscal deficit level is linked to household savings in financial assets, which have been declining.



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7. **Debt-to-GDP Ratio Goals:** The FRBM Act committee recommended a maximum 60% debt-to-GDP ratio for the Centre and States combined. Achieving a 3% fiscal deficit by 2028-29 could lead to a 40% debt-to-GDP ratio for the Centre by 2034-35.

Mains easy language

The 2024-25 interim Budget, presented by Finance Minister Nirmala Sitharaman, upheld the existing tax rates while emphasizing increased capital expenditures and fiscal consolidation. Tax revenue buoyancy, estimated at 1.33, indicates a conservative nominal GDP growth of 10.5% for 2024-25, creating a buffer for enhanced spending or deficit reduction. A notable aspect of the Budget is the continued trend of rising capital expenditures, marked by an 11.1% increase compared to the previous year, essential for stimulating both government and private investments. The fiscal deficit is projected to reduce to 5.1% in 2024-25, aligning with previous government statements, yet necessitating a detailed roadmap to achieve the long-term target of a 3% fiscal deficit. This target is crucial, considering the declining trend in household financial savings and the need to maintain a sustainable debt-to-GDP ratio. The Budget's focus on capital expenditure and fiscal discipline reflects an approach to foster economic growth while managing fiscal health in a challenging economic environment.

In breakthrough, neural network 'explains' how it found new antibiotic-The Hindu Science

Science

Key takeaways

1. **Deep-Learning in Antibiotic Discovery:** A groundbreaking study has linked deep-learning with antibiotic discovery, leading to the identification of a new class of antibiotics, the first since 2000. This advancement connects modern AI technologies, like ChatGPT, with significant medical breakthroughs.
2. **Explainable AI Model:** Unlike previous drug discovery models, this study utilized an "explainable" deep-learning model, allowing scientists to understand the chemical substructures or motifs used by the model to identify potential antibiotics.
3. **Effective Against MRSA:** The efficacy of the new antibiotic class was demonstrated in mice infected with methicillin-resistant Staphylococcus aureus (MRSA), showing potential for significant medical applications.
4. **Graph Neural Network (GNN) Utilization:** The study used a GNN, which represents molecules in a graph format, to predict antibiotic properties based on molecular substructures.
5. **Substructure Rationales:** The researchers identified specific substructures, termed 'rationales,' that are responsible for a compound's antibiotic properties, facilitating the design of new antibiotics.
6. **Further Research and Application:** The study opens doors for further research in applying these deep-learning techniques to other drug categories, including age-related disorder treatments.
7. **Challenges in Explainability:** The study's limitation lies in assessing the AI model's explainability post-prediction, which could lead to errors in identifying the correct substructures for antibiotic properties.

Mains easy language

In a significant breakthrough, a study has successfully utilized deep-learning techniques to discover a new class of antibiotics, marking the first such discovery since 2000. This advancement connects the fields of artificial intelligence, exemplified by technologies like ChatGPT, and antibiotic research, demonstrating a significant leap in drug discovery methodologies. Central to this achievement is the use of an "explainable" deep-learning model, a departure from traditional AI models that often function as 'black boxes.' This model allows scientists to understand the specific chemical substructures that the AI uses to identify potential antibiotics, enhancing the interpretability and efficacy of the drug discovery process. The study, involving researchers from the Broad Institute, Integrated Biosciences Inc., and others, successfully tested the efficacy of these new antibiotics against methicillin-resistant Staphylococcus aureus (MRSA) in mice. They employed a Graph



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Neural Network (GNN) to predict antibiotic properties from molecular substructures, identifying key 'rationales' or substructures critical for antibiotic activity. Despite its groundbreaking nature, the study faces challenges in its approach to explainability, primarily in its post-prediction analysis of the AI model. This limitation raises concerns about the accuracy in identifying the correct substructures responsible for antibiotic properties. However, the study paves the way for further research in applying deep-learning to a broader range of drug categories, potentially revolutionizing the field of medical research and pharmaceutical development.

[Biden govt. sets tighter standards for soot pollution-The Hindu Science](#)

Environment

Key takeaways

1. **Stricter Soot Standards:** The Biden administration, via the EPA, has introduced tougher standards on soot pollution to reduce emissions from industrial sources, aiming to prevent thousands of premature deaths annually.
2. **Health Benefits Versus Industry Concerns:** The new rule is projected to yield \$46 billion in net health benefits by 2032 but has been met with criticism from industry groups over potential job losses and operational impacts.
3. **Focus on Vulnerable Populations:** EPA Administrator Michael Regan highlighted the rule's particular benefits for children, the elderly, and heart and lung condition patients, as well as historically pollution-impacted communities.
4. **Rule Specifications:** The regulation lowers allowable fine particle pollution to 9 micrograms per cubic meter, a decrease from the previous 12 micrograms set under Obama's administration.
5. **State and Industry Adjustments:** States and counties must meet the new air quality levels, potentially affecting various sectors. Industry groups are concerned about permit difficulties for new or expanded projects.
6. **Political Considerations:** Amid President Biden's re-election campaign, the rule raises concerns about electoral impacts in industrial states, though officials remain optimistic about industries adapting to the standards.
7. **Industry Response and Relocation Risks:** Some industry groups, like the American Forest and Paper Association, warn that stricter standards could force companies to relocate to countries with more lenient air quality standards.

Mains easy language

The Biden administration, through the Environmental Protection Agency (EPA), has implemented more stringent soot pollution standards, targeting a reduction in fine particle emissions from industrial sources like tailpipes and smokestacks. This new rule is poised to yield substantial health benefits, with projections showing \$46 billion in net health benefits by 2032, including the prevention of numerous asthma attacks and premature deaths. The initiative has garnered praise from environmental and public health groups for its potential to significantly improve American health standards, particularly benefiting vulnerable populations and communities historically affected by pollution. However, the rule has sparked controversy among industry groups, who caution that it could lead to manufacturing job losses and impact the operation of power plants and refineries. Despite these concerns, EPA Administrator Michael Regan emphasizes that the rule aligns with the administration's goal of a healthy economy without sacrificing public well-being. The new regulation reduces the permissible level of fine particle pollution to 9 micrograms per cubic meter, down from the previous 12 micrograms. As the U.S. heads towards the 2024 election, this environmental policy move by the Biden administration introduces a critical balance between advancing public health initiatives and addressing industrial and political challenges.



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9th February 2024

What white paper says—and doesn't-Indian Express explained

Economy

Key takeaways

1. **Comparative Analysis:** The document compares the economic performance of the Congress-led UPA government (2004-05 to 2013-14) and the BJP-led NDA government (2014-15 to 2023-24).
2. **Nature of the White Paper:** It differs from a traditional white paper as it focuses on comparing the records of two different governments rather than addressing a specific issue.
3. **Objectives:** The white paper aims to inform about the economic challenges inherited by the NDA, the policies implemented to address these issues, and to encourage debate on national and fiscal responsibility.
4. **UPA's Tenure:** Criticizes the UPA for allegedly abandoning economic reforms, leading to high inflation, high fiscal deficits, and an increase in bad loans. It also mentions neglect in areas like infrastructure, health, and defense preparedness.
5. **NDA's Tenure:** Portrays the NDA period as one of improvement in various economic indicators. Highlights lower inflation and successful implementation of schemes like construction of toilets and opening bank accounts.
6. **Economic Complexity and External Factors:** Acknowledges the complexity in analyzing economic performance over two decades, influenced by external factors like global oil prices.
7. **Omissions:** The paper does not address significant issues like the high unemployment rate during the NDA tenure, the lack of updated measures of poverty, and the failure to conduct the latest decadal Census.
8. **Political Narrative:** The document serves as a tool to showcase the achievements of the NDA while critiquing the UPA, reflecting the political narrative and strategic priorities of the current government.

Mains easy language

The white paper presented by Finance Minister Nirmala Sitharaman offers a comparative analysis of the economic performances of the UPA government (2004-14) and the NDA government (2014-24). Unlike a traditional white paper, which focuses on a specific issue, this document contrasts the policies and outcomes of two different administrations. It aims to highlight the economic challenges inherited by the NDA, outline the policies implemented to improve the economy, and foster debate on national interest and fiscal responsibility. The document criticizes the UPA for abandoning reforms, leading to high inflation, fiscal deficits, and a surge in bad loans, alongside neglecting infrastructure, health, and defense. Conversely, it portrays the NDA period as an era of improvement, with lower inflation and successful implementation of various schemes. However, the paper omits significant issues faced during the NDA tenure, such as high unemployment rates and the lack of updated poverty measures. Overall, the white paper serves as a political narrative tool, showcasing NDA achievements while critiquing the UPA, reflecting the complexities of assessing long-term economic performance influenced by multiple factors.

Court Reserves Verdict: debate around sub categorisation with SC quota-Indian Express Explained

Polity

Key takeaways

1. **Verdict Reserved:** The Supreme Court, led by Chief Justice D Y Chandrachud, has reserved judgment on sub-classification within the SC quota, addressing whether certain underrepresented castes within SCs should have a distinct quota.



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- 2. Background:** The issue dates back to 1975 in Punjab, with legal challenges peaking in 2004 when the Supreme Court in the EV Chinniah case ruled against states altering the SC list set by the President.
- 3. States' Advocacy for Sub-Classification:** States argue for sub-classification within the SC quota to ensure equitable distribution of benefits among all SC communities, citing disproportionate underrepresentation of certain groups.
- 4. Legal Hurdles and Developments:** Efforts by states like Punjab to implement sub-classification have been legally contested and struck down. A 2020 Supreme Court bench suggested reconsidering the 2004 decision, acknowledging inequalities within SCs.
- 5. Arguments in Court:** Advocates for states argue that sub-classification is akin to the 'creamy layer' concept, ensuring fair distribution of benefits. They reference Article 342A, which empowers states to maintain their backward classes list.
- 6. Opposition and Concerns:** Opponents argue for equal treatment of all SC communities in reservation policies, warning against deepening inequalities by favoring certain groups over others.
- 7. Implications:** The Supreme Court's upcoming decision will significantly impact the distribution of reservation benefits among SC communities, potentially altering affirmative action dynamics in India.

Mains easy language

The Supreme Court of India, under Chief Justice D Y Chandrachud, has reserved its verdict on the contentious issue of sub-classification within the Scheduled Castes (SC) quota. This debate focuses on whether certain underrepresented castes within the SCs should have a distinct quota within the existing 15% SC reservation. The genesis of this debate can be traced back to 1975 in Punjab, where a policy was introduced to prioritize economically and educationally backward SC communities. The legal battle reached a pivotal moment in 2004 with the EV Chinniah case, where the Supreme Court ruled that states could not alter the SC list set by the President. This decision has been contested by several states, advocating for the authority to ensure equitable distribution of reservation benefits among all SC communities. They argue that sub-classification is necessary to address the disproportionate underrepresentation of certain SC communities. Advocates for states argue that this sub-classification aligns with the concept of the 'creamy layer', ensuring that the most disadvantaged within SCs receive the intended benefits. Opponents, however, argue for equal treatment of all SC communities, emphasizing that all face the stigma of untouchability. The Supreme Court's decision on this matter is expected to significantly influence the distribution of reservation benefits among SC communities and reshape the landscape of social justice and affirmative action in India.

NEW GUIDELINES TO MAKE CINEMA HALLS ACCESSIBLE THOSE WITH DISABILITIES-Indian Express Explained

Sociology

Key takeaways

- 1. Scope and Aim:** The new guidelines, issued by the Ministry of Information & Broadcasting, apply to feature films certified for public exhibition and aim to make cinemas accessible to persons with hearing and visual impairments.
- 2. Film Requirements:** Films must have two versions for certification: a standard one and another with accessibility features like audio descriptions and captioning.
- 3. Cinema Provisions:** Cinemas must either hold dedicated screenings or use specialized equipment like smart glasses and caption displays to facilitate viewing for impaired audiences.
- 4. Staff Training and Equipment:** Theatres are required to train staff to assist customers with disabilities and provide necessary equipment for accessibility.
- 5. Monitoring and Grievance Redressal:** Implementation will be monitored by licensing authorities and a committee. Grievances can be addressed to the cinema licensee or licensing authority.



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- 6. Implementation Timeline:** Films in multiple languages must add accessibility features within six months of the guidelines. Films in national and international festivals need these features from the next year, and all other feature films within three years.

Mains easy language

The Ministry of Information & Broadcasting in India has recently introduced new guidelines titled 'Accessibility Standards in the Public Exhibition of Feature Films in Cinema Theatres for Persons with Hearing and Visual Impairment'. These guidelines are designed to make cinema more inclusive for individuals with disabilities, aligning with the mandate of the Rights of Persons with Disabilities Act, 2016. The aim is to ensure that persons with hearing and visual impairments can enjoy films alongside the general audience. Under these guidelines, film producers are required to create two versions of each feature film for CBFC certification: a standard version and a version with accessibility features like audio descriptions, captioning, and sign language interpretation. Cinemas will need to accommodate these versions either through dedicated screenings or by integrating specialized equipment to enhance the viewing experience for the impaired. This equipment includes smart glasses, caption stands, separate screens for captions, and audio description headphones. The implementation of these guidelines will be monitored by licensing authorities, with a committee set up by the I&B Ministry overseeing compliance. Cinema staff must be trained to assist customers with disabilities effectively. Feature films in multiple languages must comply with these guidelines within six months, while those featured in national and international film festivals are required to include the specified accessibility features from the next year. All other feature films are given a three-year window to ensure compliance. These steps represent a significant move towards inclusivity and accessibility in the Indian film industry.

An ethical minefield-Indian Express Editorial

Science

Key takeaways

1. **Ethical Concerns:** The project's ambitious vision, which extends beyond medical applications to enhancing human cognition, raises significant ethical and legal concerns. Issues of data ownership and privacy are particularly crucial.
2. **Lack of Transparency:** Neuralink has been criticized for its secrecy and lack of transparent data, which is vital for scientific scrutiny and replicability. This secrecy undermines trust and raises questions about the validity and safety of the technology.
3. **Regulatory and Oversight Issues:** Despite receiving FDA approval, which should ensure patient safety, concerns persist due to the FDA's past shortcomings in oversight. Additionally, Neuralink's avoidance of National Institute of Health funding, presumably to keep its technology proprietary, has led to less regulatory oversight and data sharing.
4. **Study and Participant Concerns:** The trial's unregistered status makes it difficult to ascertain the conditions under which it was conducted. The inclusion criteria are specific but exclude individuals with certain medical conditions or implants. There's also a lack of clarity on whether the participants will retain ownership of their recorded data.
5. **Potential Risks:** The implantation of recording electrodes in the brain poses risks of micro-injuries, which could lead to serious neurological conditions over time. Neuralink must prove the safety and consistent efficiency of these implants.
6. **Importance of Openness:** For Neuralink to gain trust and credibility, greater openness about its data and study methods is essential. The potential impacts on human agency and privacy necessitate careful consideration and ethical handling from the outset.

Mains easy language

Elon Musk's Neuralink project, developing a brain-computer interface, has entered an ethical minefield due to its conspicuous lack of data transparency, a cornerstone of scientific discovery. The device is designed for quadriplegic individuals to control digital devices through a chip implanted in the brain, which records and transmits neuron data. The project's ambitious scope extends beyond medical applications to enhancing human cognitive abilities, raising profound ethical and legal concerns, particularly around data ownership and privacy. The



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project's secretive approach and lack of transparent data sharing contrast sharply with the fundamental principles of scientific research, undermining trust and scientific scrutiny. This is compounded by Neuralink's decision to avoid National Institute of Health funding, which would necessitate more rigorous oversight and data sharing, further raising concerns about safety and ethical standards. The unregistered status of Neuralink's trials obscures crucial details about their conduct and participant safety. The potential neurological risks from micro-injuries caused by the implantation of electrodes and the long-term efficacy of these implants remain significant concerns. Furthermore, the ethical dilemma of data ownership, crucial in the context of Neuralink's broader goals to enhance human cognition, necessitates careful consideration. A more transparent approach by Neuralink, addressing these ethical concerns, is essential for establishing trust within the scientific community and the public.

AT STAKE IN PAKISTAN-indian Express Editorial

International relations

Key takeaways

1. **Context of Elections:** Held amidst an economic crisis and political polarization, the 2024 elections in Pakistan were crucial for determining the nation's immediate and future trajectory.
2. **Controversy and Fairness Concerns:** Similar to past elections, these polls were marred by controversies and accusations of unfairness, particularly against Imran Khan's PTI.
3. **Political Dynamics:** The failure of the establishment's support for PTI led to other parties, especially PML-N, emerging as significant contenders due to their strong base in Punjab.
4. **Economic Challenges:** Pakistan faces severe economic challenges that require bold structural reforms, with a general belief that PML-N might be better equipped to handle these issues, at least in Punjab.
5. **Voter Demographics and Impact:** Youth and women voters were expected to play a crucial role, potentially benefiting PTI. However, PTI's disarray and leadership issues posed challenges to its performance.
6. **Regional Party Influence:** While PPP tried to expand its influence beyond Sindh, its impact in Punjab was limited.
7. **Skepticism about Promises:** Parties made grandiose promises of welfarism, but there was widespread skepticism about their implementation.
8. **Foreign Relations:** All parties expressed a desire to improve relations with India and the USA, but prospects for significant improvement were limited due to trust issues and geopolitical dynamics.
9. **Hope for Political Stability:** The primary expectation from the elections was to bring some level of political stability and sound economic decision-making to navigate the country out of its current difficulties.

Mains easy language

The 2024 elections in Pakistan were held amidst a severe economic crisis and deepening political polarization, marking a critical juncture in the nation's history. These elections were embroiled in controversy, with accusations of unfairness, particularly towards Imran Khan's PTI, echoing the contentious nature of Pakistani polls over the past 75 years. The electoral dynamics were influenced by the establishment's (the army high command) shifting allegiances. After the failed endeavor to sustain Imran Khan and PTI's power, the establishment allowed other parties, particularly PML-N, to gain prominence, primarily due to their strong base in Punjab. The PPP, while active, struggled to expand its influence outside Sindh. Economically, Pakistan faced daunting challenges that necessitated bold reforms. The general consensus in Punjab was that PML-N was better positioned to manage these issues, though opinions varied across provinces. Voter demographics, especially the youth and women, were expected to impact the election outcomes, potentially favoring PTI despite its internal turmoil and leadership





challenges. The elections carried the hope of political stability and judicious economic decision-making, essential for pulling Pakistan out of its current quagmire. While parties promised improvements in foreign relations with India and the USA, real progress appeared limited due to enduring trust issues and complex geopolitical factors.

The Paytm Payments Bank debacle-The hindu Text and Context

Economy

Key takeaways

- 1. RBI Restrictions:** RBI prohibited PPBL from accepting new deposits and wallet top-ups from February 29 and previously stopped new customer onboarding in March 2022 due to non-compliance and supervisory concerns.
- 2. Operational Impact:** The ban affects PPBL's banking services, including AEPS, IMPS, bill payments, and UPI. PPBL is also required to terminate nodal accounts associated with its parent company and Paytm Payments Services.
- 3. Financial Implications:** Paytm faces a significant financial impact, estimating a "worst case impact" of ₹300 to ₹500 crore on its annual EBITDA. The restrictions may hinder Paytm's customer retention and product sales.
- 4. Transition Strategy:** Paytm plans to transition services to other banks, involving a partner bank integration, assessing commercial viability, and facilitating account migrations.
- 5. Governance and Money Laundering Concerns:** Issues include PPBL's governance structure, compliance with RBI guidelines prohibiting lending, and risks of money laundering, highlighted by previous penalties for KYC norm violations.
- 6. Regulatory Compliance:** The RBI and the Finance Minister have emphasized the need for compliance, with potential re-evaluations by Paytm's lending partners.

Mains easy language

The Reserve Bank of India (RBI) has imposed stringent restrictions on Paytm Payments Bank Ltd (PPBL), a significant move affecting the operations of the fintech giant Paytm. RBI's directive, stemming from an audit report, bars PPBL from accepting new deposits and top-ups in its wallets from February 29, following earlier restrictions on new customer onboarding since March 2022. These measures are in response to persistent non-compliance and supervisory concerns identified in the bank. The operational impact of RBI's action is profound. PPBL is restrained from conducting a range of banking services, including AEPS, IMPS, bill payments, and UPI. Additionally, PPBL must sever ties with nodal accounts related to its parent company and Paytm Payments Services, with all transactions required to be settled by March 29. Financially, Paytm anticipates a "worst case impact" of ₹300 to ₹500 crore on its annual EBITDA due to these restrictions. This development could significantly impede Paytm's customer retention and product sales capabilities. In response, Paytm is planning a transition of its services to other banks, involving multiple stages such as finding a partner bank, assessing commercial viability, and managing account migrations.

Concerns about PPBL's governance and potential money laundering risks have also been raised, exacerbated by previous penalties for flouting KYC norms. Regulatory compliance is now a critical focus, with the RBI and Finance Minister emphasizing adherence to directives and regulations. This situation may lead to re-evaluations by Paytm's lending partners, affecting its future business relationships and operations.

What are the regulations with respect to rice prices?-The Hindu Text and Context

Economy

Key takeaways



| Clear your doubts now.



- 1. Paddy Production Fluctuations:** The 2022-2023 season saw an increase in rice production, but projections for 2023-2024 are mixed, with southern states experiencing a decline due to inadequate rainfall, while northern states report increased production.
- 2. Rise in Rice Prices:** Retail prices of rice have increased significantly, with some varieties seeing more than ₹10 per kg increase. The rise in the Minimum Support Price and higher costs for transport and storage are contributing factors.
- 3. Government Measures:** Mandatory stock declarations, the introduction of "Bharat Rice" for consumers, export bans on certain rice types, and heavy duties on others are among the steps taken. The government also procured a substantial amount of paddy for the Kharif season.
- 4. Export Trends and Impact:** Despite export restrictions, there has been a significant increase in non-basmati rice exports over the last three years, which has contributed to domestic price rises.
- 5. Recommended Actions for the Government:** Prioritizing rice sale for consumption and analyzing stock data, especially for the most consumed varieties, are suggested for better management of the situation.

Mains easy language

The Indian government has recently intervened in the rice market to control escalating prices, mandating all stakeholders in the supply chain to declare their rice stocks and introducing "Bharat Rice" at a subsidized rate. This intervention comes amid varying rice production forecasts for the 2023-2024 season, with southern states, key rice consumers, experiencing a production drop due to insufficient rainfall, contrasting with an increase in northern states. Rice prices have seen a notable rise, with some varieties increasing by more than ₹10 per kg in a year. Contributing factors include the hike in the Minimum Support Price over the last five years and rising costs associated with transport and storage. Despite government measures like export bans and duties on certain rice types, the escalation in prices persists. The government's procurement of substantial paddy quantities for the Kharif season and restrictions on rice exports are part of the broader strategy to stabilize prices. However, the significant increase in non-basmati rice exports in recent years has counteracted these efforts, underscoring the complexity of the challenge. For a more effective response, the government is advised to focus on prioritizing rice for consumption and analyzing stock data, especially for popular varieties. This targeted approach could provide a clearer picture of the market and aid in formulating more impactful strategies to manage rice prices effectively.

[With CRISPR poised to revolutionise therapy, a pause to consider ethics-The Hindu Science](#)

Science and technology

Key takeaways

- 1. CRISPR's Origins and Potential:** Derived from a bacterial immune system mechanism, CRISPR has evolved into a versatile tool for precise genetic modifications. It's being used for treatments like sickle cell anemia and beta-thalassemia and has broader applications in agriculture and other fields.
- 2. FDA Approval and Cost Concerns:** The FDA has approved CRISPR-based therapies like Casgevy and Lyfgenia for certain genetic disorders. However, the high treatment costs, such as \$2.2 million for sickle cell anemia treatment, pose accessibility challenges, particularly in countries like India.
- 3. Ethical Debates and Germline Editing:** CRISPR's ability to edit genes heritably, especially in germline cells, has sparked intense ethical debates. The controversy around Chinese scientist He Jiankui's embryo editing highlights the risks and moral dilemmas of heritable genetic modifications.
- 4. Regulatory Framework in India:** India's regulatory approach to CRISPR, guided by the New Drugs and Clinical Trials Rules and ICMR guidelines, requires strict approval processes and adherence to ethical standards.



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- 5. Societal and Accessibility Issues:** The potential use of CRISPR for non-therapeutic genetic enhancement raises concerns about societal inequality and access. Ensuring equitable distribution of CRISPR-based treatments remains a significant challenge.
- 6. Importance of Public Engagement:** Transparent and ethical research practices, coupled with public education and engagement, are crucial for the responsible development and acceptance of CRISPR technology.

Mains easy language

CRISPR technology, a revolutionary genome editing tool, is at the forefront of a potential therapeutic revolution but brings with it significant ethical challenges. Originating from a bacterial immune system, CRISPR has been adapted for precise genetic modifications, opening up vast possibilities in medical treatment and agriculture. This technology's most notable recent applications include FDA-approved treatments for genetic disorders like sickle cell anemia and beta-thalassemia, utilizing therapies like Casgevy and Lyfgenia. However, the high cost of these treatments, exemplified by the \$2.2 million price tag for Casgevy's sickle cell anemia treatment, raises concerns about accessibility, especially in countries like India where a significant portion of the population affected by such diseases cannot afford such expensive therapies. This economic disparity underscores the need for more affordable CRISPR-based treatments.

Furthermore, ethical concerns are amplified with the prospect of germline editing, which involves heritable genetic modifications. The case of Chinese scientist He Jiankui, who controversially edited human embryos, highlights the moral and long-term safety concerns associated with CRISPR. In India, the regulatory framework for CRISPR research under the New Drugs and Clinical Trials Rules 2019, and ICMR guidelines, ensures a thorough approval process. Yet, the potential for CRISPR's misuse, particularly in non-therapeutic genetic enhancements, raises critical societal and ethical issues.

The adoption of CRISPR technology necessitates a careful balance between scientific advancement and ethical responsibility. Ensuring equitable access, maintaining strict regulatory standards, and fostering public engagement are key to harnessing CRISPR's potential responsibly.

[Kyasaur Forest Disease: the assault of the tick-The Hindu Science](#)

Science

Key takeaways

- 1. Transmission and Symptoms:** KFD is transmitted through tick bites. Primates, including monkeys, are also susceptible to the infection. Human infection occurs through contact with infective ticks in forest areas. Symptoms appear three to eight days post-bite, including fever, eye redness, severe headache, body pain, and in severe cases, gastrointestinal issues and nose bleeding.
- 2. Geographical Spread and History:** Initially confined to Shivamogga district, KFD has expanded to other districts in Karnataka and states like Tamil Nadu, Kerala, Goa, and Maharashtra. Monkeys' deaths often signal an outbreak.
- 3. Vaccine and Treatment Efforts:** There is no specific treatment for KFD; medical care focuses on symptom management. Efforts to develop an effective vaccine are ongoing, with the Indian Council of Medical Research (ICMR) collaborating with Indian Immunologicals.
- 4. Preventive Measures:** The forest department distributes DEPA oil, a tick repellent, and the state government offers free treatment to patients. The Health and Family Welfare Department has conducted tests and found 68 positive cases since the beginning of the year.

Mains easy language

Kyasaur Forest Disease (KFD), commonly known as monkey fever, is a tick-borne viral infection first identified in 1956 in the Kyasaur Forest area of Karnataka, India. Since its discovery, it has been responsible for over 560 deaths, predominantly in Karnataka's Malnad region, encompassing Shivamogga, Uttara Kannada, and Chikkamagaluru districts. The disease has also spread to other Indian states, including Tamil Nadu, Kerala, Goa, and Maharashtra. KFD transmission occurs through tick bites, affecting both primates and humans. The disease is characterized by symptoms like fever, eye redness, severe headache, and body pain. In severe cases, gastrointestinal symptoms and



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bleeding may occur. Despite its long history, there is no specific treatment for KFD. Management focuses on addressing symptoms, and efforts are underway to develop an effective vaccine. The disease initially remained confined to Shivamogga district but gradually spread to neighboring districts and states. The recent upsurge in cases has prompted intensified testing and containment efforts by the Health and Family Welfare Department. Preventative measures include the distribution of DEPA oil, a tick repellent, and the provision of free treatment to patients. The spread of KFD emphasizes the need for ongoing surveillance, research for a viable vaccine, and effective public health strategies to mitigate its impact.

10th february 2024

The message in the Ratnas-Indian Express Explained

Polity

Key takeaways

1. Political Significance of Recent Awardees:

- P.V. Narasimha Rao: Recognizing a former Congress Prime Minister overlooked by his party, potentially highlighting Congress's internal politics.
- Chaudhary Charan Singh: Aiming to appeal to the Jat community, particularly in Uttar Pradesh and Haryana.
- Dr. M.S. Swaminathan: Signaling a focus on agriculture and farmers.
- L.K. Advani: Acknowledging his role in the Ram Temple movement and appealing to the BJP's base.
- Karpoori Thakur: Targeting backward castes in Bihar and Uttar Pradesh, and possibly countering the opposition's caste-based political strategies.

2. **Strategic Use of Awards:** The Modi government has been astute in using these awards for political ends, including sending messages about national priorities, correcting perceived historical oversights, and appealing to specific voter bases.

3. Historical Context:

- The article compares the current government's choices with those of previous governments, noting that the use of these awards for political messaging is not new.
- It mentions past recipients under various governments, highlighting how these choices often reflected the political and ideological leanings of the ruling parties.

4. **BJP's Narrative:** The selections under the Modi government are seen as aligning with the BJP's broader narrative of nationalism, cultural pride, and rectifying historical neglect of certain figures by previous Congress governments.

5. **Beyond Politics:** While the political aspects are emphasized, it's also noted that these awards do recognize genuine contributions to the nation in various fields.

Mains easy language

The article delves into the political nuances of the Bharat Ratna and Padma awards in India, particularly under Prime Minister Narendra Modi's administration. These honors, while acknowledging individual contributions, are strategically used for political messaging. The recent awarding of the Bharat Ratna to figures like P.V. Narasimha Rao, Chaudhary Charan Singh, Dr. M.S. Swaminathan, L.K. Advani, and Karpoori Thakur is seen as a calculated move ahead of the Lok Sabha elections, each choice carrying specific political implications. For instance, honoring Rao is perceived as a critique of the Congress party's internal dynamics, while Singh's award aims to connect with the Jat community. Swaminathan's recognition focuses on agriculture, Advani's on the Ram Temple issue, and Thakur's on appealing to backward



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castes in key states. This approach underlines the Modi government's adeptness in utilizing these awards for sending political signals, aligning with its broader narrative of nationalism and rectifying historical neglect by previous governments. The article suggests that such selections, though a tradition in Indian politics, have been particularly emphasized in the current regime, blending recognition of achievements with significant political undertones.

[WHY TAYLOR SWIFT'S PRIVATE AIR TRAVEL IS A PROBLEM FOR THE PLANET-Indian Express Explained](#)

Environment

Key takeaways

1. **Legal Actions Against Information Sharing:** Taylor Swift's legal team has threatened to take legal action against Jack Sweeney, a university student, for sharing data on her private jet's movements, claiming it causes her distress.
2. **High Environmental Cost of Private Jets:** Private jets are significantly more polluting than commercial planes and trains, with a single hour of flight emitting about 2 tonnes of CO₂.
3. **Taylor Swift's Carbon Footprint:** Swift has been specifically criticized for her excessive use of private jets, leading to a large carbon footprint. In 2022, her private jet emissions were notably high, making her one of the top celebrities in terms of private jet CO₂ emissions.
4. **Rising Trend in Private Jet Usage:** Despite their environmental impact, the use of private jets is on the rise, with a significant increase in private flights in Europe in 2022.
5. **Wealth Inequality and Climate Change:** The article highlights the broader issue of how the lifestyle of the rich and powerful, including celebrities like Swift, disproportionately contributes to climate change. This points to a larger conversation about wealth inequality and its impact on the environment.

Mains easy language

The article addresses the environmental impact of private jet usage, with a focus on pop star Taylor Swift's extensive use of her private aircraft. Taylor Swift's legal team has threatened legal action against Jack Sweeney, a university student who tracks private jet movements, alleging his activities cause Swift emotional and physical distress. This situation has sparked a broader discussion about the environmental implications of private jet travel and the responsibilities of high-profile individuals like Swift. Private jets are significantly more polluting than commercial flights and trains, with emissions up to 14 times higher per passenger compared to commercial planes. Swift's private jet usage, notably high in 2022, places her among the top celebrities in terms of carbon emissions. This has led to criticism of her as an 'ethical billionaire', contrasting her public persona with the environmental cost of her travel habits.

The article highlights the broader issue of wealth inequality's impact on climate change. The lifestyles of the rich and famous disproportionately contribute to global emissions, with the wealthiest 1% accounting for more emissions than the poorest 50%. This disparity emphasizes the need for climate justice and socio-economic considerations in addressing environmental issues.

[Polygamy in India: What the data show-Indian Express Explained](#)

Sociology

Key takeaways

1. **Uniform Civil Code Bill in Uttarakhand:** The UCC Bill passed in 2024 aims for uniform personal laws across communities in the state, extending monogamy to the Muslim community, who were previously allowed multiple wives.
2. **Data Limitations on Polygamy:** Government data on polygamy, primarily from the census and the National Family Health Survey (NFHS), has limitations. The census infers polygamy indirectly, while NFHS covers less than 1% of households.



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- 3. Census Data on Polygamy:** The 2011 census indicates a discrepancy in the number of married men and women, possibly suggesting polygamy. Hindus have the highest numerical discrepancy, but proportionally, Muslims and Christians show the greatest difference.
- 4. NFHS Findings on Polygamy:** According to NFHS-5, polygamy is most prevalent among Christians, followed by Muslims and Hindus. Overall, Scheduled Tribes reported the highest incidence.
- 5. Decline in Polygamy Rates:** Analysis of NFHS data from 2005-2021 shows a decreasing trend in polygynous marriages, particularly among Buddhists, with a general reduction of 26.31% in the total population.

Mains easy language

The article discusses the implications of the Uniform Civil Code (UCC) Bill passed by the Uttarakhand Legislative Assembly in 2024, focusing on its impact on the practice of polygamy in India. The UCC Bill aims to standardize personal laws across communities in the state, including monogamy, thus affecting the Muslim community which previously permitted men to have multiple wives. Government data on polygamy primarily comes from the decadal census and the National Family Health Survey (NFHS), each with its limitations. The census infers polygamy indirectly from the difference in numbers of married men and women, which could also result from men working abroad. The NFHS, though more recent, covers a small percentage of households and directly asks women about their husbands' marital status. The 2011 census data shows a discrepancy between the numbers of married men and women, with the highest gaps found in the Hindu community, followed by Muslims, Sikhs, Christians, and Buddhists. However, proportionally, Muslims and Christians exhibit the greatest difference. NFHS-5 data indicates the highest prevalence of polygamy among Christians, then Muslims, and Hindus, with Scheduled Tribes showing the highest incidence overall. A study analyzing NFHS data from 2005 to 2021 indicates a decline in polygynous marriages across the Indian population, particularly among Buddhists, with an overall reduction in polygamy. The article concludes that despite cultural variations, polygamy is a relatively rare practice in India.

A very flawed code-Indian Express Editorial

Polity

Key takeaways

- 1. Superficial Reform:** On the surface, the U-UCC appears progressive, particularly regarding inheritance laws, but deeper analysis reveals significant problems, including its approach to live-in relationships and inheritance rules.
- 2. Inheritance Rules and Gender Equality:** The U-UCC attempts to make inheritance rules gender-equal, discarding distinctions in Hindu and Muslim laws. However, it allows all property to be willed away, potentially disadvantaging daughters who previously had some protection under joint family property laws.
- 3. Issues with Class 1 Heirs and Remarriage:** The new code alters the rights of class 1 heirs, reducing the share for mothers and disqualifying a widow or widower from inheriting if they remarry, which is a regressive change from the existing laws.
- 4. Impact on Different Religions:** The U-UCC overlooks complex orders of heirs under Sharia law for Muslims and reduces the inheritance share for Christian widows. It also doesn't address the Hindu Undivided Family system, creating uncertainty for business families.
- 5. Exclusion of Tribal Communities:** Tribals are left out of the U-UCC, missing an opportunity to address gender inequalities in tribal customary laws.
- 6. Potential for Multiple UCCs Across States:** If every state enacts its own UCC, it could lead to 28 different codes, contradicting the idea of a uniform civil code for India.
- 7. Hasty Passage Without Public Feedback:** The U-UCC was passed rapidly without adequate public consultation, leading to more confusion than solutions.



| Clear your doubts now.



Mains easy language

The article critically examines the Uniform Civil Code (U-CC) recently passed in Uttarakhand, pointing out its shortcomings and potential consequences. The U-CC, intended to standardize personal laws, particularly in terms of marriage, divorce, and inheritance, is seen as a flawed reform passed hastily without adequate public consultation or consideration of its broader implications. One of the primary criticisms of the U-CC is its approach to inheritance laws. While it aims to establish gender equality by eliminating distinctions between separate and joint family property in Hindu law and addressing unequal shares for women under Muslim law, it inadvertently weakens the protection previously afforded to daughters. Under the new code, all property can be willed away, potentially exacerbating biases against endowing daughters with property. The U-CC also revises the rights of class 1 heirs and introduces regressive clauses, such as disqualifying a widow or widower from inheriting if they remarry. This represents a step back from the progress made under previous laws like the Hindu Succession Amendment Act 2005. Furthermore, the U-CC overlooks the complexities of inheritance laws under Sharia for Muslims and fails to address the Hindu Undivided Family system's impact on Hindu businesses. Additionally, the exclusion of tribal communities from its purview is a missed opportunity to address gender inequalities in tribal customary laws. The article also highlights the potential for confusion and inconsistency if other states follow suit and enact their own versions of the UCC, leading to a multitude of differing codes across India. In conclusion, the U-CC in Uttarakhand, while seemingly a step towards legal uniformity, is criticized for its oversimplified approach and lack of consideration for the diverse legal and social fabric of India, leading to more confusion and potential conflicts rather than effective solutions.

LET THEM LIVE-Indian Express Editorial

Sociology

Key Takeaways:

- 1. Controversial Uniform Civil Code (UCC) in Uttarakhand:** Uttarakhand's UCC, aiming to regulate personal matters like marriage and inheritance, faces criticism for its approach to live-in relationships.
- 2. BJP's Core Issues and UCC:** The UCC is one of the BJP's three core issues, alongside the Ayodhya Ram temple and the abrogation of Article 370. The party's push for a common civil code across BJP-ruled states is seen as a move towards homogenization.
- 3. Positive Aspects of UCC:** The UCC is progressive in certain aspects, such as equal property rights for men and women, elimination of the concept of illegitimacy for children, and raising marriage age for both genders.
- 4. Failure in Addressing Live-in Relationships:** The UCC's policy on live-in relationships is criticized for lacking inclusivity and intruding into individuals' private lives. It requires compulsory registration of such relationships, seen as a moralizing overreach by the state.
- 5. Criticism of Compulsory Registration:** The mandatory registration of live-in relationships and penal provisions for non-compliance are viewed as an unnecessary and intrusive state intervention in personal affairs.
- 6. Contradiction with Central Government's Vision:** The provisions of the Uttarakhand UCC contradict the central government's emphasis on youth and women-led development, as advocated by Prime Minister Narendra Modi.
- 7. Call for Reconsideration:** The UCC in Uttarakhand, especially the section regarding live-in relationships, is urged to be urgently reconsidered for its restrictive and intrusive nature on personal freedoms.

Mains easy language

Uttarakhand's recently passed Uniform Civil Code (UCC) has sparked controversy, particularly regarding its approach to live-in relationships. While the UCC, part of the BJP's core issues, shows foresight in areas like equal property rights and raising marriage age, it fails in its policy on live-in relationships. The UCC requires compulsory registration of such relationships, which is seen as a moralizing intrusion by the state



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into individuals' private lives. This aspect of the UCC is criticized for undermining personal freedom and privacy, and for being out of step with the central government's vision of youth-and women-led development. The UCC's approach to live-in relationships is perceived as an unnecessary and authoritarian overreach, conflicting with the principles of a free society and the rights of consenting adults to choose their living arrangements. Consequently, there is a pressing call for the urgent reconsideration of the UCC in Uttarakhand, particularly the section that mandates terms for live-in relationships, which is seen as restrictive and detrimental to individual liberties.

[BITS IN PIECES-Indian Express Editorial](#)

Economy

Key takeaways

1. **India's New Bilateral Investment Treaties (BITs) Approach:** Finance Minister Nirmala Sitharaman announced that India will negotiate BITs with trade partners to boost foreign direct investment (FDI).
2. **Background of BITs in India:** India initiated BITs in the mid-90s to provide favorable conditions for foreign investors. The first BIT was signed with the UK in 1994. However, several disputes, including high-profile cases against India, led to a reevaluation of its BIT model.
3. **2016 Model BIT and Its Impact:** The 2016 Model BIT, adopted as a response to increasing legal burdens, was seen as protectionist. It omitted key doctrines like "fair and equitable treatment" and required investors to exhaust local remedies before international arbitration, impacting FDI inflows.
4. **Decline in FDI:** There was a noticeable decline in FDI equity inflows in India following the adoption of the 2016 model.
5. **Renegotiation Challenges:** India faces difficulties renegotiating BITs based on the 2016 model, affecting its FDI attractiveness.
6. **Parliamentary Committee Recommendations:** The Parliamentary Standing Committee on External Affairs recommended revisiting the BIT regime, focusing on timely dispute settlement and developing local expertise in investment arbitration.
7. **India's Goal for Robust International Trade and Investments:** A forward-looking approach to BITs is essential for India's goal of becoming a \$5-trillion economy. This involves revisiting the existing BIT framework to align with global best practices and encourage sustainable foreign investments.

Mains easy language

India is shifting its approach towards Bilateral Investment Treaties (BITs) to enhance foreign direct investment (FDI), as announced by Finance Minister Nirmala Sitharaman. This change comes after the 2016 Model BIT, adopted in response to costly legal disputes against India, led to a decline in FDI inflows due to its perceived protectionist nature. The 2016 model, criticized for omitting key international law doctrines and requiring exhaustion of local remedies before international arbitration, resulted in a 24% decline in FDI equity inflows. Recognizing these challenges, the Parliamentary Standing Committee on External Affairs recommended a revision of the BIT regime, emphasizing timely dispute settlements and the development of local expertise in investment arbitration. As India aims for a \$5-trillion economy, a progressive BIT approach is vital. The government is now taking steps to move away from the one-size-fits-all model of the 2016 BIT, focusing on sustainable growth in cross-border flows and aligning with global best practices to attract and sustain long-term foreign investments. This renewed effort is crucial for bolstering India's international trade and investment landscape.

[The decline of America's leadership-The Hindu Editorial](#)

International relations

Key takeaways

1. **Declining Global Influence:** The U.S. is experiencing a decline in its traditional global influence due to internal divisions, questioning the effectiveness of its democracy and international policies.



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- 2. Economic Challenges and China's Rise:** America faces economic challenges, including a rising national debt. Concurrently, China's economy has grown larger in terms of purchasing power, challenging U.S. economic dominance.
- 3. Military Credibility and Global Presence:** The U.S.'s extensive military campaigns and global presence have raised credibility issues, particularly regarding adherence to international norms.
- 4. Domestic Polarization Affecting Foreign Policy:** The ideological divide and political polarization within the U.S. are impacting its foreign policy and international cooperation.
- 5. Shift in International Power Dynamics:** There is a noticeable shift in global power dynamics, with challenges to the legitimacy of U.S. leadership and international institutions.
- 6. Technological Lag and Rivalry with China:** The U.S. lags in critical technological areas like AI, with China leading the way. This forms a central aspect of the U.S.-China security and economic rivalry.
- 7. Strategic Relationships for Other Nations:** Countries like India are advised to strategically navigate their relationship with the U.S., recognizing the benefits and limitations of this partnership amidst the shifting global landscape.

Mains easy language

In the current global landscape, the United States faces significant challenges in maintaining its traditional role as a world leader. Internal divisions and policy inefficiencies have led to a decline in its influence, both domestically and internationally. The possibility of an authoritarian shift under leaders like Trump and Biden is a concern, reflecting deep-rooted issues in American democracy and global strategy. Economically, the U.S. is being outpaced by China, which has a larger economy in terms of purchasing power. This shift is compounded by significant national debt and internal challenges such as illegal immigration and deficits in key sectors like technology and public health. The extensive U.S. military presence globally has also raised questions about its commitment to international norms, diminishing its credibility. The U.S.'s domestic polarization is impacting its ability to cooperate effectively within its political system and uphold its international agreements. This ideological divide has ramifications for its global standing. Concurrently, the rise of China and Russia, both aiming to reshape the international system in favor of their authoritarian regimes, presents a stark challenge to Western democratic values. The U.S. is lagging in critical areas such as Artificial Intelligence, with rivals like China setting the pace. This technology gap, coupled with the economic and security rivalry between the U.S. and China, is central to current global tensions. In light of these challenges, countries like India are encouraged to navigate their relationship with the U.S. strategically, recognizing both the potential benefits and the limitations of this partnership.

11th February, 2024

Probability of survival decreases with increased duration of CPR- The Hindu Science

-Science Tech

Key Takeaways:

- 1. Rapid Decline in Survival Rates:** The study found a significant decrease in the chances of surviving a cardiac arrest with CPR from 22% in the first minute to less than 1% after 39 minutes.
- 2. Decline in Chances of Brain Function Preservation:** The likelihood of maintaining good brain function after CPR drops from 15% within the first minute to less than 1% after 32 minutes of no heartbeat.
- 3. Insight for Medical Decisions:** These findings could assist healthcare teams, patients, and their families in making informed decisions about the duration of CPR efforts in hospitals.



| Clear your doubts now.



4. **Study Population and Methodology:** The research involved 348,996 adults in the U.S. who experienced in-hospital cardiac arrests from 2000 to 2021, focusing on the relationship between CPR duration and survival or favorable brain function outcomes.
5. **Implications for CPR Guidelines:** Although the study highlights the diminishing returns of prolonged CPR, it also underscores the need for clear guidelines on when to consider cessation of resuscitation efforts.

Easy Explanation

A new study shows that if someone's heart stops in the hospital and they need CPR (chest compressions to help their heart beat again), the chances of them making it through and not having serious brain problems drop really quickly. In the first minute of CPR, there's a 22% chance they might survive, but after 39 minutes, it's almost zero. This is important for doctors and families to know when they're deciding how long to keep trying to save someone. The study looked at a lot of people over 20 years to find this out, which helps us understand better when it might be time to stop CPR.

Transitioning to hyperlocal extreme weather forecasting- The Hindu Science

-Science tech

Key Takeaways

1. **Weather Forecasting Challenges:** Weather forecasting in India faces significant challenges due to the inherent variability in tropical weather patterns and a shortfall in the required number of ground monitoring stations.
2. **Current Infrastructure and Its Limitations:** The Indian Meteorological Department (IMD) operates around 800 AWS, 1,500 ARG, and 37 DWRs, but the ideal requirement is over 300,000 ground stations and about 70 DWRs. Data from numerous stations operated by state governments and private entities often go unused due to accessibility and reliability issues.
3. **Adoption of Modern Technologies:** While IMD predominantly uses traditional global forecasting systems, there's a shift towards leveraging Artificial Intelligence and Machine Learning technologies for more accurate predictions by new-age companies. However, the effectiveness of these technologies hinges on the availability and quality of data.
4. **Initiatives to Bridge Data Gaps:** The Department of Agriculture & Farmers Welfare has launched the Weather Information Network and Data System (WINDS) to generate comprehensive, hyper-local weather data, aiming to install over 200,000 ground stations.
5. **Fog and Air Quality Concerns:** Dense fog, particularly in urban areas like the NCR region, exacerbates air quality issues by trapping pollutants close to the ground. This poses severe health risks, especially to vulnerable populations.
6. **Advances in Air Quality Monitoring:** Make in India initiatives have spurred the development of affordable, reliable sensor-based air quality monitoring systems. These domestically produced systems offer a cost-effective solution for expanding urban air quality monitoring networks.
7. **The Role of Academic Institutions:** IITs are establishing centers of excellence to create a nationwide network of affordable air quality sensors, contributing to the enhancement of air quality and weather prediction models through AI and ML integration.
8. **Towards a Comprehensive Monitoring Network:** India is on the verge of establishing a world-class air quality and weather information network. Seamless data sharing and systems integration will unlock new avenues for addressing climate and environmental challenges effectively.

Easy Explanation

In India, predicting the weather is really tricky because of how much the weather can change, especially in tropical places. The Indian Meteorological Department, which is in charge of forecasting, is working hard to get better at predicting things like rain and cyclones. They're starting to use smart computer programs to help, but they need more weather stations across the country to collect data. There's



| Clear your doubts now.



also a big push to track air pollution better, especially in cities where fog can make the air quality even worse. Thanks to some new programs and technology made in India, we're getting closer to having a really good system for keeping an eye on the weather and the air, which can help keep people safe and healthy.

[What does Uttarakhand's UCC entail?- The Hindu FAQ](#)

-Polity

Key Takeaways:

Applicability: The Bill applies to all residents except the tribal community.

Live-in Relationships:

- Mandatory registration for live-in couples.
- Penalties for non-registration.
- Provision for women to claim maintenance.

Marriage Regulations:

- Prohibits bigamy and polygamy.
- Mandates registration of marriages within 60 days.

Divorce Guidelines:

- Divorce only permissible through court order.
- Specific grounds for divorce, excluding "irretrievable breakdown of marriage."

Child Custody:

- Custody of children up to 5 years awarded to the mother post-divorce.

Inheritance Rights:

- Equal property rights for spouse, children, and parents.
- Abolishes the coparcenary system in Hindu law.

Criminalization of Practices:

- Indirect criminalization of practices like nikah halala, iddat, and triple talaq.

Expert Concerns:

- Privacy issues with mandatory live-in relationship registration.

State-specific UCCs may conflict with the national uniformity envisioned by Article 44.

Easy Explanation:

The article discusses a significant legislative development in Uttarakhand, where the state assembly has passed a Uniform Civil Code (UCC) Bill. This Bill aims to create a common set of laws for all citizens regarding marriage, divorce, inheritance, and live-in relationships, moving beyond the bounds of individual religious laws.

For instance, if you're living with your partner in Uttarakhand without being married, you'll now need to officially register your relationship with the authorities. And if you're planning to get married, your marriage needs to be registered within two months, or you might have to pay a fine.

The Bill also touches upon divorce, making it clear that you can't just decide to end your marriage without a court's approval. Plus, if you have kids and end up divorcing, moms will usually get to take care of kids who are five or younger.



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When it comes to inheriting property, the Bill is trying to make things fairer by ensuring that spouses, kids, and parents all have equal rights, changing some old rules that were specific to Hindu families.

Interestingly, the Bill also tackles some practices that are common in Muslim personal law, like *nikah halala* and triple talaq, by making them punishable offenses, though it doesn't name them outright.

However, not everyone's on board with every part of this Bill. Some folks are worried about the government getting too involved in personal matters, like who you're living with. And there's also a debate about whether every state having its own version of a UCC goes against the idea of having one set of rules for the whole country, as suggested by India's Constitution.

In summary, Uttarakhand's UCC Bill is a bold step toward uniform laws for personal matters, but it's also stirring up quite a bit of discussion about privacy, state intervention, and the challenge of balancing traditional practices with modern legal frameworks.

[How can child safety be ensured online?- The Hindu FAQ](#)

-Sociology

Key Takeaways:

Children's Safety Online:

- Growing concerns over the safety of children on social media platforms.
- The need for platforms to be 'safe by design' for young users.

Risks and Impacts:

- Exposure to sexual content, bullying, harassment, and abuse in virtual environments.
- Data collection in immersive virtual environments poses privacy and security risks.
- Mental health concerns due to trauma from online soliciting and abuse.

Generative AI and its Reach:

- Generative AI offers educational benefits but poses risks like disinformation.
- AI-generated content can be indistinguishable from real content, affecting children's cognitive development.

Solutions and Responsibilities:

- Tech companies must incorporate 'safety by design' principles.
- Regulatory frameworks need periodic adjustments to protect children's rights online.
- Real-world rules for child protection should apply online as well.

Easy Explanation:

Recently, there's been a lot of worry about whether kids are safe when they're online, especially on big social media sites like Facebook, TikTok, and others. People are upset because there are some really bad folks out there who might try to hurt kids through these sites. So, there's a big push to make these companies do more to keep kids safe.

One big issue is that when kids go into virtual worlds or play certain video games, they might see or experience things that aren't good for them, like being bullied or seeing stuff that's way too adult. Plus, these games and sites collect a ton of info about what kids do, which could invade their privacy.

For example, there's this really popular game where part of it tells players to do something pretty mean to a character who's supposed to be a prostitute. That's definitely not the kind of thing we want kids learning. And now, with all this new AI stuff, there are even more ways for bad things to happen, like making fake images or spreading lies really fast.



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But it's not all bad. AI can also help kids learn in cool new ways, like getting homework help or making art and music. It can even help kids who have trouble in school because of disabilities.

So what can we do about it? Well, the big tech companies need to step up and make sure their sites and games are safe for kids right from the start. There are rules in the real world to keep kids safe, and the same kind of rules should apply online too. Governments might need to get involved to make sure these companies are doing the right thing. In the end, it's about making sure that when kids go online, they can learn, play, and explore without running into anything that could hurt them.

[What are the changes in the new Water Act?- The Hindu FAQ](#)

Polity

Key Takeaways:

Introduction of the Amendment Act:

- The Lok Sabha passed the Water (Prevention and Control of Pollution) Amendment Act, 2024.
- It amends the Water (Prevention and Control of Pollution) Act, 1974.

Background of the Original Act:

- The original 1974 Act established the Central Pollution Control Boards (CPCB) and State Pollution Control Boards (SPCB) for monitoring water pollution.
- It required industrial units to obtain permission from State boards before establishment.

Amendments Made:

- The amended Act will apply to Himachal Pradesh, Rajasthan, and Union territories initially.
- It replaces imprisonment for minor violations with fines ranging from ₹10,000 to ₹15 lakh.
- Certain industrial plants may be exempted from obtaining consent for discharging sewage.
- The Centre can issue guidelines for SPCB operations and the selection of their chairpersons.
- Penalties are introduced for tampering with monitoring devices.

Response and Rationale:

- The amendments aim to reduce the "trust deficit" and harassment from outdated regulations.
- They are intended to promote "ease of living and ease of doing business."

Opposition concerns include potential weakening of protections for water bodies and the removal of imprisonment as a deterrent for non-compliance.

Easy Explanation:

Recently, the Indian government made some changes to an old law from 1974 that was all about keeping our water clean. This law was pretty important because it set up groups whose job was to make sure our rivers and lakes weren't getting dirty from all the stuff factories and industries might dump into them. They could even shut down factories or fine them if they didn't follow the rules.

But now, the government has decided to update this law. They're saying that for some smaller mistakes, factories won't go to jail; instead, they'll just have to pay some money. They also said that for certain types of factories, they might not need to get permission at all, which is a big change. And if a factory messes with the equipment that checks how clean the water is, they'll have to pay a big fine.





The government thinks these changes are good because the old rules were too strict and made it hard for businesses to work smoothly. They believe that making things easier for businesses is good for everyone. But, some people are worried. They think that without the fear of going to jail, factories might not take the rules about keeping water clean seriously. They're concerned that this might end up making our rivers and lakes dirtier, which isn't good for people or the environment.

So, it's kind of like a balancing act. On one side, the government wants to make it easier for businesses to do their thing. On the other side, they need to make sure our water stays clean for everyone's health and safety. It's a tricky situation, and people have different opinions on what's the best way to handle it.

12th February 2024

What Charan Singh did for farmers' welfare-Indian Express Explained

Economy

Key takeaways:

1. **Agricultural Representation Advocacy:** Singh advocated for the representation of farmers in government jobs and educational institutions, emphasizing the need for agricultural understanding in governance.
2. **Mandal Commission and Reservations:** He played a key role in establishing the Mandal Commission, which led to a 27% reservation for OBCs. Singh focused on occupation-based rather than caste-based reservations.
3. **Urban-Rural Divide Emphasis:** Singh highlighted the disconnect between urban dwellers and the agricultural community, advocating for more understanding and support for farmers.
4. **Government Job Reservations Proposal:** He proposed a 60% reservation in government jobs for farmers' children, believing in their unique administrative qualities.
5. **Land Reform Laws:** Singh passed significant laws in Uttar Pradesh, including the Zamindari Abolition Act (1950), the Consolidation of Holdings Act (1953), and the Ceiling on Land Holdings Act (1960), transforming the agricultural economy.
6. **Creation of Middle Peasantry:** His reforms led to the rise of an empowered middle peasantry, further boosted by the Green Revolution.
7. **Current Relevance:** With ongoing agricultural challenges, the idea of reservations for farmers' children in government roles remains pertinent.

Mains easy language

Chaudhary Charan Singh's impactful legacy in Indian agriculture is marked by his significant reforms and advocacy for farmers. He championed the cause of agricultural representation in government and education, believing that those with direct farming experience were crucial in relevant governmental departments. His role in establishing the Mandal Commission led to the introduction of a 27% reservation for Other Backward Classes (OBCs), with a focus on occupation over caste. Singh's emphasis on the urban-rural divide was a critical aspect of his policies, advocating for greater understanding and support for the agricultural community from urban sectors. Singh proposed a 60% reservation in government jobs for children of farmers, highlighting the unique administrative qualities he believed they possessed. His tenure saw the implementation of transformative land reform laws in Uttar Pradesh, including the Zamindari Abolition Act, the Consolidation of Holdings Act, and the Ceiling on Land Holdings Act. These laws were instrumental in creating a middle peasantry class, which saw economic growth during the Green Revolution. Today, Singh's vision and policies continue to be relevant amidst the evolving challenges in agriculture, reflecting the enduring significance of his contributions to the sector.



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Haldwani violence: what is Nazool land-Indian Express Explained

Sociology

Key takeaways

1. **Nazool Land Definition:** Nazool land is government-owned but not directly administered as state property, typically leased to various entities for fixed periods.
2. **Historical Origin:** Originated during British rule in India, Nazool land was often acquired from defeated kings and kingdoms. Post-independence, these lands lacked proper ownership documentation and were marked as state-owned Nazool land.
3. **Usage and Lease:** Generally used for public purposes like schools and hospitals, Nazool land is also leased for housing societies in urban areas. Leases can range from 15 to 99 years and are renewable.
4. **Governance:** Governed by various state-specific orders and primarily by the Nazool Lands (Transfer) Rules, 1956.
5. **Haldwani Incident:** In Haldwani, the land where a mosque and madrasa stood was registered as Nagar Nigam's Nazool land. A demolition drive was conducted by the district administration to clear encroachments and ease traffic congestion, following a court's approval.
6. **Controversy and Local Response:** Despite a notice requiring removal of encroachments or proof of ownership, and local appeals for time to challenge the decision in the High Court, the demolition proceeded, leading to violence.

Mains easy language

The Haldwani violence in Uttarakhand, triggered by a demolition drive on Nazool land, brings to light the complexities surrounding this category of land ownership. Nazool land, historically emerged during British rule in India, is government-owned but not directly administered as state property. These lands, often acquired from defeated kings and kingdoms who lacked proper ownership documentation post-independence, are typically leased to entities for fixed periods, ranging from 15 to 99 years, and are used primarily for public purposes like building schools, hospitals, and housing societies. The recent incident in Haldwani involved the demolition of a mosque and madrasa situated on land registered as Nazool land under the Nagar Nigam (Municipal Council). The demolition, part of an initiative to clear encroachments and alleviate traffic congestion, was executed following a court's approval. Despite a notice issued by the district administration requiring the removal of encroachments or the submission of ownership documents, and local appeals for postponement to appeal to the High Court, the drive led to violence, resulting in casualties and injuries. This incident highlights the ongoing challenges and sensitivities involved in managing and regulating Nazool land, particularly in densely populated areas.

After Pakistan's fractured mandate-With Imran's independents in the lead, what next?-Indian Express Explained

International relations

Key takeaways

1. **PTI-Backed Independents' Success:** Independents supported by Imran Khan's PTI won the highest number of seats in Pakistan's National Assembly, leading to an unprecedented political scenario.
2. **Challenging Majority Formation:** With 336 seats in the National Assembly and 70 of these reserved, no traditional party like PML-N or PPP can secure a simple majority even if they form a coalition.
3. **Influential Role of Independents:** The PTI-backed independents, holding the majority, have a critical role in the formation of the government. They have a limited time to join a political party or remain independent.



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- 4. Reserved Seats Dynamics:** Reserved seats for women and non-Muslims are filled based on each party's strength in the Assembly, adding complexity to the post-election landscape.
- 5. Uncertain Political Future:** The future actions of these independents are uncertain, with possibilities of joining parties opposing PTI or aligning with it, influenced by regional political dynamics and voter sentiment.

Mains easy language

The recent Pakistani election has led to a unique political situation, with independents backed by Imran Khan's PTI emerging as a significant force in the National Assembly. The assembly, comprising 336 seats, of which 266 are directly elected and 70 reserved, faces a scenario where no traditional party, including the PML-N or PPP, can form a majority, even with potential coalitions. The PTI-backed independents, holding a crucial number of seats, have a limited timeframe to decide whether to join a political party or maintain their independence. The allocation of reserved seats, which are distributed based on each party's representation in the assembly, further complicates the post-election landscape. The role of these independents is pivotal in shaping the government's formation, with their actions being closely watched for indications of future political alliances. This uncertain political future, marked by allegations of election rigging and protests by PTI, raises questions about the stability and direction of Pakistan's governance. The situation is reminiscent of the 1985 elections, where candidates contested as individuals, but with a contemporary twist as PTI candidates ran as independents while others represented their parties. The outcome presents a challenging scenario for Pakistan, with regional political dynamics and voter sentiments playing a crucial role in the unfolding political narrative.

Securing the sea lanes-Indian Express Editorial

Internal security

Key takeaways

- 1. Need for Naval Modernization:** As India approaches its independence centenary and becomes the world's third richest nation in terms of GDP, there is a critical need to modernize its naval forces, moving away from outdated force structures.
- 2. Strategic Necessity of Aircraft Carriers:** The current geopolitical climate, with threats to vital sea lanes and regional stability, highlights the strategic importance of a robust Indian aircraft carrier force for both defensive and offensive capabilities.
- 3. Carrier as a Tool of Influence:** Large aircraft carriers, capable of operating numerous strike aircraft, serve as significant tools of state policy, influencing geopolitical and regional decisions and asserting India's influence on the global stage.
- 4. Evolving Role of Indian Armed Forces:** By 2047, India is expected to shift from a defensive posture to a more proactive role in global affairs, necessitating a reevaluation of resource allocation and strategic priorities across all branches of the armed forces.
- 5. Response to Global Naval Developments:** With countries like China advancing their naval capabilities and seeking strategic maritime routes, India needs to strengthen its naval force, especially with powerful carriers, to maintain strategic advantages and protect its interests in the region.

Mains easy language

As India nears its centenary of independence and is poised to become the world's third richest nation, a strategic shift in its naval capabilities is essential. The geopolitical landscape underscores the need for a modernized Indian Navy, particularly the development of a robust aircraft carrier force. This modernization is not just for defensive purposes but also for asserting India's influence on the global stage. The presence of a powerful carrier can significantly impact regional and global political decisions, serving as a tool of state policy. The evolving global scenario, with nations like China enhancing their naval strength and seeking strategic maritime routes, necessitates India's response with a similar enhancement in naval capabilities. By 2047, India's role in international affairs is expected to shift from a defensive stance to an active contribution to global stability, requiring a reevaluation of resource allocation and strategic planning across its armed forces. The



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development of a formidable carrier force becomes crucial to maintaining strategic advantages and safeguarding national and regional interests.

Election without winner-Indian Express Editorial

International relations

Key takeaways

1. **Pakistan Tehreek-e-Insaf's (PTI) Strong Performance:** Despite Imran Khan being in prison and PTI candidates standing as independents, the party emerged as the single largest group in the National Assembly, highlighting Khan's solid voter base.
2. **Limited Impact of Army's Influence:** The efforts of Army Chief General Asim Munir to diminish Imran Khan and PTI's influence proved ineffective, suggesting limits to the army's control over electoral outcomes.
3. **Inevitability of a Coalition Government:** No party achieved a majority, making a coalition government necessary. The Pakistan Peoples Party (PPP) is set to play a key role in this formation.
4. **Imran Khan's Continued Popularity:** Khan's PTI maintained strong support in Khyber Pakhtunkhwa and Punjab, reflecting his ongoing political significance despite his imprisonment.
5. **Persistent Dual Role of the Army:** The Pakistani army's role as both a professional and political entity is not expected to change following the election results, nor is General Munir's opposition to Khan.
6. **Significance of the Judiciary's Decision:** The judiciary's approach to Imran Khan's convictions will be crucial in determining his future political role and potential active participation in Pakistan's political landscape.

Mains easy language

The February 8 national polls in Pakistan, dominated by Army Chief General Asim Munir and former Prime Minister Imran Khan, resulted in a political stalemate. Despite Munir's efforts to undermine Khan, PTI-backed independent candidates emerged as the single largest group in the National Assembly, highlighting Khan's resilient voter base. With no party securing a majority, Pakistan is heading towards a coalition government. This complex situation is compounded by the Pakistan constitution's provisions for reserved seats, which PTI is ineligible for, having contested as independents. The PPP's role is now pivotal in government formation, holding significant gains in Punjab and retaining Sindh. Munir is likely to push for a coalition between the PPP and PML(N), despite tough negotiations and stakes for both parties. Meanwhile, Imran Khan's strong showing in Khyber Pakhtunkhwa and Punjab, despite his imprisonment and the army's narrative against him, indicates his continued popularity. The election results may not significantly alter the army's national role, which remains both professional and political. Munir's stance towards Khan is unlikely to soften, and while there's a desire among some in Pakistan for the army's detachment from politics, this change seems improbable in the current scenario. The judiciary's response to Khan's convictions and his future role in Pakistan's politics remains a key factor to watch.

How women can be represented in politics-The Hindu Editorial

Sociology

Key takeaways

1. **Limited Effectiveness of Internal Party Quotas:** The Women's Reservation Bill's passage has not significantly changed the political landscape for women, as political parties remain hesitant to field a large number of women candidates.
2. **Underperformance of Women Candidates:** In Rajasthan Assembly elections, women candidates from major parties like Congress and BJP had lower success rates compared to their male counterparts, indicating systemic challenges in the political arena for women.



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- 3. Voter Bias Toward Male Candidates:** Election outcomes suggest a prevailing voter bias favoring male candidates over female candidates, affecting the electability of women in politics.
- 4. Lack of Contagion Effect:** Increasing the number of women candidates does not necessarily lead to a proportional increase in women's representation in legislatures, as seen in elections in West Bengal and Uttar Pradesh.
- 5. Need for Legislative Quotas:** Implementing reservation quotas for women in Parliament and State Assemblies seems to be the most effective way to ensure greater representation of women in politics.
- 6. Structural Changes Required:** To overcome biases and barriers in the political system, structural changes are necessary beyond the Women's Reservation Bill to enhance women's political representation in India.

Mains easy language

The discourse on enhancing women's political representation in India, especially post the Women's Reservation Bill, underscores a need for systemic change beyond internal party quotas. The Rajasthan Assembly elections revealed that quotas within political parties are insufficient for significantly increasing women's representation. Both major parties, Congress and BJP, fielded a limited number of women candidates, who generally underperformed compared to male candidates. This outcome suggests a deeper, systemic issue in the political environment that affects women's electability. There is an evident voter bias in favor of male candidates, as seen in constituencies where women from major parties were pitted against each other or against male candidates. The lack of a contagion effect is noticeable; even when parties like the Trinamool Congress in West Bengal and Congress in Uttar Pradesh provided more tickets to women, it did not lead to a substantial increase in women MLAs. These observations indicate that the only effective solution for enhancing women's political representation seems to be the implementation of reservation quotas in Parliament and State Assemblies. To truly increase women's participation and success in politics, structural changes are necessary, addressing inherent biases and systemic barriers within the political framework.

Decoding India's economic realities-The Hindu Text and Context

Economy

Key takeaways

- 1. Fiscal Consolidation Focus:** Finance Minister Nirmala Sitharaman's interim Budget emphasizes fiscal consolidation, aiming to reduce the fiscal deficit from 9.2% of GDP in 2020-21 to 4.5% by 2025-26. This involves significant cutbacks in public expenditures and welfare allocations.
- 2. Questioning GDP Growth Accuracy:** Despite a nominal GDP growth of 9%, the IMF has raised concerns about the accuracy of official growth estimates in India, recommending statistical upgrades. This skepticism casts doubt on the real health of India's economy.
- 3. Contrasts Between NDA and UPA Regimes:** The fiscal trends over the past 20 years under the NDA and UPA regimes show no clear pattern. The NDA's revenue mobilization strategy focused on indirect taxes and expanding the income tax base, while corporate tax collections fell as a share of GDP.
- 4. Sectoral Growth Patterns:** Both the UPA and NDA periods failed to significantly alter the sectoral pattern of growth. The services sector's share in GVA increased, but the Make in India initiative did not substantially boost the manufacturing sector.
- 5. Investment and Export Growth:** Real investment and export growth were higher during the UPA decade compared to the NDA's tenure. Private investment as a share of nominal GDP was significantly higher during the UPA era.



| Clear your doubts now.



- 6. Inflation Trends and RBI's Role:** Inflation, particularly food inflation, was a major challenge during the UPA era and continued under the NDA. Despite RBI's efforts to control inflation through policy rate adjustments, food price movements in India remain largely unaffected by these measures.

Mains easy language

The assessment of India's economic health, particularly in light of the interim Budget presented by Finance Minister Nirmala Sitharaman, reveals a nuanced and complex picture. The Budget's focus on fiscal consolidation aims to reduce the fiscal deficit significantly by 2025-26, which involves substantial cuts in public spending and welfare allocations. Despite nominal GDP growth rates suggesting robust growth, the International Monetary Fund (IMF) has raised doubts about the accuracy of these figures, suggesting a need for statistical refinement. A comparison between the economic strategies of the current National Democratic Alliance (NDA) government and its United Progressive Alliance (UPA) predecessor shows varied approaches and outcomes. The NDA's revenue strategy has leaned heavily on indirect taxation and broadening the income tax base, while corporate tax collections have diminished as a percentage of GDP. In contrast, the UPA period experienced higher real investment and export growth. Both regimes have struggled with inflation, particularly in food prices, with little impact from the Reserve Bank of India's monetary policy adjustments. Despite the NDA's focus on fiscal stimulus post-pandemic, the overall economic growth has been dependent on this government spending, leading to a significant increase in fiscal deficit and debt levels. In summary, India's economic realities are marked by challenges in fiscal management, accurate growth measurement, and persistent inflation, complicating the narrative of a straightforward economic turnaround under the NDA regime.

The patterns of global warming are more important than its levels-The Hindu Science

Geography

Key takeaways

- 1. Inadequate Explanation for Warming Patterns:** The current scientific understanding is unable to fully explain the patterns of warming associated with crossing the 1.5 degrees C threshold. This gap in knowledge is significant as the patterns of warming are crucial for managing the disasters associated with global warming.
- 2. 1.5 Degrees C Threshold – Not a Scientific Benchmark:** The widely referenced 1.5 degrees C warming threshold is not based on scientific evidence but was adopted in the Paris Agreement following intense political negotiations. It was derived from the earlier, more politically palatable target of 2 degrees C.
- 3. Role of Palaeo Proxies in Temperature Estimation:** Palaeo proxies, like chemical evidence in corals and stalactites, offer indirect evidence of past temperature changes. While insightful, they only provide local temperature anomaly estimates and cannot robustly claim tiny deviations from instrumental records.
- 4. Uncertainty in Climate Event Explanations:** The inability to fully explain climate events like the 2023 monsoons in India, including factors like El Niño and its interaction with global warming, highlights the complexity of warming patterns.
- 5. El Niño and Warming Patterns:** The El Niño phenomenon and its teleconnections significantly influence global warming patterns. The location of warming in the Pacific Ocean can drastically alter the impacts on monsoons and other global weather events.
- 6. Necessity of Accurate Predictions:** Accurate predictions of warming patterns are vital to manage and adapt to climate change impacts effectively. Understanding these patterns is crucial for mitigating harm to lives, livelihoods, and economies.

Mains easy language

The discourse on global warming has often centered on the 'magical' threshold of 1.5 degrees C warming, as enshrined in the Paris Agreement. However, this figure is more a result of political negotiations than scientific evidence, originally derived from a more



| Clear your doubts now.



approachable 2 degrees C target. Recent studies, such as one published in Nature, suggest that the Earth's surface may have already warmed beyond this threshold. These studies rely on palaeo-thermometry, which uses chemical evidence from organic materials like corals to estimate past temperatures. While innovative, these methods offer only indirect evidence and are limited to local temperature anomalies, not providing a complete picture of global temperature changes. The real challenge lies in understanding the patterns of global warming, not just the levels. Current scientific understanding falls short in explaining these patterns, particularly in relation to specific climatic events like the 2023 monsoons in India. The El Niño phenomenon exemplifies the complexity of these patterns, where the location of warming in the Pacific Ocean significantly alters its global impacts. This complexity underscores the need for accurate predictions of warming patterns, essential for effectively managing climate change impacts. As we confront changing seasons and their increasing toll on lives and economies, a focus on understanding and adapting to these warming patterns becomes crucial.

13th February 2024

Jail and bail under UAPA-Indian Express Explained

Polity

Key takeaways

1. **Higher Bail Threshold under UAPA:** The UAPA sets a higher bar for granting bail compared to ordinary criminal law. This is due to the stringent nature of the Act, which deals with anti-terror and unlawful activities.
2. **Conflicting Supreme Court Views:** There have been differing interpretations by the Supreme Court regarding the 'prima facie test' for bail under the UAPA. This has led to varied approaches in handling bail applications under this Act.
3. **Section 43D (5) of UAPA:** This section places the burden on the accused to show the unreasonableness of the belief that the accusations against them are prima facie true. This is a shift from the standard criminal law principle of 'innocent until proven guilty'.
4. **Significant Judgments:**
 - Watali Judgment (2019): This ruling emphasized not examining the evidence in detail but accepting it at face value for bail considerations.
 - Delhi High Court Ruling (2021): Granted bail to student activists, placing the burden of proving a prima facie case on the police.
 - Union of India vs KA Najeed (2021): Allowed bail under UAPA for prolonged incarceration, balancing it with the right to a speedy trial.
 - Vernon Gonsalves v State of Maharashtra (2023): Differed from the Watali ruling, suggesting a surface-analysis of the evidence's probative value.
5. **Implications for Liberty and Justice:** These rulings have raised concerns about individual liberty, as stringent bail conditions under UAPA can lead to prolonged incarceration without conviction.
6. **Need for Future Judicial Clarification:** With different two-judge Benches of the Supreme Court providing contrasting views, there is a need for a larger Bench to settle the law and provide clear guidelines for bail under UAPA.

Mains easy language

The debate over bail under the Unlawful Activities Prevention Act (UAPA) in India hinges on the interpretation of Section 43D (5), which sets a higher bar for bail than ordinary criminal law. This has led to contrasting rulings by the Supreme Court, reflecting the challenges in



| Clear your doubts now.



balancing national security concerns with individual rights. The 2019 Watali judgment set a precedent that for UAPA cases, courts should not delve deeply into the evidence when considering bail, but rather accept it at face value. This stance places a significant burden on the accused to demonstrate the unreasonableness of the accusations against them, effectively upending the principle of 'innocent until proven guilty'. Subsequent rulings have varied in their approach. The Delhi High Court, in 2021, granted bail to student activists, shifting the burden of proof to the police. Meanwhile, the Supreme Court in the case of Vernon Gonsalves v State of Maharashtra in 2023, suggested a need for at least a surface-level analysis of the evidence's probative value, deviating from the Watali judgment. These differing interpretations underscore the tension between ensuring swift justice and upholding civil liberties. The Gurwinder Singh case, where bail was denied following the Watali ruling, highlights this judicial dilemma. It signifies the need for a larger bench to establish clearer guidelines and resolve the ambiguities in the application of UAPA in bail proceedings.

[HOW CHINESE IS GOBI MANCHURIAN, AND WHY DID A GOAN FAIR BAN IT?-Indian Express Explained](#)

Sociology

Key takeaways

1. **Ban on Gobi Manchurian:** The Mapusa Municipal Council in North Goa unanimously passed a resolution banning the sale of gobi manchurian at roadside stalls during the Bodeshwar temple zatra (fair).
2. **Reason for the Ban:** The ban was initiated due to health concerns. Councillor Tarak Arolkar cited the unhygienic preparation of the dish at roadside stalls, including the use of synthetic colors, MSG (Ajinomoto), and low-quality sauces containing reetha (Indian soapberry).
3. **Underlying Sentiments:** Some view the targeting of gobi manchurian as reflective of anti-outsider sentiments in Goa. Many vendors selling the dish are not Goan natives, leading to concerns about cultural alterations.
4. **Nature of Gobi Manchurian:** The dish is a popular Indian-Chinese staple consisting of fried cauliflower florets tossed in a spicy Manchurian sauce. It's an Indian adaptation and not traditionally Chinese.
5. **Origin and Evolution:** Food critic Vir Sanghvi notes that gobi manchurian likely originated in the 1980s as a vegetarian version of chicken manchurian, which was part of the Punjabi-Chinese cuisine wave in India. This cuisine style is characterized by spicy masala Chinese food in red sauce.
6. **Cultural Fusion:** The dish exemplifies the fusion of Indian (particularly Punjabi) and Chinese culinary styles, leading to what some call 'Chinjabi' cuisine. It's distinct from traditional Chinese cuisine and often surprises Chinese visitors to India.

Mains easy language

The recent ban of gobi manchurian at a fair in North Goa has stirred a debate that transcends mere food hygiene concerns, touching upon cultural and culinary identity. The Mapusa Municipal Council's unanimous decision to prohibit this popular Indian-Chinese dish during the Bodeshwar temple zatra was primarily due to health reasons. Councillor Tarak Arolkar highlighted the unhygienic preparation methods at roadside stalls, including the use of synthetic colors, MSG (Ajinomoto), and low-quality sauces containing reetha (Indian soapberry). However, this ban also reflects deeper sentiments. The targeting of gobi manchurian, often sold by non-Goan vendors, hints at underlying anti-outsider feelings and fears of cultural dilution. This situation brings to the forefront the complexities of India's diverse cultural fabric, where food often becomes a symbol of larger socio-cultural dynamics. Gobi manchurian itself is a culinary representation of cultural fusion, born from the blend of Indian (particularly Punjabi) and Chinese cooking styles. This dish, part of the wider Punjabi-Chinese cuisine wave that swept India, symbolizes an adaptation and localization of Chinese flavors to suit Indian palates. It stands as a testament to India's ability to integrate and transform external culinary influences, creating unique flavors like 'Chinjabi' cuisine – a mix of Punjabi and



| Clear your doubts now.



Chinese. In essence, the ban on gobi manchurian in Goa is more than a health measure. It's a reflection of the nuanced interplay between culinary innovation, cultural identity, and social perceptions in the diverse tapestry of Indian society.

[Death in Wayanad: What is behind Kerala's rising human-animal conflict-indian Express Explained](#)

Environment

Key takeaways

1. **Widespread Conflict:** Kerala is experiencing an increase in wildlife attacks, especially by elephants, tigers, bison, and wild boar, leading to significant human casualties and agricultural losses.
2. **Wayanad's Vulnerability:** With its extensive forest cover and proximity to various wildlife reserves, Wayanad faces frequent incursions by elephants and other wildlife, resulting in numerous human fatalities.
3. **Degraded Forest Habitats:** The conflict is partly driven by the deterioration of forest quality due to the cultivation of non-native plant species, which disrupts natural habitats and food sources for wildlife.
4. **Agricultural Shifts:** Changing farming practices, such as leaving land uncultivated and the rise of animal husbandry, particularly in Wayanad, have attracted more wildlife into human settlements.
5. **Other Contributing Factors:** Additional issues exacerbating the conflict include improper waste disposal, habitat fragmentation, and increased human activities near forest areas.
6. **Government Initiatives:** Kerala has undertaken measures like constructing barriers and eco-restoration programs, and it's working on converting farmlands back to forestland. However, these efforts have been inadequate in fully addressing the problem, and there's a lack of sufficient support from the central government.

Mains easy language

The escalating human-animal conflict in Kerala, exemplified by the recent elephant attack in Wayanad, highlights a complex ecological crisis. Kerala's forests, spread across 13 of its 14 districts, have seen a surge in wildlife attacks, with elephants, tigers, bison, and wild boars being the primary aggressors. In 2022-23 alone, there were 8,873 attacks, resulting in 98 human fatalities. Wayanad, with its significant forest cover, is notably affected, experiencing numerous human deaths due to elephant and tiger attacks. This conflict is largely attributed to the degradation of forest habitats, primarily due to the cultivation of non-native plants like acacia and eucalyptus for commercial purposes. These practices have altered the natural habitat, driving wildlife into human settlements in search of food. Additionally, changes in agricultural practices, such as abandoning farmlands and shifting to animal husbandry, have made these areas more susceptible to wildlife incursions. Kerala's government has responded with measures like constructing barriers and initiating eco-restoration programs. However, these steps have proven insufficient. The state's request for federal support was not met, emphasizing the need for more sustainable and integrated solutions to address this deep-rooted environmental challenge.

[Snapshots of turbulence-Indian Express Editorial](#)

International relations

Key takeaways

1. **Myanmar Soldiers in Mizoram:** A significant number of Myanmar soldiers, having fled battles in Chin State, have sought refuge in Mizoram. This includes a recent incident where a transport plane carrying these soldiers crashed at Lengpui Airport.
2. **Humanitarian and Political Crisis:** The conflict in Myanmar, following the 2021 coup, has led to a significant refugee crisis, with around 45,000 Chin refugees in Mizoram. Rebel groups, notably the Chin National Army and People's Defence Force, have gained control over large parts of Chin State and Sagaing Region, declaring them "liberated zones."



| Clear your doubts now.



- 3. India's Border Challenges:** India faces an unpredictable situation along its 1,640 km eastern border with Myanmar. The Indian government, considering security interests, is contemplating building a border fence and ending the Free Movement Regime (FMR), which allows local communities to maintain cross-border connections.
- 4. Impact on Local Communities and Trade:** The proposed border fence and changes to FMR have sparked opposition due to their potential to disrupt longstanding kinship and trade ties between communities across the border. There are concerns about the impact on local economies and social structures.
- 5. Security Concerns:** The porous border has facilitated the movement of armed groups and illegal shipments of weapons and narcotics. Manipur's Chief Minister has strongly advocated for fencing to control the movement of insurgents.
- 6. Geopolitical Context:** The situation is complicated by China's involvement in securing its interests in Myanmar, particularly regarding investments and infrastructure assets. India, too, has economic interests in Myanmar, some in rebel-held areas, and has maintained support for the Myanmar army.
- 7. Policy Dilemma for India:** The decision to potentially end the FMR and build a border fence challenges India's 'Neighbourhood First' and 'Act East' policies. There is a need for a cautious approach, considering the long-standing tribal and kinship ties across the border.

Mains easy language

The recent developments in Mizoram, near the Myanmar border, underscore the complex and evolving situation in the region. A military transport plane from Myanmar, carrying soldiers who had fled from battles in Chin State, crashed at Lengpui Airport in Mizoram, highlighting the ongoing humanitarian crisis and security concerns. The conflict in Myanmar, especially post the 2021 coup, has led to a significant influx of refugees into Mizoram, with approximately 45,000 Chin refugees seeking shelter. This situation has been exacerbated by the control of large areas of Chin State and Sagaing Region by rebel groups, who have declared these as "liberated zones." India faces a challenging scenario along its 1,640 km eastern border with Myanmar. In response, the Indian government is considering building a border fence and ending the Free Movement Regime (FMR). This decision, aimed at enhancing security, has sparked controversy due to its potential impact on the deep-rooted social and economic ties between border communities. The geopolitical context, including China's active involvement in Myanmar, further complicates the situation. India's policy decision to potentially alter the FMR and build a border fence poses a dilemma, as it affects the 'Neighbourhood First' and 'Act East' policies. The resolution of this issue requires a balanced approach, considering the humanitarian aspects, security needs, and longstanding cultural connections across the border.

[The real travesty-The Hindu Editorial](#)

Polity

Key takeaways

- 1. Governor's Refusal:** R.N. Ravi declined to read the customary address to the Tamil Nadu legislature, citing "misleading claims and facts." He argued that reading it would constitute a "constitutional travesty," a stance that has raised questions about the constitutional role and responsibilities of a Governor.
- 2. Politicization of the Role:** The incident underscores the increasing politicization of gubernatorial positions in India. Governors, who are supposed to be apolitical, are often seen as acting as agents of the ruling party at the Centre, especially when the state government is run by an opposition party.
- 3. Constitutional Functionaries' Conduct:** The article also criticizes the conduct of the Tamil Nadu Assembly Speaker, who launched a tirade against the Governor. Such actions detract from the dignity of constitutional offices and the legislative assembly.



| Clear your doubts now.



4. **Governors as Political Tools:** The tendency of Governors to act as political instruments rather than neutral constitutional authorities is highlighted as a significant issue. This behavior is seen as an attempt to obstruct and undermine state governments run by political adversaries.
5. **The Larger Issue:** The real travesty, according to the article, is not the content of the Governor's address but the fact that a Governor who profoundly disagrees with state government policies chooses to remain in office. This situation reflects a deeper problem in India's constitutional system, where gubernatorial roles are often filled by individuals who are keen to engage in political maneuvering.

Mains easy language

The recent controversy involving Tamil Nadu Governor R.N. Ravi's refusal to read the address prepared by the DMK-led state government at the legislature session highlights a critical issue in India's constitutional democracy. Governor Ravi cited "misleading claims and facts" in the address as his reason for not reading it, terming it a "constitutional travesty." This incident brings to the forefront the increasing politicization of the Governor's role in state politics, particularly when the state government is run by a party different from the ruling party at the Centre. The Governor's role, traditionally seen as apolitical and ceremonial, is increasingly perceived as being used to further the interests of the central government. This undermines the neutrality and impartiality expected of the gubernatorial office. The controversy also raises questions about the conduct of constitutional functionaries, as seen in the Tamil Nadu Assembly Speaker's tirade against the Governor, which detracts from the legislative assembly's dignity. The core issue, as the article suggests, is the misuse of the gubernatorial position as a tool for political interference rather than an office upholding constitutional values. Governors who profoundly disagree with the policies of state governments yet choose to remain in office reflect a deeper malaise in India's constitutional system. This situation highlights the need for a more robust framework to ensure the impartiality of Governors and the sanctity of their role in India's parliamentary democracy.

Decoding India's economic realities-II-The Hindu Text and Context

Economy

Key takeaways

1. **Skill India Mission's Impact:** Despite the Finance Minister's claim of training 1.4 crore youth under the 'Skill India Mission', there is a significant gap in gainful employment for these skilled individuals. This surplus of skilled workers is negatively impacting wage growth and earnings in the economy.
2. **Food Inflation and Agricultural Policy:** The NDA government has struggled to effectively address food inflation and enhance agricultural productivity. Measures like PM-Kisan and distribution of free foodgrains provide relief but don't modernize agriculture. The attempted corporate takeover of agriculture through three farm laws was rescinded due to farmer protests.
3. **Trade Balance and Foreign Exchange:** Under the NDA, India saw a decrease in both export and import growth, improving the external trade balance but affecting economic growth. The rupee has continued to depreciate against the dollar, importing global inflation trends into India.
4. **Non-Performing Assets (NPAs):** The NDA claims to have improved the health of Public Sector Banks (PSBs) by reducing Gross Non-Performing Assets (GNPA). However, the scale of NPA write-offs and substantial losses due to NPA provisioning raise concerns about the effectiveness of these measures.
5. **Employment and Income:** Official data shows a slowdown in inflation-adjusted income growth during the NDA's tenure compared to the UPA. The government cites reduced unemployment rates, but long-term data reveals historically high rates of unemployment, particularly among urban youth and educated individuals.



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- 6. Informalization of Labour Force:** The share of self-employed workers has increased, indicating a trend towards the informalization of the labor force. This trend contradicts official claims of increased formalization and is affecting wage growth and earnings.
- 7. Economic Aspirations and Realities:** The Finance Minister's claims of improved living and earnings are questioned in light of the minimal growth in earnings for self-employed workers and the high percentage of the labor force engaged in self-employment. The article suggests that the aspirations of a significant portion of India's labor force are not being met under the current economic policies.

Mains easy language

The "Skill India Mission" under the NDA regime trained 1.4 crore youth, but data reveals a significant shortfall in their gainful employment, leading to an oversupply of skilled workers and stagnating wage growth. Despite initiatives like PM-Kisan and free foodgrain distribution, the government has struggled to effectively address food inflation or modernize agriculture, as evidenced by the controversial farm laws that were eventually repealed following farmer protests. On the economic front, the NDA period witnessed a decline in both export and import growth, positively impacting the trade balance but negatively affecting overall economic growth. The rupee's depreciation against the dollar during this time further compounded the issue, importing global inflation trends into India. Challenges in the banking sector, particularly regarding Non-Performing Assets (NPAs), have persisted. Despite claims of improving the health of Public Sector Banks (PSBs), the high volume of NPA write-offs and associated losses highlight the complexity and depth of the problem. In terms of employment and income, the NDA's tenure has seen a slowdown in inflation-adjusted income growth compared to the previous UPA regime. While the government cites reduced unemployment rates, long-term data indicates historically high unemployment, especially among urban youth and educated individuals. This trend, coupled with the increasing informalization of the labor force, contradicts official claims of enhanced formalization and has impacted earnings growth. These economic realities reflect a disconnect between policy intentions and outcomes, underscoring the challenges faced by the NDA in fulfilling the aspirations and improving the living standards of India's labor force.

Earth-wide telescope confirms black hole's shadow is 'real' - The Hindu Science

Science

Key takeaways

- 1. First Visual Evidence of Black Holes:** The EHT provided the first-ever visual confirmation of a black hole's existence, located at the center of the M87 galaxy, 53 million light-years away. This achievement substantiated a fundamental prediction of Einstein's general relativity.
- 2. Observation of the Event Horizon:** New details have been captured about the black hole's event horizon, which is the boundary beyond which light cannot escape. The observations revealed a distinct ring formation around this boundary.
- 3. Confirmation of Black Hole's Shadow:** The EHT's observations have confirmed the presence of the black hole's shadow, a result of gravitational effects at the event horizon. This finding is crucial for understanding the properties of black holes.
- 4. Global Collaboration and Advanced Techniques:** The EHT is a collaborative network of radio telescopes around the world, utilizing very-long baseline interferometry. This approach enhances resolution and accuracy, allowing for these groundbreaking observations.
- 5. Improved Observational Capabilities:** Enhancements to the EHT, including better data-recording rates and the addition of new telescopes to the array, have improved the resolution and quality of observations.
- 6. Insights into Black Hole Dynamics:** The observations have provided valuable insights into the dynamics near a black hole's event horizon, such as gravitational lensing. This phenomenon causes the black hole's gravity to bend light in a way that magnifies and distorts the appearance of objects behind it.





7. **Future Research and 'Movie Project':** The EHT collaboration plans further observations, including a 'movie project' in 2026, to track changes in the black hole over time. This continuous observation will offer deeper insights into the behavior and nature of black holes.

Mains easy language

The Event Horizon Telescope (EHT), a collaborative network of global radio telescopes, has made significant strides in black hole research, particularly regarding the supermassive black hole in the M87 galaxy. The EHT's landmark achievement was the first-ever visual evidence of a black hole's existence, a feat that aligns with the predictions of Einstein's theory of general relativity. This groundbreaking observation captured the black hole's event horizon and revealed a distinct ring formation around it, confirming the presence of the black hole's shadow. Improvements in the EHT's capabilities, including enhanced data-recording rates and the inclusion of additional telescopes, have led to more detailed and high-resolution observations. These advancements have allowed scientists to study the dynamics near the black hole's event horizon with unprecedented precision. Observations have confirmed the gravitational lensing effect, where the black hole's intense gravity bends light, making the shadow and ring visible. Looking ahead, the EHT collaboration plans further innovative projects, such as a 'movie project' in 2026, to track changes in the black hole over time. This initiative aims to provide deeper insights into the black hole's behavior and nature. The EHT's ongoing work not only substantiates fundamental aspects of theoretical physics but also opens new avenues for exploring the complex mechanisms governing our universe.

Scientists plan to build even larger atom-smasher by 2040-The Hindu Science

Science

Key takeaways

1. **Advanced Particle Collider Plans:** CERN is planning to build the Future Circular Collider, a successor to the Large Hadron Collider (LHC), with the aim of unlocking further mysteries of the universe. This new collider is envisioned to be more powerful and larger than the current LHC.
2. **Projected Cost and Timeline:** The FCC is estimated to cost around 15 billion Swiss francs (approximately \$17.2 billion). The project's first phase is expected to be operational by 2040, subject to approval and funding.
3. **Feasibility and Development Stage:** The project is currently in the feasibility study phase. CERN's Director-General, Fabiola Gianotti, stated that no "technical show-stoppers" have been identified so far, indicating positive progress in the project's development.
4. **Potential for Scientific Innovation:** The FCC is anticipated to drive innovation in various fields such as cryogenics, superconducting magnets, vacuum technologies, and detector instrumentation. These advancements could yield significant socioeconomic benefits beyond fundamental physics research.
5. **Speculative Scientific Outcomes:** While the exact scientific discoveries that the FCC might lead to are currently unknown, the collider is expected to further our understanding of fundamental physics. The lack of clear theoretical guidance at this stage adds to the exploratory nature of the project.
6. **Increased Power and Capability:** The proposed collider, with a 91-kilometer loop, aims to achieve particle collision energy levels of up to 100 TeV (trillion electron volts). This is significantly higher than the LHC's capacity of 13 TeV, potentially enabling groundbreaking research in particle physics.

Mains easy language

The European Organization for Nuclear Research (CERN) is advancing plans to construct the Future Circular Collider (FCC), a project that aims to succeed and surpass the capabilities of the current Large Hadron Collider (LHC). This new particle collider is a bold step in the quest to unlock more mysteries of the universe, building on the success of the LHC, which was instrumental in confirming the subatomic Higgs



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boson in 2012. The FCC, estimated to cost around 15 billion Swiss francs (approximately \$17.2 billion), is expected to commence its initial phase by 2040. This timeline, however, is contingent upon the project receiving the necessary approvals and funding, primarily from European and Western countries. Currently in the feasibility study stage, the FCC has not yet faced any insurmountable technical challenges. This proposed collider is poised to be a hub for innovation in various scientific and technological fields, including cryogenics, superconducting magnets, and vacuum technologies. These advancements hold the potential for significant socioeconomic impacts beyond the realm of physics. Despite the ambitious nature of the project, the specific scientific outcomes and discoveries it could yield remain largely speculative. The FCC, with a planned 91-kilometer loop, aims to achieve particle collision energies up to 100 trillion electron volts (TeV), significantly more powerful than the LHC's 13 TeV. This increase in power and capability is expected to further deepen our understanding of fundamental physics, pushing the boundaries of current knowledge and exploration. In summary, the Future Circular Collider represents a major leap forward in particle physics, promising to expand our comprehension of the universe's fundamental principles and potentially leading to groundbreaking discoveries and technological innovations.

14th February 2024

MSP issue: what govt committee set up in 2022 has done so far-Indian Express Explained

Economy (agriculture)

Key takeaways

1. **Formation:** Established in July 2022, led by former agriculture secretary Sanjay Agrawal, following the repeal of three farm laws and farmers' protests.
2. **Composition:** Comprises 26 members, including agricultural experts, economists, farmers, government officials, and representatives from various farmers' organizations and institutions.
3. **Objectives:** Aimed at promoting Zero Budget Natural Farming, adjusting crop patterns, making MSP more effective and transparent, and strengthening the Agricultural Marketing System.
4. **Progress:** The committee has been regularly meeting since its first session on August 22, 2022, but there is no specified deadline for presenting its report.
5. **Political Context:** Formed amidst significant political discourse, with various political parties expressing support for legal guarantees for MSP.
6. **Challenges:** Faces hurdles like the non-participation of key farmers' unions and the complexity of agricultural issues, which might impact the effectiveness and acceptance of its recommendations.

Mains easy language

The committee established by the Indian government in July 2022, under the chairmanship of Sanjay Agrawal, is a response to the farmers' protests and the subsequent repeal of the three farm laws. Comprising 26 members, including agricultural experts, economists, and representatives from various farmers' organizations, its primary objective is to revitalize agricultural practices and policies. Its mandates encompass promoting Zero Budget Natural Farming, revising crop patterns according to national needs, and enhancing the effectiveness and transparency of the Minimum Support Price (MSP) system. The committee also aims to strengthen the Agricultural Marketing System and offer suggestions for the autonomy and scientific approach of the Commission for Agricultural Costs and Prices. Since its first meeting on August 22, 2022, the committee has met regularly to deliberate on these critical issues. However, it operates without a specified deadline for submitting its report, indicating a potentially extended and thorough examination process. The committee's formation and activities occur amidst significant political discourse, with various political entities advocating for legal guarantees for MSP. This political backdrop, coupled



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with the challenges posed by the non-participation of key farmers' unions and the complexity of the agricultural sector, adds layers of complexity to the committee's task of proposing effective and widely acceptable reforms.

WHAT DID TRUMP SAY ABOUT NATO FUNDING AND WHAT IS ARTICLE 5?-Indian Express Explained

International relations

Key takeaways

1. **Trump's Criticism of NATO Members:** Donald Trump frequently criticized NATO members for not contributing sufficiently to their defense budgets, particularly targeting countries like Germany for relying too heavily on the U.S. for defense.
2. **Controversial Statement on Defense Commitment:** Trump made a controversial statement suggesting he would not defend NATO allies who failed to meet their defense spending obligations, and might even encourage Russia to attack them.
3. **NATO Funding Mechanism:** NATO's funding is not based on a fixed membership fee. While there are some common funds, the primary defense strength of the alliance comes from the individual defense spending of its member countries, with a guideline to spend at least 2% of GDP on defense.
4. **Article 5 of the NATO Treaty:** Article 5 is a critical component of the NATO treaty, stating that an armed attack against one member is considered an attack against all. This forms the basis for collective defense but does not automatically obligate military response, leaving room for political decisions.
5. **Impact of Trump's Remarks:** Trump's comments were significant as they potentially undermined the collective defense principle of NATO. By suggesting a conditional defense commitment based on financial contributions, he challenged the foundational assurance that underpins the strength and unity of the NATO alliance.

Mains easy language

Former U.S. President Donald Trump's remarks about NATO and its funding raised significant controversy. He criticized NATO members, notably Germany, for insufficient defense spending and reliance on the U.S. for security. Trump controversially suggested he might not defend NATO allies who fail to meet their financial obligations for defense, even implying encouragement of Russian aggression against them. This stance challenges the foundational principle of NATO, especially Article 5, which is central to the alliance's collective defense strategy. Article 5 states that an armed attack against one member is considered an attack against all, but it does not automatically trigger a military response, leaving decisions to member states. Trump's comments potentially undermined the collective defense principle, questioning the alliance's effectiveness and unity. His stance was a departure from traditional U.S. policy, impacting NATO's perceived reliability and the U.S.'s role within the alliance.

High in sky, a new-gen eye-Indian Express Explained

Science

Key takeaways

1. **High-Altitude Pseudo-Satellite (HAPS) Prototype:** The UAV tested by NAL is a type of High-Altitude Pseudo-Satellite, capable of flying about 20 km above ground level. It is solar-powered and can remain airborne for extended periods, potentially months.
2. **Advantages Over Traditional UAVs and Satellites:** HAPS vehicles offer several advantages over conventional drones and satellites. Drones have limited airtime and lower altitude capabilities, while satellites, especially in low-earth orbit, cannot constantly monitor the same area. HAPS can loiter over a region, providing continuous monitoring with a high-resolution view.
3. **Engineering Challenges:** Developing a HAPS vehicle involves overcoming significant technological challenges, including efficient solar power generation, battery storage, lightweight design for stability, and operation in low air density and extreme temperatures.



| Clear your doubts now.



- 4. Strategic Importance for India:** India's entry into HAPS technology development positions it advantageously in a relatively nascent field. This early adoption allows India to build capacity, gain control over patents, and explore business and technological opportunities.
- 5. Potential for Innovation and Global Positioning:** The successful test flight demonstrates India's capabilities in this advanced technology field. It positions India as a significant player, not far behind the leading countries in HAPS technology, with potential advantages in tropical conditions due to unique atmospheric challenges.

Mains easy language

India's successful test of a High-Altitude Pseudo-Satellite (HAPS) prototype by the National Aerospace Laboratories (NAL) marks a significant leap in unmanned aerial vehicle (UAV) technology. This solar-powered UAV can operate at around 20 km above the ground and stay airborne for months, offering a strategic advantage over traditional drones and satellites. Unlike regular UAVs with limited flight duration and lower altitude capabilities, HAPS can continuously monitor large areas with high-resolution imaging. This technology is particularly beneficial for surveillance, monitoring, and disaster management. Developing a HAPS vehicle is technologically challenging, requiring advancements in solar power efficiency, battery technology, and lightweight yet stable design to function in low air density and extreme temperatures. The test flight signifies India's burgeoning capabilities in aerospace technology, positioning it as an emerging player in a field still in its infancy globally. India's entry into HAPS technology is timely, allowing for innovation, patent control, and exploration of new business and technology opportunities. This achievement demonstrates India's potential to become a leader in advanced UAV technology, especially suited for tropical climates with unique atmospheric conditions.

[IIT Madras Zanzibar: what does it mean to be an IIT outside India? - Indian express Explained](#)

Sociology

Key takeaways

- 1. Historical Context:** IITs were established to contribute to India's human resource development, with a strong emphasis on national service. Initially, they were set up with Western assistance but were distinctly Indian in character and objectives.
- 2. IIT Madras Zanzibar's Significance:** The campus in Zanzibar, a Tanzanian archipelago, marks a shift from IITs being purely national entities to becoming international educators. It reflects India's aspiration to share its educational successes globally and to participate in the international academic community.
- 3. Indian Yet International:** Unlike the early days when Western guidance was crucial, the IIT Madras campus in Zanzibar remains intrinsically Indian, despite its international location. It's not a mentorship of a Zanzibari institute but a replication of the Indian IIT model in a foreign land.
- 4. Strategic Importance:** The campus is seen as a gateway to Africa, aligning with India's broader diplomatic and educational outreach to the continent. It represents a mutual aspiration for technological advancement and economic development.
- 5. Cultural and Educational Exchange:** The establishment of IITMZanzibar is an exercise in knowledge-sharing and cultural exchange. It challenges the traditional dichotomy of knowledge producers and consumers, aiming to foster a sense of brotherhood and collaboration.
- 6. Challenges and Expectations:** While there are concerns regarding the infrastructure and the rationale behind establishing a campus abroad, the initiative is viewed as an opportunity for India and Zanzibar to mutually benefit and grow in the field of technology and education.

Mains easy language



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The inauguration of IIT Madras Zanzibar, marking the first overseas campus of an Indian Institute of Technology, signifies a historic shift in the global outreach of Indian higher education. This move reflects the evolution of IITs from national to international educational institutions, showcasing India's rising influence in the global technological and academic landscape. Originally conceptualized as national institutions for India's human resource development, IITs have historically balanced Western influences with a deeply rooted Indian ethos. The establishment of IIT Madras Zanzibar extends this ethos internationally, signifying India's readiness to share its educational model and expertise beyond its borders. This campus is not merely a mentorship of a local institute but a replication of the IIT framework in an international setting. Situated in the Tanzanian archipelago, IIT Madras Zanzibar represents a strategic expansion into Africa, aligning with India's diplomatic and educational goals in the region. It symbolizes a partnership that transcends traditional academic boundaries, fostering mutual growth and development in technology and education. Despite challenges and criticisms concerning infrastructure and the rationale behind establishing an IIT abroad, this initiative is viewed as a crucial step in strengthening India's role as a global educational leader. It's a testament to India's capacity to contribute significantly to the global academic community while reinforcing its commitment to sharing knowledge and fostering international collaborations.

An Arabian Valentine-Indian express Editorial

International relations

Key takeaways

1. **Increased Diplomatic Engagement:** Modi's proactive approach, with 15 visits to the Middle East since 2014, contrasts starkly with the sporadic engagement of previous administrations. This increased focus on the region has helped strengthen bilateral ties.
2. **Political and Economic Realignment:** India's engagement with the Gulf has moved beyond traditional rhetoric to include pragmatic geopolitical and economic collaborations. Initiatives like the I2U2 group and the India-Middle East-Europe Economic Corridor signify a strategic reorientation towards the region.
3. **Moving Beyond Pakistan-centric Policy:** India has successfully shifted its Gulf strategy from being overshadowed by Pakistan-centric issues to fostering independent bilateral relations based on mutual interests.
4. **Cultural and Religious Dynamics:** The inauguration of the BAPS temple in Abu Dhabi symbolizes a new era of religious tolerance and cultural exchange in the Gulf, reflecting a departure from the previous export of radical Islamic ideologies from the region.
5. **Economic and Counter-Terror Collaboration:** The relationship has evolved from transactional to strategic, with a focus on leveraging Gulf capital for India's economic growth and expanding counter-terrorism cooperation.
6. **Potential in Defense and Security:** While military exchanges with the Gulf have increased, there is potential for deeper collaboration in defense and security, including joint development of military technologies.

Mains easy language

Over the last decade, India's relationship with the Gulf, particularly the UAE and Qatar, has undergone a significant transformation, marking a diplomatic success story under Prime Minister Narendra Modi's leadership. Modi's proactive approach, characterized by numerous visits to the region, contrasts with the earlier sporadic engagements, indicating a strategic shift in India's foreign policy. This enhanced focus on the Middle East has helped strengthen bilateral ties and moved beyond the traditional transactional nature to a more strategic partnership. The relationship now encompasses strategic economic collaboration and counter-terrorism cooperation, focusing on leveraging Gulf investments for India's economic growth. The establishment of the BAPS temple in Abu Dhabi symbolizes a new era of religious tolerance in the Gulf, indicating a shift away from the export of radical ideologies. Additionally, India has successfully navigated its policy beyond Pakistan-centric issues, establishing independent bilateral relations based on mutual interests. While military exchanges have increased, the full potential in defense and security collaboration, including joint military technology development, remains largely untapped. This transformation in India's



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Gulf policy reflects a successful diplomatic realignment, adapting to the changing regional dynamics and underlining India's growing influence in international affairs.

On the rights of forest-dwellers-The Hindu Text and Context

Sociology

Key takeaways

- 1. Forest Dwellers' Concerns:** The notification of the Thanthai Periyar Sanctuary in Tamil Nadu's Erode district has led to apprehension among local forest-dwellers. They fear the loss of rights granted under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (FRA), particularly regarding their land and grazing rights.
- 2. Conversion of Forest Villages:** Despite directives from the Union Ministry of Environment and Forests and provisions in the FRA, many forest villages in Tamil Nadu have not been converted into revenue villages. This non-conversion has historically denied forest-dwellers their rightful land use and community facilities.
- 3. Impact on Traditional Practices:** The notification of the sanctuary threatens traditional practices, such as the grazing of Bargur cattle, a native breed. This raises concerns about the survival of these cattle and the livelihoods of the communities dependent on them.
- 4. Inadequate Implementation of FRA:** Tamil Nadu's implementation of the FRA has been notably sluggish, with a very small percentage of forest land being officially recognized and titled to the forest-dwellers, thereby undermining their legal rights.
- 5. Legal Conflicts in Protected Area Notifications:** The expansion of Protected Areas under the Wildlife (Protection) Act 1972 often neglects the changes mandated by the FRA. The FRA's later enactment should take precedence, requiring the determination of forest rights and the consent of gram sabhas for such notifications.
- 6. National Trend of Disregarding FRA:** The pattern of inadequate FRA implementation and the disregard for forest-dwellers' rights in the process of notifying Protected Areas is a widespread issue across India, not just confined to Tamil Nadu. This reflects a systemic issue in balancing environmental conservation with the rights of indigenous and local communities.

Mains easy language

The notification of the Thanthai Periyar Sanctuary in Tamil Nadu's Erode district has raised concerns among local forest-dwellers. They fear that their rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (FRA) may be compromised. This apprehension stems from the history of forest villages not being converted to revenue villages, despite orders from the Union Ministry of Environment and Forests and provisions in the FRA. The forest-dwellers are particularly worried about losing their grazing rights, crucial for the survival of traditional cattle breeds like the Bargur cattle. Tamil Nadu, historically sluggish in implementing the FRA, has seen a meager recognition and issuance of individual titles to forest-dwellers. The state has recognized and issued titles for only a tiny fraction of the land that forest-dwellers historically accessed. This pattern of inadequate implementation of the FRA is not unique to Tamil Nadu but prevalent across India. The notification of sanctuaries and national parks, as outlined in the Wildlife (Protection) Act 1972, often overlooks the legal regime change brought by the FRA. The FRA, being a later law, supersedes conflicting provisions in the WLPA, requiring government authorities to determine and respect forest rights and acquire the consent of gram sabhas when notifying Protected Areas. However, the continued expansion of Protected Areas across the country, including Tamil Nadu, has largely disregarded these legal requirements, leaving forest-dwellers' rights and the environment in a precarious state.

The untapped potential of stem cells in menstrual blood-The Hindu Science

Science

Key takeaways



| Clear your doubts now.



- 1. Discovery of Endometrial Stem Cells:** About 20 years ago, Dr. Caroline Gargett identified adult stem cells in the endometrium, the tissue lining the inside of the uterus. This discovery was significant given the endometrium's ability to regenerate itself each month, a process that occurs approximately 400 times before menopause.
- 2. Potential of Menstrual Blood Stem Cells:** Researchers discovered that some endometrial stem cells, specifically endometrial stromal mesenchymal stem cells, are present in menstrual blood. These cells are multipotent, meaning they can develop into various types of tissues, including fat, bone, and smooth muscle cells.
- 3. Non-Invasive Collection Method:** The finding that stem cells can be obtained from menstrual blood presents a less invasive method for collecting these valuable cells compared to surgical biopsies or bone marrow extractions.
- 4. Applications in Women's Health:** The identification of endometrial stem cells has implications for treating women's health conditions like endometriosis. It opens up possibilities for non-invasive diagnosis and treatment methods, potentially reducing the average seven-year wait for a diagnosis.
- 5. Broader Therapeutic Potential:** Beyond gynecological diseases, menstrual stem cells show promise in treating other conditions. Studies in diabetic mice demonstrated the potential for these cells to regenerate insulin-producing cells and improve blood sugar levels.
- 6. Challenges in Research and Funding:** Despite their potential, menstrual stem cell research accounts for a small fraction of overall stem cell research. This is partly due to cultural taboos surrounding menstruation and a general lack of investment in women's health research, which makes it challenging to obtain funding.

Mains easy language

Two decades ago, Dr. Caroline Gargett's groundbreaking discovery of adult stem cells in the endometrium, the tissue lining the uterus, opened up a new frontier in stem cell research. Recognizing the endometrium's remarkable capacity for monthly regeneration, Dr. Gargett's research revealed the presence of multipotent endometrial stromal mesenchymal stem cells, capable of developing into various tissue types. This discovery was pivotal, considering the endometrium undergoes about 400 cycles of regeneration before menopause. A significant advancement came with the realization that these valuable stem cells are also present in menstrual blood. This finding presents a less invasive method of stem cell collection compared to traditional techniques like surgical biopsies or bone marrow extraction. The potential applications of these stem cells are vast, extending beyond gynecological conditions such as endometriosis, where they could offer new diagnostic and treatment methods, reducing the prolonged diagnosis period that currently averages seven years. Moreover, menstrual stem cells have shown therapeutic promise in broader medical fields. Animal studies indicate their capability to regenerate insulin-producing cells in diabetic mice and improve wound healing. Despite these promising prospects, menstrual stem cell research faces challenges, primarily due to cultural taboos around menstruation and limited investment in women's health research. Consequently, this crucial area of regenerative medicine represents only a fraction of overall stem cell research. Addressing these challenges through more equitable research funding and overcoming societal biases could unlock the full potential of menstrual stem cells in various medical applications.

[The role of X chromosome in auto-immune diseases-The Hindu Science](#)

Science

Key takeaways

- 1. Gender Disparity in Autoimmune Diseases:** Studies, including a 2023 report from the University of Oxford, have shown that women are more susceptible to autoimmune diseases than men, with about 13% of women compared to 7% of men being affected in the studied population.



| Clear your doubts now.



2. **X Chromosome's Role:** The higher incidence of autoimmune diseases in women has been linked to the X chromosome. Women possess two X chromosomes, while men have one X and one Y chromosome, leading researchers to investigate the X chromosome's unique role in autoimmune diseases.
3. **X-Chromosome Inactivation Process:** A critical process called X-chromosome inactivation, which involves muting one of the two X chromosomes in women, is facilitated by a molecular coating composed of RNA and proteins. This mechanism ensures that only one set of X chromosomes remains active in female cells.
4. **XIST Molecule and Autoimmune Diseases:** The XIST molecule, essential for X-chromosome inactivation, has been found to trigger inflammatory immune responses. Some genes on the muted X chromosome escape inactivation, and proteins associated with XIST can induce autoantibodies, potentially contributing to autoimmune diseases.
5. **Experimental Findings in Mice:** Research involving bioengineered male mice with a modified version of XIST showed that these mice exhibited higher levels of autoantibodies and increased immune cell activity when subjected to a lupus-like disease, suggesting a link to autoimmune reactions.
6. **Implications for Future Research and Treatment:** Understanding the relationship between the X chromosome and autoimmune diseases opens new possibilities for diagnosis and treatment. Identifying specific XIST-related antigens that contribute to sex-biased immunity could lead to earlier detection and more effective management of autoimmune diseases, primarily affecting women.

Mains easy language

The higher prevalence of autoimmune diseases in women compared to men has been a longstanding puzzle in medical research. Recent studies, including a 2023 University of Oxford report, have highlighted this gender disparity, with a notably higher percentage of autoimmune conditions in women. This trend prompted scientists to investigate the underlying causes, focusing on factors like genetics, environmental triggers, hormonal imbalances, and lifestyle. A breakthrough in understanding this phenomenon came with the exploration of the X chromosome's role. Women have two X chromosomes, while men have one X and one Y chromosome. Researchers discovered that the molecular coating of one of the X chromosomes in women, composed of RNA and proteins, is crucial for a process called X-chromosome inactivation. This process ensures that one of the X chromosomes remains active while the other is muted. However, not all genes are silenced through this process. The persistence of some active genes on the muted X chromosome, along with the inflammatory immune response triggered by the XIST molecule (essential for X-chromosome inactivation), may contribute to the increased susceptibility to autoimmune diseases in women. This hypothesis was supported by studies on bioengineered male mice with a modified version of XIST, which showed heightened immune responses similar to autoimmune conditions. This research opens new avenues for understanding sex-biased immunity, potentially leading to more effective diagnostics and treatments for autoimmune diseases.

15th February 2024

[The blurring lines between makers of GenAI software, hardware-Indian Express Explained](#)

Science and technology

Key takeaways

1. **NVIDIA's Chat with RTX:** NVIDIA has launched 'Chat with RTX', enabling AI-powered chatbots to run offline on PCs. This tool integrates generative AI models with users' local files, enhancing query and information retrieval.
2. **OpenAI's Investment in Semiconductors:** OpenAI CEO Sam Altman is seeking trillions in investment to expand the semiconductor industry, addressing the AI chip supply-demand challenge, crucial for OpenAI's growth.



| Clear your doubts now.



3. **NVIDIA's Market Dominance:** NVIDIA's valuation has surged due to demand for its GPUs, pivotal in AI applications. Their advantage lies in their specialized GPUs, proprietary software, and comprehensive solutions like CUDA.
4. **Altman's AI Infrastructure Vision:** Sam Altman emphasizes the need for more global AI infrastructure, including fabrication capacity and data centers, to support large-scale AI development and deployment.
5. **Blurring Hardware-Software Lines in AI:** The article highlights a trend of integration between hardware makers like NVIDIA and software companies like OpenAI, suggesting a more interconnected AI industry.
6. **Industry Dynamics and Collaboration:** These developments indicate evolving roles and potential new collaborations in the tech sector, with companies expanding beyond traditional hardware or software domains.

Mains easy language

NVIDIA, a company known for making advanced computer chips, has recently launched a new tool called 'Chat with RTX'. This tool allows people to use AI-powered chatbots on their personal computers without needing an internet connection. It works by using NVIDIA's latest graphics cards and can interact with personal files and documents to answer user queries. Meanwhile, Sam Altman, the CEO of OpenAI (the company behind ChatGPT), is looking to invest trillions of dollars to improve the global production of computer chips. This is because there's a growing need for these chips in the AI industry, and currently, there aren't enough of them to meet demand. NVIDIA is already a big player in this market, controlling a significant portion of it with their high-tech chips initially designed for video games but now used in AI. These recent developments show how the lines between companies that make hardware (like computer chips) and those that develop AI software are becoming more blurred. This means they are starting to work more closely together and depend on each other's advancements.

Story of consumer sentiments-Indian Express Explained

Economy

Key takeaways

1. **Rural India's Low Optimism:** The Centre for Monitoring Indian Economy (CMIE) has found that rural India is currently low on optimism. This is based on regular surveys that gauge how people feel about their economic situation.
2. **Long-term Consumer Pessimism:** According to the Reserve Bank of India (RBI), Indian consumers have been pessimistic about economic conditions for nearly five years, with this trend being steady across various surveys.
3. **Political Context:** As the Lok Sabha elections approach, there's a growing divide in the narratives presented by the government and opposition. This divide is illustrated in the government's recent "white paper" on the economy, which compares its performance favorably against the previous Congress-led government.
4. **Demand for Minimum Support Prices (MSP):** Farmers, after ending their protests two years ago, have restarted their march to the capital, demanding legal rights to Minimum Support Prices for crops. The government's recent announcement on MSP for wheat shows a trend of higher MSP increases in election years.
5. **Consumer Sentiments' Fall:** CMIE reports a significant drop in consumer sentiments in January 2024, particularly in rural areas. This decline is attributed to stagnant commodity prices and reduced profits.
6. **RBI's Consumer Confidence Survey:** The RBI's survey, which includes responses on economic conditions, income, spending, employment, and price levels, shows that consumer sentiment has been largely negative since mid-2019. However, there has been a gradual recovery post-pandemic, though still within the range of pessimism.

Mains easy language



| Clear your doubts now.



The current state of consumer sentiment in India, especially in rural areas, is marked by a notable lack of optimism. This trend has been highlighted in the latest survey conducted by the Centre for Monitoring Indian Economy (CMIE). The Reserve Bank of India (RBI) has also reported a sustained pessimistic view among consumers regarding economic matters for nearly five years. This ongoing sentiment of economic caution coincides with the intensifying political narratives as the Lok Sabha elections approach, with the government and opposition presenting contrasting economic evaluations. A key focus in the current discourse is the demand for Minimum Support Prices (MSP) for crops, a topic reignited by farmers' renewed protests for legal rights to MSP. The government's MSP policy shows a pattern of increased rates during election years, hinting at a politically influenced economic strategy. RBI's consumer confidence survey reveals a gradual, albeit slow, improvement in consumer sentiment post-pandemic, though it still lingers in the pessimistic zone. These observations underscore a complex mix of economic policies, political influences, and broader market dynamics shaping the Indian consumer's perspective and mood.

[BAPS temple inaugurated by PM Modi in Abu Dhabi: features, significance-Indian Express Explained](#)

Art and culture

Key takeaways

- 1. Global Network of BAPS Temples:** The temple is built by the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS), a denomination of the Swaminarayan branch of Hinduism, known for its global network of 1,550 temples and centers.
- 2. Cultural Integration and Community Need:** The temple addresses the needs of the large Indian diaspora in the UAE, especially the BAPS Swaminarayan devotees. It's a product of a vision to bring together countries, communities, and cultures, with a unique collaboration among people of different faiths in its construction.
- 3. Architectural Harmony and Symbolism:** Constructed in the traditional Nagara style with seven shikharas representing the UAE's seven Emirates, the temple uses pink sandstone from Rajasthan and Italian marble. It features two central domes, the 'Dome of Harmony' and 'Dome of Peace', and a 'Wall of Harmony' with the word 'harmony' in 30 languages, symbolizing human coexistence.
- 4. Deities and Global Tales:** The temple houses deities from across India, including figures like Ram, Sita, Shiva, Parvati, and Krishna. It also incorporates stories from various global civilizations, such as Mayan, Aztec, Egyptian, and others, in its murals.
- 5. Facilities and Amenities:** The temple complex includes an assembly hall for 3,000 people, a community center, classrooms, and a majlis venue. It also features a 'holy river' with waters from the Ganga and Yamuna and a Varanasi-like ghat.
- 6. Cultural and Diplomatic Significance:** This temple stands as a testament to the growing bilateral relationship between India and the UAE, showcasing a blend of cultural diversity and religious harmony. It's not just a place of worship but a symbol of the deep-rooted connections and mutual respect between the two nations.

Mains easy language

The BAPS Swaminarayan temple in Abu Dhabi, inaugurated by Prime Minister Narendra Modi, is the first Hindu temple in the United Arab Emirates, symbolizing a significant cultural and diplomatic achievement. Built by the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS), the temple is a part of a global network of 1,550 temples and serves the large Indian diaspora in the UAE. The temple's architecture, crafted in the traditional Nagara style with seven shikharas, represents the seven Emirates of the UAE. It features a unique blend of pink sandstone from Rajasthan and Italian marble. The temple not only showcases Hindu deities from across India but also includes murals depicting tales from various global civilizations, highlighting its inclusive and multicultural ethos. As a landmark of India-UAE relations, the temple stands as a testament to the growing bilateral ties and mutual respect between the two countries. It serves not only as a place of worship but also as a symbol of the harmonious blend of diverse cultures and communities.



| Clear your doubts now.



Farmers' protest, lessons unlearnt-Indian express Editorial

Governance

Key takeaways

1. **Changing Context of Protests:** Unlike the 2020 agitation, which was not centered around Punjab and involved a wide range of farmer unions across several states, the current protest is more pronounced in Punjab. The leading groups in the previous protest are not actively participating this time.
2. **Identity Politics and Lack of Widespread Support:** The current protest lacks the broad support from various sectors of society seen in the earlier movement and is more influenced by identity politics.
3. **Fragmentation Among Unions:** There's a visible lack of unity among farmer unions, with major factions operating independently and competing for dominance.
4. **Structured Demands:** The demands are more organized, encompassing legal guarantees of Minimum Support Price (MSP), withdrawal from the World Trade Organisation, loan waivers, implementation of the Swaminathan Commission's recommendations, and addressing issues from the 2020-21 protests.
5. **Government's Reactionary Stance:** The government's response remains largely unchanged, marked by heavy barricading, internet shutdowns, and deployment of security forces, indicating a failure to learn from the past experiences of handling such protests.
6. **Political and Economic Implications:** The protest and government's response hint at deeper issues in the agriculture sector and the political landscape. There's a perception that the government is more responsive to protests around election times, and the issue of farmer welfare is becoming a significant political and economic topic.

Mains easy language

The recent farmers' protest in India, emerging ahead of the 2024 parliamentary elections, represents a significant yet familiar socio-political event with distinct differences from the 2020 agitation. Unlike the previous nationwide movement, the current protest is largely concentrated in Punjab, with less participation from other states like Haryana, Uttar Pradesh, Rajasthan, and Madhya Pradesh. The protest sees fragmentation among farmer unions, with different groups operating independently and presenting varying demands. The farmers' demands are now more structured, seeking legal MSP guarantees, withdrawal from international trade agreements, loan waivers, and implementation of the Swaminathan Commission's recommendations. Despite these evolved demands, the government's response mirrors its previous approach – heavy security deployment, internet shutdowns, and a general reactionary posture. This scenario underscores deeper agricultural and political issues in India. It highlights the need for more inclusive and proactive governmental engagement with farmers, addressing the underlying economic challenges in agriculture, and preventing these protests from becoming merely a tool in electoral politics.

The new echo system-Indian Express Editorial

Polity

Key takeaways

1. **Suppression of Dissent:** There's a growing trend of suppressing dissent and freedom of expression, as illustrated by incidents of police arresting victims of attacks and discouraging criticism of the ruling party.
2. **Alignment of Police with the Ruling Party:** The police appear to be increasingly aligned with the ruling party, enforcing policies that support the party's agenda and discourage opposition.



| Clear your doubts now.



- 3. Shift Towards Majoritarianism:** The events suggest a shift towards majoritarianism, where the majority's sentiments and views overshadow democratic principles like freedom of expression and the right to dissent.
- 4. Erosion of Democratic Values:** These developments indicate an erosion of core democratic values and a blurring of lines between the ruling party and law enforcement, leading to a mix of vigilante action and official policing.
- 5. Concerns for Future Elections:** There are concerns that this trend could affect the fairness of future elections, with systematic efforts to suppress free campaigning and the expression of dissenting views.
- 6. Redefinition of Democracy:** The article suggests that India may be on the verge of redefining its democracy, moving away from traditional liberal democratic values towards a form of majoritarian democracy that excludes differences, arguments, and criticism.

Mains easy language

The article discusses a worrying trend in India's democratic framework, where freedom of expression and dissent are increasingly under threat, potentially leading to a redefinition of democracy. Two incidents are highlighted: students of performing arts attacked mid-exam, with the police arresting the victims instead of the attackers, and a public meeting criticizing the ruling party being threatened, with subsequent attacks on the speaker's vehicle. These events signal a deeper issue where the police, seemingly aligned with the ruling party, discourage dissent and support a climate of self-censorship. This conflation of the ruling party with government machinery, embracing policies like bulldozer justice and encounter jurisprudence, raises concerns about the fading distinction between law enforcement and vigilante action. The article argues that these developments indicate a drift towards majoritarianism, where the majority's sentiments override liberal democratic values like freedom of expression. This majoritarian narrative is being widely accepted, sidelining informed debate and criticism. With national elections approaching, there are fears that this trend could lead to a democracy where elections occur, but free campaigning and genuine expression of dissent are suppressed. In essence, the article warns that India may be witnessing the emergence of a majoritarian democracy, where differences and arguments are excluded, marking a shift from the traditional understanding of democracy to a more dystopian reality.

Rescuing grace from disgrace-The Hindu Editorial

Polity

Key takeaways

- 1. Ceremonial Nature of Addresses:** These addresses have become customary and ritualistic, often drafted by the government and read by the President or Governor, lacking their personal input due to time constraints.
- 2. Presidents' and Governors' Involvement:** Past Presidents like R. Venkataraman and K.R. Narayanan, and Governors like the author, have tried to bring meaningful changes to these speeches, but their efforts were often limited by the system.
- 3. British Practice as a Model:** Venkataraman once suggested adopting the British practice of keeping the speech brief, focusing only on policy outlines and legislative agendas, but this was not implemented.
- 4. Challenges in Current Practice:** The article highlights the problems with the current practice, such as political biases and the Governor's compromised position of reading a speech they didn't draft.
- 5. Potential Solution:** It suggests a reform where the head of state would only read out a brief outline of legislative business, making the address less about the government's achievements and more about upcoming legislative work.
- 6. Resistance to Change:** Despite the benefits of such a reform, there might be resistance from governments reluctant to lose an opportunity to publicize their accomplishments.

Mains easy language



| Clear your doubts now.



The article discusses the ceremonial addresses of the President of India and Governors at the opening sessions of Parliament and State Legislative Assemblies, highlighting the need for reform in this traditional practice. These addresses, drafted by the government and read by the President or Governor, have become a mere formality, often lacking personal input from the readers due to tight timeframes and procedural constraints. Past Presidents like R. Venkataraman and K.R. Narayanan have attempted to make meaningful changes to these speeches, but their efforts were often limited by systemic rigidity. The article suggests adopting a practice similar to the British 'Throne Speech', which is brief and focuses only on outlining policy and legislative plans. Such a reform would streamline the process, making it less about the government's achievements and more about upcoming legislative work, thereby maintaining the dignity and relevance of these addresses in a politically polarized environment. The proposal faces potential resistance from governments reluctant to lose a platform for publicizing their accomplishments, but it offers a way to preserve the grace and significance of these ceremonial addresses.

The illusion of change in Pakistan-The Hindu Text and Context

International relations

Key takeaways

1. **PTI's Strong Performance:** Despite legal and political obstacles, Imran Khan's PTI emerged as the dominant force in the elections, notably in Punjab, securing 93 National Assembly seats.
2. **Establishment's Influence:** The Establishment's control over Pakistan's politics persists, regardless of the election results. The lack of a clear majority suggests ongoing political maneuvering by the Establishment.
3. **Nawaz Sharif's Limited Impact:** Nawaz Sharif's return did not significantly boost the PML-N's performance, indicating a need for introspection within the party.
4. **Continued Political Instability:** The formation of a coalition government, mirroring PDM 2.0, suggests that the political unrest of 2023 is likely to continue.
5. **Provincial Mandate Clarity:** PTI and PPP have clear mandates in KP and Sindh, respectively, while Balochistan remains politically divided.
6. **Regional and Religious Parties' Decline:** Except for MQM-P, regional and religious parties have seen reduced influence at the national level, remaining limited to provincial politics.

Mains easy language

The recent Pakistani elections have brought critical insights into the country's political dynamics. Imran Khan's Pakistan Tehreek-e-Insaf (PTI) emerged as a significant force despite facing numerous legal challenges and a biased playing field. Winning 93 seats in the National Assembly, PTI's victory, particularly in Punjab, reflects Khan's enduring popularity and public support. However, the results also underscore the persistent influence of the Establishment in Pakistan's politics. Despite PTI's strong performance, the Establishment's desire for a fragmented political landscape has been realized, as no party gained an absolute majority. This fragmentation hints at continued political maneuvering and instability, with the Establishment retaining its pivotal role in government formation and functioning. Nawaz Sharif's return, sanctioned by the Establishment, failed to significantly sway the election results in favor of the Pakistan Muslim League-Nawaz (PML-N). This outcome necessitates introspection within the PML-N, especially given its inability to dominate in Punjab. Provincially, the PTI and Pakistan Peoples Party (PPP) have maintained their strongholds in KP and Sindh, respectively. In contrast, Balochistan remains politically fragmented with no clear majority. The elections also highlighted the declining national influence of regional and religious parties, confining them primarily to provincial politics. In essence, while the election favored PTI and Imran Khan, the Establishment's deep-rooted influence and the continued political instability suggest that the landscape of Pakistani politics remains complex and largely unchanged at its core.





Does updating COVID-19 vaccines frequently have any benefits?-The Hindu Science

Science

Key takeaways

1. **Importance of Vaccine-Strain Match:** The effectiveness of COVID-19 vaccines, similar to influenza vaccines, heavily depends on the match between the vaccine strain and the circulating virus strain. A good match significantly increases vaccine effectiveness (VE).
2. **Challenges in Timely Updating:** The process of updating vaccines faces challenges due to the time required for development, manufacturing, and distribution. This delay can lead to a mismatch between the vaccine strain and the circulating virus, diminishing VE.
3. **Benefits of Updating Vaccines:** Research indicates that updated COVID-19 vaccines consistently improve neutralizing antibody titers. These updates could increase VE against symptomatic and severe disease caused by future variants by a substantial percentage.
4. **Limitations and Confounding Factors:** Despite these benefits, there are limitations such as past exposure to infections, differences between in vitro and in vivo studies, and the unpredictability of future highly mutated virus variants.
5. **Consideration of Cellular Immunity:** The role of cellular immunity, conferred by T-cells, is crucial and differs from the humoral immunity provided by antibodies. While antibodies require updates, T-cell immunity strengthens with each exposure.
6. **Situation in India:** In India, the low uptake of COVID-19 vaccines post-Omicron and the public perception of the pandemic being over affect the need for updated vaccines. Vulnerable populations might benefit more from updated boosters.

Mains easy language

Updating COVID-19 vaccines to match circulating virus strains can be beneficial, similar to how influenza vaccines are routinely updated. This process, however, faces challenges due to the time required for development and distribution, often resulting in a mismatch between the vaccine and the virus strain present in the population. Research has shown that when COVID-19 vaccines are updated to better match circulating strains, they significantly improve the body's ability to neutralize the virus. This updating can lead to better protection against symptomatic and severe disease. However, there are limitations to this approach, including the unpredictable nature of virus mutations and the time it takes to modify vaccines. In the context of COVID-19, T-cell immunity – another part of the body's defense – also plays a crucial role. While T-cell immunity strengthens with each exposure to the virus, antibody protection can wear off and may need updating. In India, the public's perception of the pandemic's end and the initial impact of the Omicron variant have led to a lower uptake of vaccines. The need for updated vaccines in India depends on whether the goal is to prevent severe disease or to protect vulnerable populations like the elderly and immunocompromised. While most healthy individuals may have sufficient protection from previous exposures or vaccinations, those at higher risk may benefit more from an updated booster. Overall, while updating COVID-19 vaccines offers potential benefits, it requires careful consideration of various factors, including the specific needs of different groups within the population.

Scientists seek more protections for 'living fossil'-The Hindu Science

Environment

Key takeaways

1. **Endangered Species Petition:** Environmental groups have petitioned the U.S. government to list the American horseshoe crab as an endangered species, highlighting the need for protective measures.
2. **Population Decline:** The population of horseshoe crabs has significantly decreased, particularly in the Delaware Bay area, with a two-thirds reduction in spawning numbers since 1990 and an 80% decline in egg densities over the past four decades.



| Clear your doubts now.



3. **Impact on Ecosystem:** The decline of horseshoe crabs adversely affects other marine species, like the rufa red knot bird, which relies on horseshoe crab larvae and eggs for food.
4. **Commercial Harvesting:** Pharmaceutical companies harvest large numbers of horseshoe crabs for their blue blood, which is essential for testing medical devices and drugs. Despite regulations, a notable percentage of these crabs do not survive the blood extraction process.
5. **Habitat Loss and Climate Change:** Horseshoe crabs face threats from habitat loss due to human activities like development and pollution, as well as from climate change-related issues like coastal erosion and sea-level rise.
6. **Vulnerability to Climate Change:** NOAA has classified the horseshoe crab's vulnerability to climate change as "very high," indicating the species is facing significant environmental threats.

Mains easy language

Environmental groups in the United States have petitioned for endangered species protection for the American horseshoe crab, a marine organism facing significant threats. These ancient creatures, often referred to as "living fossils," have experienced a drastic population decline, particularly in the Delaware Bay area, which was once their major stronghold. The decline in their numbers has had a cascading effect on other species, notably the rufa red knot bird that relies on horseshoe crab eggs for sustenance. The primary causes of the horseshoe crab's decline include commercial harvesting for biomedical purposes and habitat loss. The blue blood of horseshoe crabs is valuable for pharmaceutical companies, as it contains a clotting agent crucial for testing drugs and medical devices. However, this practice, along with habitat destruction due to oceanfront development, pollution, and climate change-related factors like coastal erosion and sea-level rise, has severely impacted their populations. The situation is aggravated by climate change, with the National Oceanic and Atmospheric Administration (NOAA) rating the species as highly vulnerable. This scenario underscores the urgent need for protective measures to conserve this ancient species integral to both ecological balance and medical research.

16th February 2024

[POLL BONDS VERDICT-Proportionality in Electoral Bonds case-Indian Express Explained](#)

Polity

Key takeaways

1. **Electoral Bonds Scheme Struck Down:** The Supreme Court unanimously ruled that the Electoral Bonds Scheme was not proportional to its stated goals of curbing black money and protecting donor privacy. This implies that the restrictions it imposed on free speech were considered excessive.
2. **Proportionality Test Explained:** This test is a judicial standard used to assess whether a law or government action, which infringes on fundamental rights, is justifiable. It requires that the action must:
 - Be sanctioned by law.
 - Be necessary in a democratic society for a legitimate aim.
 - Be proportional to the need for the interference.
 - Have procedural guarantees against abuse.
3. **Application in the Electoral Bonds Case:**
 - Government's Argument: The government contended that curbing black money and protecting donor anonymity were legitimate aims. It also argued that the right to information does not extend to information not possessed by the state.



| Clear your doubts now.



- Supreme Court's Analysis: The Court, particularly Justice Khanna and CJI Chandrachud, disagreed with the government's view. They held that donor anonymity is not a legitimate state aim and that the voters' right to know supersedes the anonymity in political party funding.

4. Double Proportionality Test: CJI Chandrachud applied a more stringent "double proportionality" test since the case involved balancing two competing fundamental rights - the right to information and the right to privacy. This test demands an even more careful examination of whether the state has adopted the least restrictive methods to realize both rights without disproportionately impacting either.

5. Alternative Methods Suggested: The judgment pointed out less intrusive methods, such as the electoral trusts scheme, which could achieve the objectives of curbing black money and protecting donor anonymity more effectively and less intrusively.

Implications of the Verdict:

- On Political Funding Transparency: This decision is a step towards more transparency in political funding in India, emphasizing the importance of voters' right to know over donor anonymity.
- On Constitutional Rights and State Action: The verdict reinforces the necessity for any state action that infringes on fundamental rights to pass the proportionality test, ensuring a balance between legitimate state interests and individual freedoms.

6. Electoral Bonds Description: Introduced in 2017, these were interest-free bearer instruments that citizens or corporations could buy from the State Bank of India and donate to political parties for funding election expenses. The aim was to cleanse the system of political funding and enhance transparency.

Mains easy language

In a landmark judgment, the Supreme Court of India, led by Chief Justice DY Chandrachud, unanimously struck down the Electoral Bonds Scheme, citing its disproportionate impact on fundamental rights. The Court applied the 'proportionality test', a key judicial standard, to assess whether the government's action in this case was justified. The test evaluates if state action infringes on fundamental rights, and if so, whether it is necessary and proportionate to the intended legitimate aim. The government defended the scheme, arguing that it aimed to curb black money and protect donor anonymity, asserting these as legitimate state interests. However, the Supreme Court, particularly through Justice Khanna and CJI Chandrachud's observations, found that the scheme's impact on the voters' right to know was not proportional to these objectives. The Court also introduced the concept of 'double proportionality' since the case involved balancing the right to information against the right to privacy. The verdict is significant for its emphasis on political transparency, reinforcing the importance of the public's right to know in the context of political funding. It underscores the necessity for any state action infringing on fundamental rights to be proportionate, necessary, and with adequate procedural safeguards. The Electoral Bonds Scheme, introduced in 2017, was intended to increase transparency in political funding, but the Court found that it fell short of achieving this goal in a constitutionally acceptable manner.

[Amendments in 3 key laws that SC struck down, restored status quo-Indian Express Explained](#)

Polity

Key takeaways

1. Representation of the People Act, 1951 (RPA):

Original Provision: Section 29C required political parties to declare contributions over Rs 20,000, specifying the source.

2017 Amendment: Exempted donations via Electoral Bonds from this disclosure requirement.

Supreme Court's Decision: Struck down the amendment, reinstating the original transparency measures, effectively balancing the right to privacy of donors with voters' right to information.



| Clear your doubts now.



2. Companies Act, 2013:

Original Provision: Section 182(1) capped corporate donations at 7.5% of the company's average net profits over the last three years, with full disclosure requirements under Section 182(3).

2017 Amendment: Removed donation caps and relaxed disclosure norms, not requiring companies to specify the recipient party.

Supreme Court's Decision: Overturned these amendments, emphasizing the role of these provisions in preventing corporate influence in elections and curbing potential corruption.

3. Income-tax Act, 1961:

Original Provision: Section 13A(b) required political parties to maintain a record of donations over Rs 20,000, including donor details.

2017 Amendment: Excluded Electoral Bond donations from this requirement and introduced a new clause for donations exceeding Rs 2,000 to be made through specific methods, including Electoral Bonds.

Supreme Court's Decision: Nullified these amendments, citing the importance of maintaining a record of all sizable donations to uphold the voters' right to information.

Mains easy language

In a pivotal decision, the Supreme Court of India nullified amendments made to three key laws under the Finance Act, 2017, which had facilitated the Electoral Bonds Scheme, thereby restoring the earlier legal framework governing corporate donations to political parties. This judgment revokes changes made to the Representation of the People Act, 1951 (RPA), the Income-tax Act, 1961, and the Companies Act, 2013. The RPA's original mandate required political parties to disclose donations above Rs 20,000, including the donor's identity. The 2017 amendment had exempted Electoral Bonds from this disclosure, a move the Supreme Court overturned to uphold transparency and the voters' right to information. In the Companies Act, the pre-amendment version capped corporate donations to political parties at 7.5% of the average net profits of the preceding three years, with complete disclosure. The 2017 amendment, which lifted these caps and eased disclosure requirements, was also struck down, emphasizing the need to limit corporate influence in politics. Finally, under the Income-tax Act, political parties were initially mandated to record all donations over Rs 20,000. The 2017 amendment's provision for Electoral Bonds exempted parties from maintaining such records, which the Court invalidated to ensure accountability and transparency in political financing. This ruling is a significant step towards maintaining the integrity of electoral funding in India, reinforcing the principles of transparency and fair elections, and curbing potential avenues for corruption and undue influence in politics.

[Objections that RBI, EC raised on the Electoral Bonds Scheme-Indian Express Explained](#)

Polity

Key takeaways

1. RBI's Objections:

- **Authority Over Bearer Instruments:** The RBI was concerned that allowing other entities to issue bearer bonds would undermine its exclusive authority in issuing such instruments, potentially destabilizing the financial system's credibility.
- **Money Laundering and Anonymity Risks:** It emphasized the risk of money laundering, as the identities of subsequent bond holders after the initial purchase would not be traceable.
- **Availability of Existing Financial Instruments:** The RBI suggested that the goals of the scheme, like ensuring electoral contributions from tax-paid money, could be effectively achieved through existing financial methods like cheques and digital payments, without introducing new bearer bonds.



| Clear your doubts now.



- **Forgery and Credibility Risks:** The RBI also warned of the potential for forgery and misuse by shell companies, highlighting the risks to the credibility and integrity of the financial system.

2. ECI's Objections:

- **Impact on Transparency in Political Funding:** The ECI expressed deep concerns about the scheme's potential to significantly reduce the transparency of political finance and funding.
- **Issues with Reporting Exemptions:** It criticized the legal amendments that exempted donations through electoral bonds from the mandatory reporting under the Representation of the People Act, advocating for the withdrawal of such exemptions.
- **Need for Disclosure of Corporate Donations:** The ECI recommended that companies should be required to disclose their political contributions party-wise, to enhance financial transparency in political donations.
- **Reintroduction of Cap on Corporate Funding:** The Commission suggested that a cap on corporate funding to political parties should be reinstated to limit the use of black money in political funding and reduce undue corporate influence in politics.

Mains easy language

The Electoral Bonds Scheme, conceived to streamline political funding, faced critical objections from the Reserve Bank of India (RBI) and the Election Commission of India (ECI), primarily centered around money laundering risks and transparency issues. The RBI's primary concerns included the undermining of its exclusive authority to issue bearer instruments, potential for money laundering due to anonymity of bond transfers, and the redundancy of the scheme given existing financial instruments like cheques and digital payments. Additionally, it highlighted risks related to forgery and the scheme's misuse by shell companies, which could jeopardize the financial system's credibility. The ECI's apprehensions revolved around the scheme's detrimental impact on transparency in political funding. It criticized the legal amendments exempting electoral bond donations from mandatory reporting under the Representation of the People Act. The ECI also stressed the importance of corporate donors disclosing their political contributions and recommended reintroducing a cap on corporate funding to political parties to curb black money use and limit corporate influence in politics. These objections underscored the need for robust regulations to ensure transparency and integrity in political funding.

[Regulating Political Funding: Rules Around The World, India's Challenge-Indian Express Explained](#)

Polity

Key takeaways

1. **Political Funding's Impact on Democracy:** Chief Justice DY Chandrachud's judgment highlighted the significant influence of money in politics and its role in democratic integrity.
2. **Regulations on Donations Worldwide:** Globally, political funding regulations often include bans on certain donors and limits on donation amounts to reduce major donors' influence.
3. **Expenditure Limits in Politics:** Countries like the UK impose spending limits on political parties to prevent excessive electoral expenditure, unlike the US, where such limits are constitutionally contested.
4. **Public Financing of Parties:** Models like Germany's public financing based on electoral performance and innovative approaches like Seattle's democracy vouchers are used to fund political parties.
5. **Disclosure Requirements for Transparency:** The need for parties to disclose their funding sources is crucial for preventing corruption and enabling informed voter decisions.



| Clear your doubts now.



6. Balancing Transparency and Anonymity: A global trend is to balance transparency with donor anonymity, particularly for smaller donations, contrasting with India's challenges, as highlighted by the Electoral Bonds Scheme.

Mains easy language

The Supreme Court's judgment on the Electoral Bonds Scheme, authored by Chief Justice DY Chandrachud, accentuates the profound impact of political funding on democracy, particularly in India. This ruling brings into focus the global practices in political funding and the challenges faced by India in this arena. Internationally, regulating political donations is a common practice, with restrictions on contributions from specific entities, such as foreign companies, and caps on donation amounts to prevent dominance by a few large donors. Additionally, expenditure limits are imposed in countries like the UK to avoid a financial arms race among political parties, a practice contrasted by the US, where constitutional interpretations have hindered similar limitations.

Public financing of political parties is another model, exemplified by Germany, which bases funding on electoral performance, and the US, which experiments with democracy vouchers in Seattle. Such measures aim to diversify funding sources and enhance public participation. Disclosure requirements form a crucial aspect of this regulatory framework, ensuring transparency and deterring corruption. However, striking a balance between transparency and protecting donor anonymity remains a challenge, particularly for smaller donations. India's Electoral Bonds Scheme highlighted these challenges, demonstrating the complexities in achieving an equitable balance between transparency, electoral integrity, and donor privacy in political funding.

What is behind Ladakh's unrest?-The Hindu Text and Context

Polity

Key takeaways

- Protests for Statehood and Special Status:** The primary cause of the unrest is the demand for full Statehood for Ladakh and its inclusion in the Sixth Schedule of the Constitution. This is to safeguard the region's land, culture, language, and environment.
- Initial Support and Subsequent Discontent:** Initially, there was support for the UT status, especially from religious minorities in Ladakh, who felt marginalized under the erstwhile J&K state's regime. However, the optimism soon turned to caution and anger due to fears of losing identity, ecological impact, and bureaucratic overreach.
- Demands of Local Bodies:** The Leh Apex Body (LAB) and the Kargil Democratic Alliance (KDA) have been at the forefront of the protests. Their demands include a full-fledged legislature for Ladakh, constitutional safeguards under the Sixth Schedule, separate Lok Sabha seats for Leh and Kargil, and job reservations for locals.
- Impact of Article 370 Abrogation:** The abrogation of Article 370 and the reorganization of J&K into two separate UTs led to concerns about the loss of political representation and protection of local interests.
- Unemployment and Economic Challenges:** The absence of significant job openings since the UT transformation has exacerbated unemployment and economic disempowerment, fueling the protests.
- Centre's Response and Future Outlook:** The Union Minister of State for Home Affairs is scheduled to meet representatives from the region, with the outcome of this meeting expected to influence the course of the protests. The demands for statehood, constitutional safeguards, and better representation in Parliament remain central to the resolution of this unrest.

Mains easy language

The ongoing unrest in Ladakh, marked by protests demanding full Statehood and inclusion in the Sixth Schedule, reflects deep-rooted concerns following its reorganization as a Union Territory (UT) in August 2019. Initially, there was optimism among Ladakh's religious minorities for UT status, hoping for liberation from perceived Kashmir-centric discrimination. However, this soon shifted to apprehension about losing their unique identity, ecological harm, and administrative overreach. The protests, led by the Leh Apex Body (LAB) and the



| Clear your doubts now.



Kargil Democratic Alliance (KDA), have been fueled by several factors. Key among these is the fear of demographic changes due to an influx of non-locals, coupled with environmental concerns over large-scale industrial projects. The demand for a full-fledged legislature, separate Lok Sabha seats for Leh and Kargil, and job reservations for locals are central to their agenda. The abrogation of Article 370 exacerbated these issues, stripping Ladakh of its political representation and leaving its governance in the hands of an externally appointed Lieutenant Governor. This has led to a sense of disempowerment and neglect, particularly in job creation and economic opportunities. The Centre's response to these grievances, especially in the upcoming meetings with regional representatives, is critical in addressing the unrest and shaping the future of this strategically important region.

Why did Kosovo face delays in Schengen approval?-The Hindu Text and Context

International relations

Key takeaways

1. **EU Members' Opposition:** Kosovo faced opposition from several EU member states that do not recognize its independence from Serbia, declared in 2008. This lack of consensus within the EU was a major obstacle.
2. **Lack of Global Recognition:** Kosovo's statehood is not legally recognized by the UN, and it faces opposition from significant global powers like Russia and China, adding to its international legitimacy challenges.
3. **Complexities of Schengen Membership:** Schengen membership, while not mandatory for EU countries, includes certain non-EU members. This complex structure of the Schengen agreement impacts the integration of countries like Kosovo.
4. **Impact of Crises on Schengen Policies:** The Schengen zone has been strained by various crises, including the Eurozone debt crisis and migration issues, influencing the EU's stance on border control and membership.
5. **Significance of Schengen Access:** For Kosovo, Schengen access enhances national mobility and European integration. For the EU, the Schengen area is a pivotal symbol of unity, promoting free movement and economic collaboration.

Mains easy language

Kosovo's recent achievement of visa-free access to the Schengen zone, marking a significant milestone as the last Western Balkan non-EU nation to attain this status, was delayed due to a blend of geopolitical factors and internal EU complexities. The most significant obstacle was the lack of recognition of Kosovo's unilateral declaration of independence from Serbia in 2008 by several EU member states, a stance that has been a major roadblock to Kosovo's international aspirations and integration within the EU framework. Additionally, the absence of legal statehood recognition for Kosovo by the United Nations, coupled with opposition from influential global players like Russia and China, further complicated its international legitimacy and standing. The Schengen agreement's structure, which encompasses both EU and non-EU members, adds another layer of complexity to its integration process. The path to Schengen visa waiver status for Kosovo was also influenced by broader European challenges, including the Eurozone debt crisis, migration issues, and the changing dynamics of EU border policies. For Kosovo, this development is not just about facilitating travel; it represents a significant step towards greater European integration and symbolizes a milestone in Kosovo's ongoing journey towards broader international recognition and collaboration within the European context.

The diversity blindspot in health policy-The Hindu Science

Sociology

Key takeaways

1. **Pronounced Gender Disparity:** While women constitute a significant portion of the health workforce, only 18% reach leadership roles, creating a stark gender imbalance in decision-making positions.



| Clear your doubts now.



2. **Dominance of Specific Groups:** Health policy-making is heavily centralized, with an over-representation of men, doctors, bureaucrats, and individuals from Delhi-NCR, leading to policies that may not reflect the diverse needs of the population.
3. **Effect of Limited Diversity on Policy:** The underrepresentation of women and marginalized groups in health committees results in policies that lack the necessary depth and consideration for diverse societal needs.
4. **Women Confined to Lower Roles:** In the health sector, women are largely in frontline, low-paid positions, facing significant barriers to career advancement due to societal and familial norms.
5. **Need for Inclusive Policy-Making:** To create more equitable health policies, experts recommend affirmative actions like reserving seats for women and marginalized individuals on health committees.
6. **Global Issue of Gender Inequality in Healthcare:** This problem mirrors global trends, where women are underrepresented in senior healthcare roles despite comprising a majority of the workforce, leading to a lack of mentorship and safe spaces.

Mains easy language

A recent study on India's health policy highlights a significant diversity blindspot, revealing deep-seated disparities in representation across gender, geographical, and socio-economic backgrounds. Notably, it exposes a stark gender imbalance: although women constitute nearly half of India's health workforce, their presence in leadership roles is markedly low at 18%. This disproportionate representation of men, especially in decision-making positions, suggests a skewed perspective in health policy formulation. Further, the study reveals an over-concentration of specific groups in health policy committees, particularly men, doctors, bureaucrats, and individuals from the Delhi-NCR region. This lack of diversity indicates a centralization in health policy-making, potentially leading to policies that fail to address the varied needs of a diverse population adequately. The underrepresentation of women and marginalized groups in health committees results in policies framed through a limited lens, often neglecting the specific requirements and challenges faced by different societal segments. Moreover, women in the health sector, predominantly in frontline and low-paid positions, face significant barriers to career advancement, exacerbated by societal norms and familial expectations. This diversity gap in health policy-making is not just a national issue but reflects a global trend where women, despite forming a majority of the health workforce, are underrepresented in senior roles. This systemic issue calls for affirmative actions, such as reserving seats for women and marginalized individuals on health committees, to ensure more inclusive and effective health policies. The study underscores the need for a broader perspective in health policy-making, incorporating diverse voices to build equitable health systems that cater to the entire population.

17th February 2024

[China's 'defence villages' along LAC, which it is populating-Indian Express Explained](#)

Science and technology(Defence)

Key takeaways

1. **Construction of Xiaokang Villages:** Since 2019, China has constructed 628 Xiaokang villages along the India-China border, particularly in the Tibet Autonomous Region, including areas along the borders of Ladakh and Arunachal Pradesh. These villages are primarily double-storey, large, and spacious buildings.
2. **Occupation of the Villages:** These villages, initially unoccupied, have recently started to be populated. This is particularly noted in villages opposite the Lohit Valley and the Tawang sector of Arunachal Pradesh.
3. **Purpose and Strategic Concerns:** The exact purpose of these villages is unclear, but they are considered to be dual-use infrastructure for both civil and military purposes. From an Indian strategic perspective, these villages are seen as a means for China to assert claims over areas along the LAC, raising concerns for the Indian military.



| Clear your doubts now.



- 4. Legal Status under Chinese Law:** A new Chinese law effective from January 1, 2022, covers the protection and exploitation of the country's land border areas. This law supports the development of these border defense villages.
- 5. India's Response:** In response, the Indian government launched the Vibrant Villages Programme in 2022 to develop its border villages into modern villages with amenities and as tourist attractions. This is an expansion of the existing Border Area Development Programme (BADP).
- 6. Infrastructure Development by China:** Apart from villages, China is also developing other infrastructure like roads, bridges, and housing in border areas, including in Arunachal Pradesh and Bhutanese territory.
- 7. Indian Infrastructure Development:** In parallel, India is strengthening its border infrastructure with new roads, bridges, helipads, and alternate routes to the LAC, especially in the Northeast region, to improve connectivity and strategic positioning.

Mains easy language

China's construction and recent occupation of "Xiaokang" border defense villages along the Line of Actual Control (LAC) with India marks a strategic escalation in the ongoing territorial dispute between the two nations. Since 2019, China has built 628 such villages, especially along the Tibet Autonomous Region, including in areas bordering Ladakh and Arunachal Pradesh. These well-constructed, spacious buildings were unoccupied until recently, when Chinese nationals began moving into villages opposite the Lohit Valley and the Tawang sector of Arunachal Pradesh. The purpose of these villages is ambiguous, yet they are perceived by Indian strategists as dual-purpose infrastructure serving both civilian and military objectives, primarily to reinforce Chinese territorial claims. This development has consequently heightened security concerns for India. In response, the Indian government initiated the Vibrant Villages Programme in 2022, aimed at modernizing and developing border villages, building on the existing Border Area Development Programme (BADP). Parallel to village development, China continues to enhance its border infrastructure, building roads, bridges, and housing, extending even into Bhutanese territory. India, in its counter-strategy, is bolstering its border infrastructure, focusing on improved connectivity and strategic positioning in the region. This development indicates a deepening of the border conflict, underlining the critical importance of infrastructure in asserting territorial claims and geopolitical influence in the region.

[What Swaminathan panel said-Indian Express Explained](#)

Economy(agriculture)

Key takeaways

- 1. MSP Enhancement:** The Commission recommended that the Minimum Support Price (MSP) should be at least 50% more than the weighted average cost of production. This was aimed at ensuring a fair and profitable price to farmers for their produce.
- 2. No C2+50% Formula:** Contrary to the current demands of farmers' unions, the Commission did not endorse the specific formula of C2+50% (actual cost of production plus 50%) for calculating MSP.
- 3. Reforms in Agricultural Marketing:** The Commission advocated for reforms in the Agricultural Produce Market Committee (APMC) Acts and the Essential Commodities Act, encouraging private sector participation and market liberalization.
- 4. Empowerment of Women in Agriculture:** A significant emphasis was placed on the empowerment of women in the agricultural sector, including access to credit, extension services, and the establishment of a National Board for Women in Agriculture.
- 5. Promotion of Agricultural Education:** The establishment of Farm Schools in the fields of innovative farmers was recommended to spread agricultural knowledge and best practices.
- 6. Development of Agricultural Infrastructure:** Recommendations included setting up grain banks, community food and fodder banks, promoting insurance, and establishing a national network of advanced soil testing labs.



| Clear your doubts now.



- 7. Autonomy for CACP:** The Commission suggested that the Commission for Agricultural Costs and Prices (CACP) should be an autonomous statutory organization, primarily responsible for recommending remunerative prices for key agricultural commodities.

Mains easy language

The National Commission on Farmers, led by M.S. Swaminathan, made pivotal recommendations to revitalize Indian agriculture. A key takeaway was the suggestion to increase the Minimum Support Price (MSP) to at least 50% more than the weighted average cost of production, aiming to ensure fair remuneration for farmers. Notably, the Commission did not advocate for the specific C2+50% formula for MSP calculation, a point currently emphasized by farmers' unions. The Commission also pushed for significant reforms in agricultural marketing, recommending amendments to the Agricultural Produce Market Committee (APMC) Acts and the Essential Commodities Act. These reforms were geared towards facilitating private sector engagement and enhancing market efficiency. A notable focus of the Commission was the empowerment of women in agriculture. It emphasized the need for their access to credit and extension services and proposed the establishment of a National Board for Women in Agriculture. Additionally, the Commission advocated for educational initiatives, including the establishment of Farm Schools to disseminate agricultural knowledge and practices. It also stressed the importance of developing agricultural infrastructure, such as grain banks and advanced soil testing labs. Furthermore, the Commission recommended that the Commission for Agricultural Costs and Prices (CACP) be made an autonomous statutory organization, tasked with setting remunerative prices for key agricultural commodities. Overall, these recommendations aimed at creating a more equitable, profitable, and sustainable agricultural sector in India, addressing the deep-seated challenges faced by farmers.

[OpenAI's breakthrough Sora: How AI can create videos from a text prompt-Indian Express Explained](#)

Science and technology

Key takeaways

- 1. Video Generation from Text:** Sora is designed to convert text prompts into videos, a complex task that has previously faced inconsistencies in the realm of generative AI. It can generate videos up to one minute long, maintaining high visual quality and adherence to the user's prompt.
- 2. Advanced Capabilities:** Sora can create complex scenes with multiple characters and specific types of motion. It accurately details subjects and backgrounds, and the model understands how objects exist in the physical world. It can interpret props and generate characters that express vibrant emotions.
- 3. Limitations and Challenges:** Despite its capabilities, Sora is not without limitations. It may struggle with complex prompts and accurately simulating the physics of a scene, such as not showing a bite mark on a cookie after it's been eaten, or confusing spatial details like left and right.
- 4. Safety and Misuse Prevention:** Prior to public release, OpenAI plans to collaborate with security experts and policymakers to prevent misuse of the technology, including generating misinformation or hateful content.
- 5. Comparison with Other AI Tools:** Text-to-video generation has lagged behind other AI-generated media like images and text. Sora represents a significant leap forward in this area, compared to other existing models like Google's Lumiere and other companies' text-to-video models.
- 6. Accessibility and Testing:** Currently, Sora is not available for public use. OpenAI is taking safety steps before integrating it into their products and is working with domain experts for testing. The company is also granting access to visual artists, designers, and filmmakers for feedback.
- 7. Safety Protocols:** OpenAI plans to use safety protocols similar to those used in DALL-E 3, including text classifiers to check and reject prompts that violate usage policies, and robust image classifiers to review video frames for adherence to usage policies.



| Clear your doubts now.



Mains easy language

OpenAI's latest innovation, Sora, marks a significant leap in the field of generative artificial intelligence (GenAI). This advanced model is capable of transforming text prompts into videos, a challenging task that GenAI has previously struggled with. Sora stands out for its ability to generate up to one-minute-long videos while maintaining high visual quality and closely adhering to the given prompts. Sora's proficiency lies in creating complex scenes involving multiple characters, various motions, and detailed backgrounds. It demonstrates an understanding of object physics and character emotions, offering a more immersive and realistic video experience. However, it's important to note that Sora is not flawless. The model can face difficulties with complex prompts and may struggle with simulating intricate physical interactions or maintaining spatial consistency. To address potential misuse, OpenAI is engaging with security experts and policymakers before making Sora publicly available. This step is crucial to prevent the generation of misinformation and hateful content. The company is also allowing access to a select group of visual artists, designers, and filmmakers for further development and feedback. In comparison to other AI tools, Sora represents a substantial advancement in text-to-video technology, surpassing the capabilities of similar models like Google's Lumiere. Despite its current limitations, Sora's introduction is a pivotal moment in AI development, expanding the possibilities for creative and realistic AI-generated video content.

STRAWS IN TRADE WIND-Indian Express Editorial

International relations

Key takeaways

1. **Growth in Exports:** India's goods exports grew by 3.1% to \$36.92 billion in January, compared to \$35.8 billion in the previous year. This growth marks a positive trend in three of the last four months.
2. **Yearly Comparison:** Despite this upturn, the total goods exports from April to January in the current financial year (\$353.9 billion) show a decline of nearly 5% from the same period last year (\$372.1 billion).
3. **Non-Oil Exports:** When oil exports are excluded, the decline is less severe, with non-oil exports down by approximately 2.5% this year.
4. **Sector Performance:** The electronics sector has shown robust growth, with a 9.31% increase in January and a 20.7% rise for the year so far. Pharmaceuticals also grew by 8%. However, major labor-intensive sectors like gems and jewelry, textiles, and leather products have not performed as well.
5. **Imports Dynamics:** Goods imports grew by 3% in January. Excluding oil and gems and jewelry, imports were 2.3% lower than last year. For the April-January period, total imports stood at \$561 billion, down 6.7% from the previous year.
6. **Variation in Import Segments:** There has been a significant reduction in imports of vegetable oil, fertilizers, and coal. However, imports of gold, electronic goods, and machinery have increased.

Impact of Red Sea Conflict: The conflict in the Red Sea, a crucial route for global and Indian trade with Europe, was expected to disrupt trade. While January's data did not show major disruptions, the full impact of the conflict, including on India's petroleum exports to Europe, may become more apparent in future data.

Mains easy language

India's merchandise exports have shown a slight recovery in January, indicating a complex trade scenario. The recent data from the Ministry of Commerce and Industry reveals a 3.1% growth in goods exports, reaching \$36.92 billion, compared to \$35.8 billion in the previous year. This improvement marks a positive trend in three of the last four months. However, when evaluated from April to January of the current financial year, there's a nearly 5% decline in total goods exports compared to the same period last year, indicating an overall downturn. Sector-wise, electronic goods and pharmaceuticals are witnessing robust growth, with electronics up by 20.7% this year. In contrast, labor-intensive sectors like gems and jewelry, textiles, and leather are not faring well. Goods imports also grew by 3% in January,



| Clear your doubts now.



but excluding oil and gems and jewelry, there's a 2.3% decline from last year. The conflict in the Red Sea, a critical passage for India's trade with Europe, was expected to disrupt trade flows. While January's data hasn't shown significant disruptions, the full impact, particularly on India's petroleum exports to Europe, might be visible in subsequent data. This mixed trade picture underscores the resilience of certain sectors amidst global challenges while highlighting vulnerabilities in others.

The MSP fallacy-Indian Express Editorial

Economy(Agriculture)

Key takeaways

- 1. MSP's Purpose and Legal Guarantee Demand:** MSP aims to stabilize essential commodity prices, shielding farmers from market volatility. However, government intervention under MSP is limited mainly to rice and wheat, related to National Food Security Act obligations. Farmers are advocating for a broader application of MSP.
- 2. Fiscal Impact Misconceptions:** There's a misconception that a legal MSP guarantee would lead to excessive government purchasing and fiscal burden. In reality, this would involve only a fraction of marketable surplus and intervention when market prices are below MSP.
- 3. Economic Implications of MSP:** The primary fiscal impact of MSP procurement is the difference between the economic cost of procured grain and its issue price. For non-NFSA crops, government costs are minimal unless subsidized sales occur.
- 4. Need for Diversification in MSP System:** Current MSP practices are geographically and crop-wise limited. A more diversified approach is needed for regional balance in agricultural productivity and natural resource management.
- 5. Market Stabilization and Inflation Control:** MSP can play a crucial role in stabilizing market prices and controlling inflation, benefiting both farmers and consumers.
- 6. Benefits to the Rural Economy:** Reforming the MSP system could enhance the rural economy by protecting farmer incomes and addressing demand and inflation challenges.
- 7. Political Consensus vs. Implementation Challenges:** Despite political agreement on the need for MSP reform, government hesitancy persists due to concerns over fiscal implications.

Mains easy language

The debate over a legal guarantee for Minimum Support Prices (MSP) in India has resurfaced with farmers' renewed protests. Their primary demand is for a legal guarantee of MSP, a mechanism designed to ensure price stability for essential agricultural commodities and protect farmers from market fluctuations. The call for this legal guarantee arises from the government's limited intervention in MSP implementation, mostly confined to rice and wheat for fulfilling National Food Security Act (NFSA) obligations, while other crops often go unsupported. Contrary to exaggerated fiscal concerns, the reality of implementing MSP widely is not as financially burdensome as feared. The fiscal impact is mostly the difference between the economic cost of procured grain and its issue price, with minimal costs for non-NFSA crops unless sold at a subsidy. A legal MSP guarantee would not require government procurement of all agricultural produce; intervention would be necessary only when market prices fall below MSP. Reforming the MSP system could offer broader economic benefits. It would not only stabilize market prices and protect against inflation but also support the rural economy by safeguarding farmer incomes. Despite a general political consensus on the need for MSP reform, implementation hesitations persist due to perceived fiscal risks. However, a balanced approach to MSP can protect farmer incomes, consumer interests, and maintain fiscal prudence.

A chance to stop the laundry cycle of Pakistan's elections-The Hindu Editorial

International relations

Key takeaways



| Clear your doubts now.



1. **Historical Political Cycles:** Pakistan's political history is marked by cycles of military-favored governments, followed by tensions and eventual dismissals, leading to new appointments and elections. This pattern has prevented any of Pakistan's 30 Prime Ministers from completing a full term.
2. **Military's Role in Politics:** Since 2008, the military has exerted influence without directly taking over the government. This influence is often exercised through judicial interventions, leading to the dismissal of Prime Ministers, as seen with PPP's Yousuf Raza Gilani and PML-N's Nawaz Sharif.
3. **Recurring Political Leaders:** Pakistan's political landscape sees a rotation of the same leaders, with major parties like PPP, PML-N, and PTI alternating in favor with the military. Leaders from these parties have experienced periods of imprisonment or exile.
4. **Imran Khan's Recent Dismissal:** Imran Khan, former PM, was dismissed after a no-confidence vote and faces charges ranging from corruption to insurrection. His party, PTI, has faced legal challenges and media restrictions.
5. **Election Outcomes and Coalition Formations:** The latest election results led to a hung parliament, with none of the parties securing a majority. PML-N and PPP have decided to form a government, although PTI Independents won the most seats.
6. **The Role of Pakistani Voters:** Despite skepticism over the election process, Pakistani voters showed up to vote, indicating a desire for change. The outcome reflects a rejection of the previous PML-PPP government.
7. **Need for Economic and Political Reforms:** The incoming government faces challenges in implementing economic reforms under the IMF program. There's an opportunity for political parties to collaborate on a common economic agenda and resist authoritarian tendencies.
8. **Global Implications for Hybrid Democracies:** Pakistan's situation offers lessons for other hybrid democracies, emphasizing the unpredictability of electoral outcomes and the importance of democratic unity against authoritarian forces.

Mains easy language

The recent elections in Pakistan offer a pivotal chance to break from the longstanding cycle of political instability dominated by military influence. Historically, no Pakistani Prime Minister has completed a full term, and major political parties have alternated between being in the military's favor and facing dismissal or exile. The military's indirect control has been evident through judicial interventions affecting leaders like PPP's Yousuf Raza Gilani and PML-N's Nawaz Sharif. Imran Khan's PTI, once favored, also faced a downfall marked by legal and media challenges. The latest election results, leading to a hung parliament, signal voter desire for change, rejecting the previous PML-PPP government. This presents an opportunity for all political parties to form a collaborative government, focusing on essential economic reforms under the IMF's guidance. Pakistan's experience serves as a lesson for hybrid democracies globally, highlighting the unpredictable nature of elections and the need for democratic forces to unite against authoritarianism. This election could be a turning point for Pakistan to establish a more stable and democratic governance structure.

[Brave new world-The Hindu Editorial](#)

Science

Key takeaways

1. **Intellectual Property Rights Challenge:** The FTA negotiations between India and EFTA, ongoing since 2008, are primarily hindered by disagreements over intellectual property rights, pivotal for EFTA members like Switzerland and Norway, which host major pharmaceutical companies.
2. **Pharmaceutical Industry's Structure:** The conflict in the pharma industry stems from the high cost of drug discovery versus the lower cost of producing generic copies. This creates a tussle between innovators of drugs and generic drug manufacturers.



| Clear your doubts now.



3. **Data Exclusivity Issue:** A critical aspect of the FTA talks is data exclusivity, which makes clinical trial data proprietary and inaccessible for a certain period. This provision could significantly impact India's ability to produce generic drugs.
4. **Potential Impact on India's Pharma Sector:** The adoption of data exclusivity in the FTA could severely restrict India's pharmaceutical industry, known for its significant role in manufacturing and exporting affordable drugs.
5. **India's Evolving Role in Drug Manufacturing:** India's growing stature in drug manufacturing necessitates the development of capabilities for conducting ethical drug trials and creating new drugs and therapies.
6. **Need for Investment in Fundamental Research:** For India to maintain and enhance its position in the global pharmaceutical market, substantial investment in fundamental research is essential. This investment is critical to foster innovation and self-reliance in the local drug industry, as demonstrated during the COVID-19 pandemic with the development of novel vaccine technologies.

Mains easy language

India's negotiation with the European Free Trade Association (EFTA) for a Free Trade Agreement (FTA) underscores a significant challenge in intellectual property rights, particularly in the pharmaceutical sector. Central to this challenge is the concept of data exclusivity, which could restrict access to vital clinical trial data for a period, thereby impacting India's capacity to produce generic drugs. This provision is crucial as it could significantly hinder India's robust pharmaceutical industry, known for affordable drug manufacturing and export. The conflict inherent in the pharma industry, between the high costs of original drug discovery and the lower costs of generic production, is a key point of contention in these negotiations. As India ascends in the global drug manufacturing arena, it must invest in developing capabilities for ethical drug trials and creating new drugs and therapies from scratch. This necessitates a substantial increase in investment in fundamental research to maintain and enhance India's position in the global pharmaceutical market, as evidenced by its innovative approach to vaccine development during the COVID-19 pandemic.

18th February, 2024

Smoking leaves a lasting adverse impact on immune response- the Hindu Science

Science & Technology

Key Takeaways:

Main Findings:

- Smoking has a significant and long-lasting impact on human immune responses, even after quitting.
- The study also highlights the substantial influence of Body Mass Index (BMI) and latent infections of cytomegalovirus on immune responses.
- These findings could help understand the risk of developing infections and immune-related illnesses, such as cancer or autoimmune diseases.

Study Details:

- Conducted by Darragh Duffy and colleagues from the Institut Pasteur, Université Paris Cité, Paris, France.
- Analyzed the effects of 136 environmental factors on the variability of immune responses in 1,000 individuals.
- Smoking was found to have the greatest influence among the studied environmental factors.

Effects of Smoking on Immunity:

- Smoking affects both innate (general response) and adaptive (specialized, pathogen-specific response) immunity.
- Innate immune responses, such as increased inflammatory responses, are transient and diminish after quitting smoking.



| Clear your doubts now.



- Adaptive immune responses are altered for many years post-quitting, impacting the levels of cytokines released upon infection or immune challenges.

Other Significant Findings:

- Body Mass Index (BMI) and cytomegalovirus infections also notably affect cytokine secretion.
- The variance in immune response associated with smoking is comparable to that linked to non-modifiable factors.

Implications:

- The study provides insights into how smoking acts as a risk factor for cancers beyond the lungs.

It opens avenues for further exploration into understanding the link between smoking and immune-related diseases.

Easy Explanation:

A recent study published in Nature has shed light on how smoking can change the way our bodies fight off sicknesses, and these changes can stick around for a long time, even if someone stops smoking. Besides smoking, the study also looked at how being overweight and having a common virus (called cytomegalovirus) can affect our immune system.

Researchers from France looked into how different things we do or are exposed to (like where we live, what we eat, and whether we smoke) can make our immune systems act differently. Out of many things they checked, smoking stood out because it had the biggest effect. It messed with both the body's general defense system and its ability to fight off specific germs. Interestingly, even after someone quits smoking, some of these immune changes don't go back to normal for a long time.

They also found that being overweight and having a certain virus can change how our bodies respond to sickness, but smoking was the big shocker because its effects were as strong as things we can't change, like our age or genetics.

This study is important because it helps us understand why smokers might be more likely to get certain diseases, not just lung cancer but other kinds too. It's like putting together a big puzzle about how our lifestyle choices, like smoking, can have long-term effects on our health, especially how we fight off diseases.

[Nearly 50% pregnancies in India are high risk- The Hindu Science](#)

Science Tech

Key Takeaways

Prevalence of High-Risk Pregnancies:

- High prevalence of high-risk pregnancies in India at 49.4%.
- 33% of pregnant women had a single high-risk factor, while 16% had multiple high-risk factors.

Regional Variation:

- Highest prevalence in Northeastern States: Meghalaya (67.8%), Manipur (66.7%), Mizoram (62.5%), and Telangana (60.3%).
- Lowest prevalence in Sikkim (33.3%), Odisha (37.3%), and Chhattisgarh (38.1%).

Study Details:

- Analysis based on the National Family Health Survey-5 (2019-2021) data.
- Included data from approximately 23,853 currently pregnant women aged 15-49.

Leading High-Risk Factors:

- Short birth spacing (less than 18 months).
- Adverse birth outcomes (miscarriage, abortion, or stillbirth).



| Clear your doubts now.



- Recent delivery through caesarean section.

Other Risk Factors:

- Maternal age (adolescents aged 15 to 17 and women older than 35).
- Maternal height (below 140 cm) and high body mass index (over 30).
- Lifestyle factors such as tobacco use and alcohol consumption.
- History of preterm deliveries, miscarriages, abortions, or stillbirths.

Regional High-Risk Factors:

- Adolescent pregnancies highest in Tripura (10.3%).
- Advanced maternal age (>35 years) most seen in Ladakh (14.3%).
- Short stature highest in Puducherry (4.8%).
- High BMI (>30) most prevalent in Goa (17.4%).
- Short birth spacing most common in Andhra Pradesh (48.1%).
- Highest caesarean delivery rates in Ladakh and Puducherry (50% each).

Conclusions:

- Short birth spacing identified as a primary factor for high-risk pregnancies.
- Higher prevalence of multiple high-risk factors among women with no education.

High-risk pregnancies more common in the third trimester.

Easy Explanation:

A recent study has revealed that almost half of the pregnant women in India are at high risk during their pregnancies. This means that many expectant mothers are facing health challenges that could affect them or their babies. The study looked at data from thousands of pregnant women across India and found that factors like having babies too close together, previous pregnancy problems, or having a C-section in the past can make a pregnancy high risk.

Interestingly, some areas in India, like the Northeastern States and Telangana, have more women facing these high-risk factors than other parts of the country. The study also noted that things like a woman's age, her height, and her weight can add to the risk. For example, very young mothers, older mothers, women who are very short, or women who are overweight have a higher chance of facing problems during pregnancy.

One major issue the study pointed out is that many women are not waiting long enough between having babies, which can lead to health problems for both the mom and the baby. This is especially true for women who don't have access to or don't use birth control to space out their pregnancies.

The study's findings are a wake-up call about the importance of taking care of women's health, especially during pregnancy, and making sure they have the information and resources they need to have safe and healthy pregnancies.

[Why did the SC invalidate electoral bonds- The Hindu FAQ](#)

Polity

Key Takeaways

Electoral Bonds Scheme Declared Unconstitutional:



| Clear your doubts now.



- Supreme Court found the Electoral Bonds Scheme unconstitutional due to its violation of citizens' right to information about political party funding.

Scheme Features:

- Electoral bonds were anonymous bearer instruments that could be donated to political parties and encashed through authorized banks.
- Denominations ranged from ₹1,000 to ₹1 crore.

Legislative Changes for the Scheme:

- Amendments were made to the Income Tax Act, Representation of the People Act (RPA), and Companies Act to facilitate anonymous contributions through electoral bonds.

Government's Defense:

- Government argued the scheme promoted legitimate funding through banking channels, curbed black money in elections, and protected donor anonymity.

Supreme Court's Rationale:

- The court held that voter's right to information is essential for exercising freedom to vote effectively.
- Found that the scheme's donor anonymity infringed on this right and was not the least restrictive means to balance privacy and transparency.
- Also ruled that amendments to the Companies Act, allowing even loss-making companies to donate, were arbitrary.

Consequences:

The ruling mandates full disclosure of contributor details, recipient parties, and bond denominations.

Easy Explanation:

The Supreme Court of India recently made a big decision about a system called Electoral Bonds, which was used to give money to political parties without telling anyone who gave the money. This was a big deal because it meant that people couldn't know where political parties were getting their money from, which is important for fair elections.

Electoral bonds were like special coupons that people or companies could buy and then give to a political party. The party could then turn these coupons into money, but no one knew who originally bought the coupons. This was done to try and stop illegal money from being used in politics, but it also meant that big companies could secretly give lots of money to political parties, and no one would know.

The Supreme Court didn't like this because they think it's really important for voters to know where political parties get their money from. This helps voters make better choices when they vote. The court said that there are other ways to give money to political parties that don't have to be secret and that it's more important for people to know about political funding than to keep donors hidden.

So, the court said that the whole system of electoral bonds was not okay because it kept too much information secret from the public. They said that all the details about who gives money to political parties need to be shared openly. This was a big win for people who want politics to be more open and honest.

19th February 2024

[ISRO latest launch: why GSLV rocket is called 'naughty boy'-Indian Express Explained](#)

Science and technology

Key takeaways



| Clear your doubts now.



1. **GSLV's Inconsistent Performance:** The GSLV (Geosynchronous Satellite Launch Vehicle) has a patchy track record with 15 flights before this launch, out of which four were unsuccessful. This high failure rate has earned it the nickname 'naughty boy.'
2. **Comparison with Other Rockets:** The GSLV's performance is less reliable when compared to ISRO's other rockets. The PSLV (Polar Satellite Launch Vehicle) has had only two failures in 60 launches, and the LVM3 (Launch Vehicle Mark-III) has a perfect record with no failures in its seven flights.
3. **Cryogenic Engine Challenges:** The GSLV's main issue lies in its cryogenic engine, crucial for the third and final stage of the flight. Handling liquid hydrogen and liquid oxygen at extremely low temperatures poses significant technical challenges.
4. **Historical Context of Cryogenic Technology:** ISRO initially used Russian-designed cryogenic engines, but due to international pressure and technology transfer issues, it had to develop its own technology. The indigenous development has been a complex and challenging process.
5. **Development of Indigenous Cryogenic Engine:** ISRO has successfully developed its own cryogenic engine, which is used in the LVM3. This engine is based on an entirely Indian design and represents a significant achievement in ISRO's technological capabilities.
6. **The Success of LVM3:** In contrast to the GSLV, the LVM3, equipped with the indigenously developed cryogenic engine, has proven to be highly reliable. It has successfully carried significant missions like Chandrayaan-2 and Chandrayaan-3, enhancing ISRO's reputation in space technology.

Mains easy language

The Indian Space Research Organisation (ISRO) recently launched the INSAT-3DS satellite using the GSLV-F14 rocket, a launch that gained significant attention due to the rocket's infamous reputation as ISRO's 'naughty boy.' The GSLV, or Geosynchronous Satellite Launch Vehicle, has had a turbulent history with a higher failure rate compared to ISRO's other rockets such as the PSLV and LVM3. Out of its 15 previous flights, four were unsuccessful, casting doubts on its reliability. This notoriety is primarily attributed to challenges with its cryogenic engine, a complex technology essential for the rocket's final stage. Originally reverse-engineered from a Russian design after international pressure halted a technology transfer deal, India's development of cryogenic technology has been fraught with challenges. In contrast, the LVM3, ISRO's most powerful rocket featuring an indigenously developed cryogenic engine, has demonstrated consistent success, including carrying out the critical Chandrayaan-2 and Chandrayaan-3 missions. The GSLV's recent successful launch of the INSAT-3DS satellite, despite its checkered past, marks an important step in ISRO's ongoing journey in space exploration and satellite technology.

BUBONIC PLAGUE CASE REPORTED IN THE US: SHOULD YOU BE WORRIED?-Indian Express Explained

Science

Key takeaways

1. **Source of Infection:** The individual in Oregon likely contracted the bubonic plague from a pet cat that was sick and subsequently did not survive, despite the person receiving effective antibiotic treatment.
2. **Nature of Bubonic Plague:** Caused by the bacterium *Yersinia pestis*, the bubonic plague is a zoonotic disease, capable of spreading between animals and humans. Transmission can occur through flea bites, direct contact with infected animals, or inhalation of respiratory droplets from infected individuals.
3. **Symptoms:** Bubonic plague typically affects lymph nodes, causing symptoms like fever, headache, weakness, and swollen lymph nodes. If untreated, it can progress to septicemic plague (infecting the bloodstream) or pneumonic plague, the latter being the most severe and contagious form.



| Clear your doubts now.



- 4. Historical Impact of Black Death:** The Black Death was one of the deadliest pandemics in history, wiping out a significant portion of Europe's population in the 14th century. A 2022 study linked certain genetic mutations from this period to increased survival chances, though these mutations are also associated with certain autoimmune diseases today.
- 5. Modern Response and Treatment:** Today, the risk of a widespread outbreak is significantly reduced due to modern antibiotics, better hygiene, and understanding of the disease. While cases still occur globally, they are relatively rare and usually containable.
- 6. Current Situation:** The case in Oregon is not expected to lead to a wider outbreak or significant human fatalities, thanks to the availability of effective treatments and preventive measures.

Mains easy language

The confirmation of a bubonic plague case in Oregon, the first since 2005, has brought attention to this ancient disease. The individual likely contracted the plague from a sick pet cat. Bubonic plague, caused by *Yersinia pestis*, can spread from animals to humans through flea bites, direct contact, or respiratory droplets. Symptoms include fever, headache, and swollen lymph nodes. If untreated, it can progress to more severe forms. Historically, the Black Death caused by this bacterium was devastating, significantly reducing Europe's population in the 14th century. However, modern medicine has drastically reduced the threat. Antibiotics are effective against *Y. pestis*, and improved hygiene and disease understanding further mitigate risk. While cases still emerge globally, they are rare and usually well-contained. The Oregon case, though serious, is not expected to lead to a larger outbreak or significant human fatalities, reflecting the advancements in medical science and public health measures.

The General, the rebel, & India-Indian Express Explained

International relations

Key takeaways

- 1. Election Results Challenge Military Influence:** The election results in Pakistan have defied the expectations set by the military-backed Sharif-Bhutto-Zardari combine. Independents backed by Imran Khan's PTI (Pakistan Tehreek-e-Insaf) party gained significant ground, indicating a shift in voter sentiment and a challenge to the military's influence.
- 2. Impact on Army Chief Gen Asim Munir:** The election results pose a challenge for the new Pakistan Army Chief, Gen Asim Munir. His authority is being tested in ways the military establishment is unaccustomed to, especially given the public's increasing dissatisfaction with the military's role in politics.
- 3. Munir-Imran Rivalry:** There is a history of rivalry between Gen Munir and Imran Khan, stemming from Munir's time as the head of the ISI (Inter-Services Intelligence) and his subsequent removal by Khan. This background adds complexity to the current political scenario.
- 4. PTI's Distinct Political Approach:** PTI relies heavily on social media for campaigning and adopts a polarizing 'good vs. evil' narrative, eschewing traditional political compromise. This approach has contributed to the current polarized political environment in Pakistan.
- 5. Implications for India:** The fractured political landscape in Pakistan raises questions for India regarding engagement and progress in bilateral ties. With a potential unstable civilian government in Pakistan, India faces uncertainty about who to engage with for meaningful diplomatic progress.
- 6. Munir's Stance on India:** Gen Munir's stance on India is crucial, especially considering past incidents like the ISI tipping off India about a potential terrorist attack in 2019. Understanding his position will be important for future India-Pakistan relations.

Mains easy language

Pakistan's political landscape is experiencing significant shifts with the recent election results, where Imran Khan's PTI defied military-backed expectations. This development challenges the influence of the military and the new Army Chief, Gen Asim Munir. The Munir-Imran



| Clear your doubts now.



rivalry adds complexity to the situation, with their history dating back to Munir's time as ISI head. PTI's unique political strategy, characterized by a polarizing narrative and heavy reliance on social media, has contributed to the current political polarization. For India, these changes bring uncertainty in diplomatic engagements, given the likely unstable civilian government in Pakistan and questions about who to engage with for meaningful progress. Gen Munir's past actions, such as alerting India about a potential terrorist threat, suggest a nuanced approach towards India, which is crucial for future bilateral relations. This evolving scenario presents challenges and considerations for India, especially in assessing channels of communication with Pakistan's military establishment under Munir's leadership.

[Seven cheetahs born in Kuno: Challenges, and the wild-vs-protected debate-indian Express Explained](#)

Environment

Key Takeaways:

- 1. Cub Development Stages:** Cheetah cubs are vulnerable in their early stages, requiring constant care from their mothers. They face numerous dangers, with less than one in ten surviving to adulthood. Key development milestones include moving nests to avoid predators, beginning to travel with the mother around six weeks, and starting to hunt at about one year.
- 2. Cub Rearing Protocols:** Experts emphasize the importance of minimal human interference and stress reduction for the mother and cubs. Essential practices include vaccinations, dietary supplements for proper development, and limiting visitor access to reduce stress.
- 3. Challenges in Rearing:** Jwala, a first-time mother, struggled with rearing her first litter, leading to the loss of three cubs. The reintroduction of a nursed-back cub to Jwala resulted in aggression, highlighting the complexities of maternal instincts in captive-raised cheetahs.
- 4. Survival Rates and Learning Curve:** First-time cheetah mothers often lose their entire first litter but gain critical rearing skills through the experience. Survival rates in the wild are low, with a study citing only a 4.8% survival rate from birth to adolescence in the Serengeti.
- 5. Debate on Enclosure Rearing:** There's a debate between South African experts and Kuno wildlife officials regarding raising cubs in enclosures. South African experts argue that protecting cubs in enclosures hinders natural selection and genetic strength, while Kuno officials prefer this method for safety.
- 6. Concerns Over Enclosure Rearing:** Rearing cheetahs in enclosures can lead to stress-related behaviors, medical conditions, and reduced reproductive performance, according to experts.

Mains easy language

The birth of seven cheetah cubs in Kuno National Park marks a hopeful turn for Project Cheetah in India. These cubs represent a crucial step in re-establishing cheetah populations, following significant losses last year. The cubs' development stages are fraught with challenges, including high mortality rates and the need for constant maternal care. Experts stress the importance of a natural upbringing with minimal human interference, emphasizing the role of the mother in teaching survival skills. However, difficulties have arisen, particularly with Jwala, a first-time mother, who struggled to rear her cubs, leading to fatalities and complications upon reintroduction of a separated cub. Survival rates for cheetah cubs are low in the wild, with a steep learning curve for first-time mothers. A debate exists over the use of enclosures for raising cubs, with South African experts cautioning against it due to potential negative impacts on natural selection and genetic strength. The approach in Kuno leans towards enclosure rearing for safety, but this raises concerns about stress-related issues and reproductive health. The project continues to navigate these complexities as it aims to successfully reintroduce cheetahs to India.

[AI in the year of elections-indian Express Editorial](#)

Polity



| Clear your doubts now.



Key Takeaways:

1. **Global Electoral Significance:** 2024 is termed as the “ultimate election year” by Time magazine, with a large portion of the world's population participating in elections, raising concerns about the impact of AI on these democratic processes.
2. **AI-Related Electoral Risks:** There is growing worry about AI's potential to amplify election-related issues, such as deepfakes, disinformation, and digital voter manipulation.
3. **Regulatory Responses:** Governments worldwide are swiftly implementing regulations to tackle AI-created disinformation. However, there are concerns that these rushed efforts might worsen the broader problems associated with AI.
4. **Disinformation Surge:** The cutback in content moderation staff at major companies like Meta, due to layoffs in 2023, may result in a surge in disinformation, as these companies struggle to manage content across numerous elections globally.
5. **Impact of AI Regulations on Industry Concentration:** Stringent AI regulations could paradoxically reinforce industry concentration, benefiting large companies like OpenAI, Anthropic, and Inflection, and disadvantaging smaller startups.
6. **Ethical and Regulatory Challenges:** The application of ethical frameworks and guidelines in AI is contentious, with societies differing on fundamental issues like free speech and risk management. This makes achieving consensus on AI regulation challenging.
7. **Need for Thoughtful Regulation:** There is a call for regulators to consider the unintended consequences of rushed AI regulations and to think several steps ahead to anticipate greater risks in the future.

Mains easy language

In 2024, a critical election year globally, the intersection of Artificial Intelligence (AI) and electoral processes is a major concern. With AI's potential to amplify challenges like deepfakes and disinformation, governments are rapidly implementing regulations to address these threats. However, there are apprehensions that such swift actions may inadvertently worsen AI's broader issues. The reduction in content moderation teams at major tech firms, due to extensive layoffs in 2023, heightens the risk of a disinformation surge. This situation is exacerbated as these companies prioritize resources for more influential markets, potentially neglecting less consequential ones. Moreover, stringent AI regulations could unintentionally solidify the dominance of large AI firms, creating barriers for smaller startups and reinforcing industry concentration. Ethical frameworks for AI regulation also present challenges, given societal divisions over fundamental issues like free speech and risk prioritization. The article emphasizes the need for thoughtful, foresighted regulation, cautioning against hasty measures that overlook long-term consequences. It advocates for regulators to anticipate evolving risks and to develop adaptable frameworks, ensuring that future elections are protected from AI's potential misuse. This balanced approach is crucial to safeguarding democratic processes while fostering healthy AI development.

Ties across the sea-The Hindu editorial

International relations

Key takeaways

1. **Strengthening Economic Partnerships:** The visit saw the signing of important agreements, including a Bilateral Investment Treaty (BIT) and the Comprehensive Economic Partnership Agreement (CEPA). This positions the UAE as a key economic partner for India, being the first country with which India has both trade and investment agreements.
2. **Growing Trade and Investment:** The UAE is now India's third-largest trading partner, second-largest export destination, and a significant source of foreign direct investment. Initiatives like Bharat Mart for Indian MSMEs are expected to further bolster these trade relations.



| Clear your doubts now.



- 3. Technological and Energy Collaboration:** Agreements were made to build digital infrastructure and conduct joint research and development in energy security. This includes a focus on green hydrogen and energy storage, emphasizing a move towards sustainable energy solutions.
- 4. Multilateral Cooperation Initiatives:** The visit highlighted the India-Middle East Economic Corridor, facilitating multilateral cooperation. Additionally, India and the UAE's involvement in the I2U2 initiative with the U.S. and Israel, and the BRICS framework, showcase their expanding global diplomatic roles.
- 5. Regional Stability and Diplomatic Relations:** The UAE is viewed by India as a stable partner in a region often troubled by conflict. Discussions on regional issues like the Israel-Gaza operations underscore the strategic importance of India-UAE relations in maintaining stability.
- 6. Cultural and Historical Connections:** The relationship between India and the UAE is deeply rooted in history and culture, including a long-standing maritime trade history and a significant Indian diaspora in the UAE. These ties are further reinforced by shared values of tolerance and pluralism.

Mains easy language

Prime Minister Narendra Modi's recent visit to the United Arab Emirates (UAE) significantly deepened India-UAE relations, marked by the signing of key economic and technological agreements. This visit, Modi's seventh to the UAE since 2014, reflects India's focus on the UAE as a primary economic partner, evident from the Bilateral Investment Treaty and the Comprehensive Economic Partnership Agreement. These agreements underscore the UAE's role as India's third-largest trading partner and a major source of foreign direct investment, exemplified by initiatives like Bharat Mart for Indian MSMEs. The visit also emphasized collaborative efforts in technology and sustainable energy, including building digital infrastructure and research in green hydrogen and energy storage. Furthermore, the establishment of the India-Middle East Economic Corridor and participation in the I2U2 initiative with the U.S. and Israel demonstrate a commitment to multilateral cooperation. Culturally, the visit highlighted the historical and diasporic connections between India and the UAE. The inauguration of Abu Dhabi's first Hindu temple signifies the shared values of tolerance and pluralism. Amidst concerns about rising majoritarian and sectarian forces in India, the UAE's move towards a more pluralistic governance model and India's cultural ties play a crucial role in maintaining these bilateral relations.

What are IPCC's assessment reports?-The Hindu Text and Context

Environment

Key takeaways

- 1. Comprehensive Coverage:** IPCC assessment reports cover a broad range of topics related to climate change, including scientific analysis, consequences, adaptation, vulnerability, and mitigation strategies. These reports are critical for understanding the multifaceted nature of climate change and its impacts.
- 2. Human Responsibility Highlighted:** The reports underscore the significant role of human activities in causing global warming, substantiating the need for urgent action to address climate change.
- 3. Urgency of Action:** The Sixth Assessment Report (AR6) emphasizes the critical necessity of limiting global warming to 1.5 degrees Celsius above pre-industrial levels, as per the Paris Agreement, and warns that the window for achieving this goal is rapidly closing.
- 4. Alignment with Global Stocktake:** The IPCC's reports are aligned with the 'global stocktake' under the Paris Agreement, a process that occurs every five years to assess the progress of countries towards achieving climate goals. The upcoming AR7 report is expected to inform the second global stocktake in 2028.



| Clear your doubts now.



- 5. Content and Focus of AR7:** The seventh assessment cycle (AR7) will include full assessment and synthesis reports, methodology reports, and a special report focusing on climate change and cities. These reports will consider the latest scientific literature, climate models, and engagement with diverse communities.
- 6. Timeline and Quality Concerns:** While there is a request for AR7 to be ready by 2028 to align with the next global stocktake, the exact timeline is pending. There are concerns that a shortened cycle could compromise the depth and quality of the reports, which typically require several years to complete.

Mains easy language

The IPCC's assessment reports are crucial in the global understanding and response to climate change. These comprehensive documents, prepared by scientists from countries in the UN Framework Convention on Climate Change, delve into the science, impacts, adaptation, vulnerability, and mitigation of climate change. They have been instrumental in confirming that human activities are a primary cause of global warming. The Sixth Assessment Report (AR6) underscored the urgency to limit global warming to 1.5 degrees Celsius, in line with the Paris Agreement, highlighting the closing window for effective action. Following AR6, the IPCC initiated its seventh cycle (AR7), which will inform the second global stocktake in 2028. This stocktake is a key mechanism under the Paris Agreement, evaluating global progress towards climate goals every five years. AR7 is set to include comprehensive assessment and synthesis reports, methodology reports, and a special report focused on climate change and cities. The decision on the exact timeline for AR7's completion is pending, with concerns about compromising the content's quality due to a potentially shortened cycle. However, the importance of these reports in guiding global climate action and policy remains undiminished, highlighting their role as an authoritative source of scientific information on climate change.

What our ancestors' genomes can tell us about modern health-The Hindu Science

Science

Key takeaways

- 1. Insight into Genetic Diseases and Ancestral Health:** Researchers have been using sequences of aDNA to understand genetic diseases that affected ancient humans. This research not only provides a historical perspective on these diseases but also helps in understanding how these diseases have evolved and how they might be treated today. For instance, the identification of chromosomal abnormalities like Down's syndrome, Klinefelter's syndrome, and Turner syndrome in ancient DNA samples sheds light on the history and evolution of these conditions.
- 2. Technological Advances in Genomic Studies:** Modern genomic technologies, like whole-genome sequencing of fragmented or degraded DNA, have enabled scientists to study chromosomal abnormalities in aDNA. This method bypasses the need for live cells and laborious culturing methods previously required for karyotyping.
- 3. Understanding Cardiovascular Diseases in Ancient Populations:** A study analyzed genetic variants associated with cardiovascular diseases in mummified individuals from various time periods and regions. This research indicates that cardiovascular diseases have been prevalent in human populations for at least 5,000 years.
- 4. Dietary Habits and Oral Health:** Analysis of ancient birch pitch, used for tool repair, has revealed information about the oral health and diets of ancient populations. For example, DNA analysis of pitch samples has identified microbial species associated with gum disease and provided clues about the diet of those who chewed it.
- 5. Revealing the Creators of Ancient Tools:** Sequencing DNA from bone remains at archaeological sites has helped determine the creators of ancient stone tools. In one case, DNA analysis identified Homo sapiens as the makers of tools found in a cave in Ranis, Germany, dating back about 45,000 years.

Mains easy language



| Clear your doubts now.



Ancient DNA (aDNA) research, utilizing cutting-edge genomic techniques, has significantly advanced our understanding of our ancestors' genetics, health, and lifestyles. This field has enabled scientists to explore genetic diseases prevalent in ancient human populations, offering insights into their evolution and impact on current health issues. Recent studies have demonstrated the presence of chromosomal abnormalities like Down's syndrome, Klinefelter's syndrome, and Turner syndrome in aDNA, providing a historical perspective on these conditions. Technological advancements in whole-genome sequencing allow for the analysis of fragmented or degraded DNA, bypassing the need for live cell culturing required in traditional karyotyping. For instance, research on cardiovascular diseases in mummified individuals suggests such conditions have been common for at least 5,000 years. Additionally, studies on birch pitch, used in tool repair, reveal ancient dietary habits and oral health. DNA analysis from archaeological sites has also identified the creators of ancient tools, clarifying historical ambiguities about tool usage by different hominin species. Overall, aDNA research offers unprecedented insights into human evolution, health, and disease, impacting our understanding of modern healthcare and genetic susceptibilities.

20th February 2024

Centre's MSP proposal: Situation in pulses, cotton-Indian Express Explained

Economy(Agriculture)

Key takeaways

- 1. Crop Diversification Proposal in Punjab:** The Centre proposed a plan for crop diversification in Punjab, suggesting that government-promoted cooperatives offer five-year contracts to procure five crops (tur, urad, masur, maize, and cotton) at MSP.
- 2. Reason for Diversification:** The initiative aims to address the environmental concerns in Punjab, where excessive cultivation of water-intensive crops like rice and wheat has led to groundwater depletion and the risk of desertification.
- 3. Farmers' Response to Proposal:** The protesting farmers rejected the Centre's proposal, maintaining their demand for a legally guaranteed MSP for all crops and aligning crop prices with the recommendations of the Dr. Swaminathan Commission.
- 4. Challenges in Crop Procurement:** The government's procurement of pulses and cotton is limited, with agencies like NAFED and CCI handling these crops. Despite recent increases, the procurement volumes remain low, and there are challenges in disposing of these stocks without impacting market prices.
- 5. Major Pulse Producing States:** A few states, including Madhya Pradesh, West Bengal, Bihar, and Maharashtra, contribute significantly to India's pulse production. The country still relies on imports to meet its domestic demand for pulses.
- 6. Goal of Pulses Self-Sufficiency:** India aims to achieve self-sufficiency in pulses by 2027, promoting their production through higher MSP and procurement initiatives like the Price Support Scheme (PSS) and Price Stabilisation Fund (PSF). However, the disposal of procured pulses at prices below MSP poses a challenge to this goal.

Mains easy language

The Centre's proposal for crop diversification in Punjab, presented during talks with protesting farmers, suggests a shift from the traditional rice and wheat cultivation to include crops like tur, urad, masur, maize, and cotton, with government cooperatives offering five-year procurement contracts at MSP. This initiative aims to address the environmental issues stemming from the excessive cultivation of water-intensive crops, which has led to significant groundwater depletion in Punjab. However, the proposal was met with resistance from farmers, who continue to demand a legally guaranteed MSP for all crops, in line with the Dr. Swaminathan Commission's recommendations. The article highlights the challenges in the government's procurement system, particularly for pulses and cotton. Despite NAFED and CCI's efforts, procurement volumes remain low, and the disposal of these stocks often occurs at prices below MSP, negatively impacting market prices and farmer-trader transactions. The article also notes that a few states like Madhya Pradesh and Maharashtra are the major producers



| Clear your doubts now.



of these pulses. India's goal to achieve self-sufficiency in pulses by 2027 faces challenges due to the current procurement and distribution system, which affects market dynamics and the financial viability of cultivating these crops.

[ODYSSEUS SPACECRAFT-indian Express Explained](#)

Science and technology

Key takeaways

- 1. Launch and Mission Objective:** The Odysseus, a robotic lunar lander, was launched by a US-based private company, Intuitive Machines of Houston. Its mission is to land on the Moon's surface, aiming to be the first American spacecraft to achieve this since Apollo 17 in 1972.
- 2. Historical Context:** This mission is notable as it represents the first private effort to successfully land on the Moon in one piece. Previous attempts by companies from America, Japan, and an Israeli nonprofit have failed.
- 3. Naming of the Spacecraft:** The spacecraft was named 'Odysseus' after a contest among employees of Intuitive Machines. The name, suggested by engineer Mario Romero, draws an analogy to the epic journey of the hero Odysseus in Homer's Odyssey, symbolizing the challenges, setbacks, and ultimate triumph akin to the lunar mission.
- 4. Significance of the Mission:** The success of Odysseus would demonstrate the capability of private companies to conduct space missions at a much lower cost than traditional NASA missions. This opens possibilities for more extensive exploration of the Moon by both NASA and commercial ventures.
- 5. NASA's Involvement:** NASA is the primary customer for this mission, having paid \$118 million for Intuitive Machines to transport its payloads. These include a stereo camera and a radio receiver for scientific experiments.
- 6. Risks and Expectations:** There is an acknowledged risk of failure, as noted by Thomas Zurbuchen, former associate administrator for science at NASA. He indicated that about half of the missions under NASA's Commercial Lunar Payload Services (CLPS) program are expected to fail. However, the cost-effectiveness of these missions compared to traditional ones (around \$100 million per CLPS mission versus \$500 million to \$1 billion for traditional missions) makes them a viable option.
- 7. Broader Context:** Odysseus is part of the CLPS program, which aims to utilize commercial companies for sending experiments to the Moon instead of NASA building and operating its own moon landers. This approach represents a shift in how space missions are conducted, emphasizing commercial participation.

Mains easy language

The Odysseus spacecraft, a robotic lunar lander launched by Intuitive Machines of Houston, represents a pivotal moment in space exploration. Named after the hero of Homer's "Odyssey," it symbolizes the challenges and triumphs of space travel. This mission is notable for being potentially the first successful private lunar landing, a milestone in space exploration history since Apollo 17's 1972 landing. Funded by NASA with \$118 million, Odysseus carries payloads for scientific research, including a stereo camera and a radio receiver. The mission is part of NASA's Commercial Lunar Payload Services (CLPS) program, which aims to leverage private companies for lunar exploration, a cost-effective alternative to traditional NASA missions. Despite the high risk of failure acknowledged by NASA officials, the success of such missions could significantly advance lunar research and open new frontiers for commercial space endeavors.

[La Nina-air quality links in new study-Indian Express Explained](#)

Geography

Key takeaways



| Clear your doubts now.



1. **La Nina Affects Air Quality in India:** The study found that La Nina, a climate pattern in the Pacific Ocean, can impact the air quality in India. This is the first time such a connection has been made.
2. **Cleaner Air in the North, Dirtier in the South and West in 2022:** During the winter of 2022, cities in Northern India, like Delhi, had cleaner air than usual. However, cities in the Western and Southern parts of India, like Mumbai and Bengaluru, experienced more pollution.
3. **Change in Wind Direction:** Normally, winds blow pollution from states like Punjab and Haryana towards Delhi. In 2022, the wind direction changed, so the pollution didn't reach Delhi as much but affected other areas instead.
4. **Long La Nina Influenced Wind Patterns:** The study suggests that the long-lasting La Nina event, which went on for three years, played a big role in changing the wind patterns that affected air quality.
5. **Other Local Weather Factors Also Important:** Besides La Nina, local weather conditions also influenced air quality changes in different parts of India.
6. **Not Sure About El Nino's Effects:** The researchers aren't certain if El Nino, another climate pattern opposite to La Nina, would have the opposite effect on India's air quality.
7. **Build-Up Over Time:** The impact of La Nina on air quality became noticeable after it had been around for a few years, indicating that these effects might build up over time.

Mains easy language

In 2022, a study by Indian researchers revealed a significant link between La Nina, a climate pattern characterized by the cooling of the Pacific Ocean, and air quality in India. This groundbreaking finding showed that La Nina events, which are becoming more severe due to climate change, can influence air pollution levels across different regions of India. During the winter of 2022, an unusual pattern was observed: northern Indian cities like Delhi experienced cleaner air, while western and southern cities, including Mumbai and Bengaluru, faced higher pollution levels. This shift was primarily due to changes in wind direction caused by the prolonged La Nina event, which lasted an unusual three years. Normally, winds carry pollutants from agricultural areas in Punjab and Haryana to Delhi. However, in 2022, the wind direction changed, redirecting pollutants away from Delhi towards southern regions. The study underscored the complexity of air quality dynamics, highlighting the interplay between global climatic events and local meteorological conditions. It also suggested a potential cumulative effect of prolonged La Nina events on air circulation patterns, raising important considerations for environmental and urban planning in the context of changing global climate patterns.

[Chanda Kochhar, husband's arrest :why Bombay HC called it abuse of power'-Indian Express Explained](#)

Polity

Key takeaways

1. **Arrests Termed as 'Abuse of Power':** The Bombay High Court described the arrests of Chanda and Deepak Kochhar as an "abuse of power" by the Central Bureau of Investigation (CBI), stating they were made "without application of mind."
2. **Violation of Legal Procedures:** The court highlighted that the arrests violated Section 41A of the Criminal Procedure Code (CrPC), which mandates certain conditions for arrest to avoid unnecessary detention.
3. **Background of the Case:** The Kochhars were arrested in December 2022 in connection with a case filed in 2019 by the CBI. The allegations were about cheating and corruption related to loans sanctioned by ICICI Bank to the Videocon Group during Chanda Kochhar's tenure as CEO.



| Clear your doubts now.



4. **Lack of Justifiable Grounds for Arrest:** The High Court observed that the Kochhars had complied with all CBI notices and appeared before the agency. There was no new material evidence against them since the FIR, making the arrests unjustifiable.
5. **Section 41A of CrPC Explained:** This section allows police to issue notices to individuals connected to a case. If the person complies with these notices, arrest is not warranted unless there are specific reasons, like preventing evidence tampering or further offences, which must be recorded in writing.
6. **Supreme Court's Previous Judgments:** The High Court referenced past Supreme Court rulings emphasizing the need to adhere to Section 41A to prevent unnecessary arrests and casual detention authorizations.
7. **Court's Observation on Non-Cooperation:** The court noted that the accused's right to remain silent, as a defense against self-incrimination, should not be mistaken for non-cooperation.

Mains easy language

The Bombay High Court labeled the arrests of former ICICI Bank CEO Chanda Kochhar and her husband Deepak Kochhar as an "abuse of power" by the CBI, stating they were conducted "without application of mind." These arrests, related to a 2019 CBI case on allegations of cheating and corruption linked to loans sanctioned to the Videocon Group, violated Section 41A of the Criminal Procedure Code. This section mandates that if a person complies with police notices, arrest is not warranted without specific, recorded reasons. The court noted that the Kochhars had complied with all CBI notices and there was no new evidence against them since the FIR. The High Court's decision emphasized the necessity of following legal procedures in arrests, highlighting the right against self-incrimination and the importance of not equating silence with non-cooperation. This ruling underscores the significance of procedural safeguards in the legal system to prevent arbitrary and unjustified use of power.

[A wider viewfinder-Indian Express Editorial](#)

International relations

Key takeaways

1. **Raisina Dialogue's Global Platform:** The Raisina Dialogue, hosted in collaboration with the Observer Research Foundation and the Ministry of External Affairs, has become a prominent global platform, drawing ministers, officials, scholars, and policy researchers to discuss India-centric global agendas.
2. **Milan Naval Exercises' Significance:** The biennial Milan Naval Exercises in the Bay of Bengal underscore India's growing influence in maritime diplomacy, attracting naval leaders worldwide for discussions on maritime issues.
3. **Emergence of Intelligence Diplomacy:** Alongside these events, India is engaging in "intelligence diplomacy," involving exchanges with intelligence officials from like-minded countries, marking a significant shift in its diplomatic strategy.
4. **Shift from Isolationism:** These engagements indicate India's move away from its post-Cold War isolationism, as it now actively seeks to build productive international partnerships in various sectors.
5. **India's Expanding Diplomatic Footprint:** These events collectively highlight the expanding footprint of Indian diplomacy, showing a more vigorous and multifaceted engagement with global issues and international partners.
6. **Alignment with Broader Strategic Goals:** India's participation in these forums aligns with its broader strategy to build regional and global coalitions, addressing a wide range of security challenges and enhancing its role in international affairs.

Mains easy language

India's increasing global engagement is highlighted by three major events: the Raisina Dialogue, the Multilateral Naval Exercise (Milan), and a gathering of intelligence officials. The Raisina Dialogue, a collaboration between the Observer Research Foundation and the Ministry of



| Clear your doubts now.



External Affairs, focuses on promoting India-centric global agendas through discussions among ministers, officials, scholars, and policy researchers. The Milan exercises, held biennially in the Bay of Bengal, facilitate professional exchanges on maritime issues among naval leaders globally. Simultaneously, India is actively participating in "intelligence diplomacy," involving regular exchanges with like-minded countries' intelligence agencies, demonstrating a shift from traditional isolationism to forming strategic partnerships. This move aligns with India's broader strategy of building regional and global coalitions, modernizing its intelligence agencies, and responding to an expanding range of security challenges. These developments represent a significant change in India's diplomatic approach over the last decade, reflecting its growing strategic importance in international politics. The involvement in these diverse areas of diplomacy, from discourse to naval to intelligence, showcases India's commitment to playing a more prominent role on the global stage.

[The recent report on local Fintech players-The Hindu Text and Context](#)

Science and technology

Key takeaways

- 1. Concerns Over Foreign-Owned Fintech Dominance:** The Committee expressed concerns about the dominance of fintech apps owned by foreign entities, like Walmart-backed PhonePe and Google Pay, in the Indian digital payment ecosystem.
- 2. Promotion of Local Players:** The Committee recommended the promotion of local fintech players, citing better feasibility for regulatory bodies like the RBI and NPCI to control these local apps compared to foreign apps operating in multiple jurisdictions.
- 3. UPI's Market Share:** Unified Payments Interface (UPI) has a significant share of digital payments in India (73.5% in volume but only 6.67% in value in FY 2022-23), indicating its widespread adoption for smaller transactions.
- 4. NPCI's 30% Volume Cap:** The National Payments Corporation of India imposed a 30% volume cap on transactions facilitated using UPI for third-party apps to prevent risks and protect the UPI ecosystem. The deadline for compliance was extended to December 31, 2024, to encourage more players to contribute to UPI's growth and reach market equilibrium.
- 5. Concerns About Fraud and Money Laundering:** The Committee also raised concerns about fintech companies being used for fraudulent activities and money laundering, citing the example of an Abu Dhabi-based app, Pyppl, used by Chinese investment scammers.
- 6. Advantages of Local Fintech Players:** Experts from Deloitte India highlighted that local fintech players have a natural advantage in understanding the customer, ecosystem participants, and the market infrastructure. A balanced mix of local and foreign fintech players is essential to cater to different areas like payments, lending, wealth management, and insurance, ensuring compliance with local laws.

Mains easy language

The Parliamentary Standing Committee on Communications and Information Technology recently highlighted concerns regarding the dominance of foreign-owned fintech apps in India's digital payment sector. In its report, the Committee emphasized the substantial market share of apps like Walmart-backed PhonePe and Google Pay in the Unified Payments Interface (UPI) ecosystem. It noted that while UPI commands a significant volume of digital transactions, its value share remains relatively low. The Committee advocated for promoting local fintech players, citing easier regulatory oversight by bodies like the RBI and NPCI over domestic apps compared to foreign ones operating in multiple jurisdictions. This perspective aligns with NPCI's implementation of a 30% cap on individual app transaction volumes via UPI, intended to protect the UPI ecosystem and encourage equitable market participation. The report also raised concerns about fintech platforms being misused for fraudulent activities, underscoring the need for robust regulatory frameworks to ensure secure and inclusive growth in digital payments.

[Why was there a political deadlock in Northern Ireland?-The Hindu Text and Context](#)

International relations



| Clear your doubts now.



Key takeaways

1. **Political Deadlock Post-Brexit:** The political deadlock in Northern Ireland was primarily due to the DUP's opposition to the internal trade border established between Northern Ireland and the rest of the UK following Brexit. This border was necessary to maintain a border-free Ireland and protect the Good Friday Agreement.
2. **DUP's Boycott of Stormont Institutions:** Following the 2022 regional elections, the DUP boycotted the Stormont institutions due to their disagreement with the Northern Ireland Protocol, which kept Northern Ireland within the EU customs union, creating a de facto border in the Irish Sea.
3. **Introduction of the Windsor Framework:** The 2023 Windsor framework addressed the DUP's concerns over the UK's withdrawal protocol. It simplified the process for sending goods to Great Britain from Northern Ireland and introduced a dual lane system for goods movement, easing trade procedures between Northern Ireland and Great Britain.
4. **Formation of New Government:** The introduction of the Windsor framework facilitated the formation of a new government in Northern Ireland, ending the political stalemate and enabling the DUP to rejoin the Stormont Assembly.
5. **Ongoing Challenges:** Despite the resolution of the immediate deadlock, Northern Ireland continues to face challenges, including balancing unionist and nationalist interests and addressing the broader impacts of Brexit on its political and economic framework.

Mains easy language

The political deadlock in Northern Ireland (NI) was primarily due to the Democratic Unionist Party's (DUP) opposition to the internal trade border created between NI and the rest of Britain following the UK's withdrawal from the EU. This border, a result of the Northern Ireland Protocol, was necessary to keep NI within the EU customs union, ensuring a border-free Ireland and protecting the Good Friday Agreement. The DUP, not reconciling with this arrangement, boycotted the Stormont institutions since the 2022 regional elections. The recent formation of a new government in NI came after the introduction of the 2023 Windsor framework, which addressed the DUP's concerns. This framework simplified the paperwork for sending goods from NI to Great Britain and established a dual lane system for goods movement, easing trade procedures. This development likely influenced the DUP's decision to rejoin the Stormont Assembly, although challenges remain, including balancing the interests of unionists and nationalists and addressing the long-term impacts of Brexit on NI's political and economic landscape.

[Hundred years ago, Satyendra Nath Bose changed physics forever-The Hindu Science](#)

Science

Key takeaways

1. **Background and Education:** Bose was born in 1894 in Calcutta (now Kolkata). He displayed exceptional mathematical abilities from a young age and went on to study physics at Presidency College. There, he met Meghnad Saha, who became a lifelong friend and collaborator.
2. **Early Career and Challenges:** Bose and Saha both taught at the newly founded Rajabazar Science College, where they faced the challenge of teaching new physics concepts, primarily in German, to their students. They became early adapters of the concepts of quantum theory and even translated Einstein's papers on general relativity into English.
3. **Bose's Discovery:** Bose's significant contribution came while he was a lecturer at Dhaka University. He was attempting to explain Planck's law of black-body radiation to his students but found the existing theories unsatisfactory. Planck's law, fundamental to quantum mechanics, suggested that energy is quantized, but its derivation had inconsistencies.



| Clear your doubts now.



- 4. Bose's Novel Approach:** Bose approached the problem by eliminating the use of classical physics, focusing solely on quantum mechanics. He proposed a method to find the most probable distribution of energy among quanta of radiation, leading directly to Planck's formula. This approach showed that Planck's law was a statistical property of radiation quanta, or photons.
- 5. Impact and Recognition:** Although initially overlooked, Bose's paper gained prominence after Albert Einstein endorsed it, translating and submitting it to a prestigious journal. This paper is now considered one of the six foundational papers of quantum theory.
- 6. Legacy in Quantum Statistics:** Bose's work laid the groundwork for quantum statistics. His methods implied that the total number of photons is not conserved, a concept later expanded upon by Paul Dirac, who distinguished between two categories of fundamental particles: bosons (named after Bose) and fermions.
- 7. Bose's Career Aftermath:** Despite his significant contribution, Bose published sparingly and never replicated the impact of his earlier work. He likened himself to a comet that appeared brightly once and never returned.

Mains easy language

In 1924, Satyendra Nath Bose, a physicist from Dhaka University, revolutionized quantum theory with a significant discovery. Faced with explaining Planck's law of black-body radiation, Bose found existing theories inadequate. He innovatively approached the problem by excluding classical physics and focusing on quantum mechanics. Bose proposed a method to determine the most probable distribution of energy among radiation quanta (photons), leading directly to Planck's formula. This approach revealed that Planck's law was a statistical property of photons, fundamentally challenging existing scientific norms. Bose's work initially received little attention until Albert Einstein recognized its value, translated it into German, and submitted it to a journal. This paper is now regarded as one of the foundational documents of quantum theory. Bose's methods implied that photons are not conserved, a crucial aspect later expanded upon by Paul Dirac, who established the distinction between two categories of fundamental particles: bosons (named after Bose) and fermions. Despite his profound contribution, Bose published sparingly afterward and described himself as a comet that shone brightly once but never returned. His work remains a cornerstone in the field of quantum mechanics.

[Saturn's moon Mimas may have ocean under its crust-The Hindu Science](#)

Geography

Key takeaways

- 1. Background:** Mimas, one of Saturn's smallest major moons, also known as one of the "big seven" or "inner moons," was previously considered an unlikely candidate for hosting an ocean. Its surface is heavily cratered, resembling the "Death Star" from the Star Wars franchise.
- 2. Study and Data Analysis:** In a study published in Nature on February 7, 2024, scientists analyzed orbital motion data from NASA's Cassini spacecraft. They focused on Mimas's librations (oscillations) to infer its internal structure.
- 3. Libration Analysis:** The moon's librations suggested two possibilities: an elongated silicate core or a global ocean. These would affect Mimas's gravitational interactions with Saturn, altering its orbit over time.
- 4. Solid Moon Hypothesis Rejected:** Initial calculations assuming Mimas was entirely solid reached a dead end, leading scientists to explore the subsurface ocean theory.
- 5. Theoretical Model for Subsurface Ocean:** Scientists used a theoretical approach to understand how an underground ocean would impact the moon's movement. This involved considering the viscoelastic properties of the outer icy layer and hydrostatic conditions of interior interfaces.



| Clear your doubts now.



6. **Ice Sheet Thickness:** Calculations indicated that the ice sheet covering the ocean would be around 20-30 km thick to match observations, consistent with a previous study in 2022.
7. **Surface Heat and Ocean Formation:** The surface heat release on Mimas was estimated at about 25 milliwatts per square meter. This level of heat would reduce the moon's orbital eccentricity significantly over 4-5 million years. Simulations based on these values suggest that Mimas's ocean could have formed between 2-25 million years ago.
8. **Comparison with Enceladus:** The predicted surface heat on Mimas closely matches observations of Enceladus, another Saturn moon known to have a global ocean beneath its crust. This similarity hints that Mimas might also have a hydrothermally active core, despite the lack of surface indicators.

Mains easy language

Saturn's moon Mimas, traditionally seen as an unlikely candidate for hosting an ocean due to its heavily cratered surface, might actually harbor a subsurface ocean, according to a 2024 study published in Nature. This revelation comes from an analysis of Mimas's orbital motion using data from NASA's Cassini spacecraft. The focus was on Mimas's librations, oscillations that suggested the presence of either an elongated silicate core or a global ocean, both of which would influence its gravitational interactions with Saturn and consequently, its orbit. Initial calculations assuming Mimas was completely solid were inconclusive, leading researchers to explore the possibility of an underground ocean. Theoretical models indicated that the outer icy layer of Mimas is viscoelastic, while the interior interfaces are hydrostatic. These calculations suggested an ice sheet around 20-30 km thick, aligning with earlier studies. The surface heat release on Mimas, estimated at about 25 milliwatts per square meter, suggests that its orbital eccentricity would significantly reduce over millions of years, indicating the ocean's formation could date back 2-25 million years. This finding, along with the similar surface heat observed on Enceladus (another Saturn moon with a known subsurface ocean), points to the potential of a hydrothermally active core in Mimas.

21st February 2024

[Art 142, why SC quashed Chandigarh mayor election, why it matters-Indian Express Explained](#)

Polity

Key takeaways

1. **Misconduct by the Presiding Officer:** The Court found that the presiding officer, Anil Masih, had deliberately invalidated eight ballots cast in favor of the AAP-Congress candidate, Kuldeep Kumar 'Tita'. The Court observed that these votes were wrongly treated as invalid and should have been counted in favor of Kumar, who would then have won with 20 votes against the BJP candidate Manoj Sonkar's 16 votes.
2. **Use of Article 142:** The Supreme Court invoked its power under Article 142 of the Indian Constitution to ensure "complete justice" and uphold the sanctity of electoral democracy. The Court's use of this article highlights the importance it places on fair electoral processes.
3. **Political Significance:** The election was crucial as it witnessed, for the first time, an alliance between the AAP and Congress against the BJP. This set the stage for potential alliances in the upcoming Lok Sabha elections and indicated evolving political strategies in the region.
4. **Before the Election:** Before the polls, the AAP and Congress alliance had a clear advantage in the 36-member House. However, the BJP claimed to have secured 16 votes, including the support of an SAD councillor and Chandigarh Lok Sabha MP Kirron Kher.
5. **Election Day Irregularities:** On the day of the election, the presiding officer's rejection of eight AAP-Congress votes led to the BJP candidate being declared elected.



| Clear your doubts now.



6. **Legal Proceedings:** Following the election, evidence emerged of the presiding officer marking ballot papers to declare them invalid. This led to legal actions culminating in the Supreme Court's intervention.
7. **Potential Impact of a Re-election:** Had the Court ordered a fresh election instead of just quashing the result, the recent defection of three AAP councillors to the BJP would have altered the balance of power, potentially favoring the BJP in a new election.
8. **Accountability and Consequences:** The Court's decision to hold the presiding officer accountable and its criticism of his actions underline the judiciary's role in safeguarding democratic processes.

Mains easy language

The Supreme Court of India's decision to quash the Chandigarh mayoral election results, held on January 30, marks a significant intervention in maintaining the integrity of electoral processes. The Court found that the presiding officer, Anil Masih, had improperly invalidated eight votes cast for AAP-Congress candidate Kuldeep Kumar 'Tita', affecting the election's outcome. Invoking Article 142 of the Constitution, the Court emphasized its role in ensuring "complete justice" and upholding democratic values, demonstrating its commitment to fair electoral practices. This election was particularly notable due to the first-time alliance between AAP and Congress, pitted against the BJP, signifying a potential shift in political strategies ahead of the Lok Sabha elections. The controversy began when the presiding officer declared eight votes invalid on election day, leading to the BJP candidate's victory. However, subsequent evidence and legal scrutiny revealed these votes were wrongly invalidated, prompting the Supreme Court's involvement. The Court's decision to not order a fresh election but to declare Kuldeep Kumar as the rightful winner is crucial, especially considering recent political shifts, including the defection of three AAP councillors to the BJP. This ruling not only corrects an electoral malpractice but also sends a strong message about the judiciary's role in safeguarding democracy and the sanctity of electoral processes.

Defining forests, saving them-Indian Express Explained

Environment

Key takeaways

1. **Reaffirmation of Broad Forest Definition:** The Supreme Court's insistence on using the broad, dictionary-based definition of forests from the 1996 T N Godavarman case challenges the narrower scope proposed in the 2023 amendments to the Forest Conservation Act (FCA).
2. **Questioning 2023 FCA Amendments:** The Court's directive raises concerns about the 2023 amendments potentially excluding non-notified and non-recorded forest lands from protection under the FCA.
3. **Government's Justification for Amendments:** The government aimed to clarify ambiguities and facilitate development through the amendments, but this has been contested as unnecessary due to the existing provisions in the Forest Rights Act of 2006.
4. **Environmental and Legal Concerns:** The challenge to the amendments by environmental groups and retired officials underscores the potential risks to a large portion of India's forests and the legal implications of redefining forest areas.
5. **Mandate for Comprehensive Forest Records:** The Supreme Court's order for states to compile and submit detailed forest records by March 31 highlights the importance of accurate data in forest conservation.
6. **Conservation vs. Development Debate:** The case exemplifies the delicate balance between environmental conservation and developmental needs, with the final ruling expected to have significant implications for forest management in India.

Mains easy language

The Supreme Court's directive to follow the 1996 T N Godavarman judgment's broad definition of 'forests' marks a critical juncture in India's environmental jurisprudence, particularly in light of the recent 2023 amendments to the Forest Conservation Act (FCA). This directive



| Clear your doubts now.



challenges the government's narrower definition of forests, aimed at clarifying ambiguities and facilitating development, especially in tribal areas. However, this rationale is contested due to the Forest Rights Act of 2006, which already addresses the development needs of tribal communities.

Environmental groups and retired officials have raised concerns that the 2023 amendments could significantly reduce the protection of India's forests by excluding non-notified and non-recorded forest lands from the FCA's scope. The Supreme Court's insistence on adhering to the broader definition until a consolidated record of forests is prepared underscores the importance of comprehensive data in forest management and conservation.

This ongoing legal debate reflects the complex balance between environmental conservation and developmental needs in India. The final outcome of this case, expected in July, will be crucial in determining the future of forest management and conservation in the country.

[FINALLY A CHIP FABRICATION PLANT IN INDIA?THE PROGRESS SO FAR-Indian Express Explained](#)

Economy

Key takeaways

1. **Entry of Major Players:** The Tata Group and Israeli company Tower Semiconductor have applied to set up chip fabrication plants in India, marking a significant step in establishing the country's first chip fabrication facility.
2. **India Semiconductor Mission (ISM):** These applications are part of the ISM, aimed at boosting India's presence in the global semiconductor industry and reducing dependence on foreign chip imports.
3. **Government Incentives:** The Indian government is offering a 50% capital expenditure subsidy as part of a \$10 billion incentive scheme to attract chipmakers, enhancing India's competitiveness in the semiconductor sector.
4. **Scope of Proposals:** The proposals include plans for full-blown foundries, ATMP (packaging) facilities, and OSAT (assembly and testing) plants, with U.S.-based Micron Technology already cleared to establish a \$2.75-billion ATMP plant in Gujarat.
5. **Potential Global Impact:** Successful establishment of these facilities could position India as a key player in the international semiconductor market, currently dominated by countries like China and the United States.
6. **Previous Attempts and Challenges:** Past efforts to set up chip fabrication units in India, including a joint venture between Foxconn and Vedanta, have faced hurdles, underscoring the challenges in realizing this ambitious goal.

Mains easy language

India is poised to make a significant leap in the semiconductor industry with the Tata Group and Tower Semiconductor applying to establish chip fabrication plants under the India Semiconductor Mission (ISM). This move, confirmed by Union Minister Rajeev Chandrasekhar, represents a potential end to India's long-standing challenges in setting up a domestic chip fabrication facility. The government is backing this initiative with a robust incentive scheme, offering a 50% capital expenditure subsidy as part of a \$10 billion plan to attract global chipmakers. This strategy includes proposals for full-scale foundries, ATMP facilities, and OSAT plants, with Micron Technology already progressing with a major ATMP plant in Gujarat. If successful, these developments could significantly enhance India's role in the global semiconductor market, reducing reliance on imports and potentially altering the landscape dominated by countries like China and the United States. However, previous attempts like the Foxconn-Vedanta joint venture highlight the ongoing challenges in actualizing these ambitious projects.

[Yale varsity apologise for slavery links:India connection of its benefactor-Indian Express Explained](#)

History

Key takeaways



| Clear your doubts now.



1. **Yale University's Apology for Slavery Links:** On February 16, Yale University issued a formal apology for its historical association with slavery. This acknowledgment is part of a broader recognition of the university's past involvements in slavery, following the release of a comprehensive study titled "Yale and Slavery: A History".
2. **Elihu Yale's Indian Connection:** The study highlights the Indian connection of Elihu Yale, the university's namesake. Yale spent over 25 years in Madras (now Chennai), India, where he accumulated wealth, partly through the slave trade.
3. **Elihu Yale's Early Life and Career:** Born in Boston, Massachusetts, in 1649, Elihu Yale moved to Britain with his family at a young age. He later joined the East India Company, eventually becoming the governor-president of Madras.
4. **Involvement in Slave Trade in Madras:** During his tenure with the East India Company, Yale oversaw the sale and purchase of enslaved people, benefiting from the local slave trade, especially during a famine in the 1680s.
5. **Evidence of Yale's Slave Trading:** Historical evidence, including a painting donated to the Yale Center for British Art, depicts Yale with an enslaved child, suggesting his direct involvement in slavery.
6. **Yale's Role as a Benefactor:** After returning to England, Elihu Yale became one of the country's wealthiest men and a significant benefactor of the Collegiate School in New Haven, Connecticut. His contributions, including hundreds of books and other goods, led to the school being renamed Yale College in his honor.

Mains easy language

Yale University recently issued a formal apology for its historical ties to slavery, a significant acknowledgment of its past following the publication of "Yale and Slavery: A History". This comprehensive study reveals the deep connections between the university and the slave trade, particularly through its benefactor, Elihu Yale. Born in Boston and raised in Britain, Yale's tenure as the governor-president of Madras with the East India Company marked his involvement in the slave trade, notably during a famine in the 1680s when the sale and purchase of enslaved people surged. Yale's Indian connection is crucial; he accumulated a substantial fortune in Madras, part of which was derived from slave trading activities. Historical evidence, including a notable painting featuring Yale with an enslaved child, further cements his direct engagement in slavery. Upon his return to England, Yale emerged as a wealthy man and became the primary benefactor of the Collegiate School in New Haven, Connecticut. His substantial donations, including books and goods, were pivotal in the school's early development and led to its renaming as Yale College, in his honor. This apology from Yale University signifies a crucial step in confronting and acknowledging its uncomfortable historical truths.

Loss of a guiding light-Indian Express Editorial

Art and culture

Key takeaways

1. **Profound Spiritual Influence:** Sant Shiromani Acharya Shri 108 Vidhyasagar Ji Maharaj Ji was a revered spiritual leader whose teachings and life were deeply rooted in Jain principles, emphasizing compassion, truthfulness, and respect for all life forms.
2. **Promoter of Education and Knowledge:** He strongly advocated for education as a key to empowerment and societal enlightenment, emphasizing the importance of self-study, self-awareness, and lifelong learning.
3. **Impact Beyond Jain Community:** Acharya Ji's influence extended beyond the Jain community, impacting individuals across various faiths and cultures with his spiritual guidance and teachings.
4. **Holistic Approach to Healthcare:** His contributions to healthcare, particularly in underserved regions, integrated physical health with spiritual well-being, addressing the overall needs of individuals.



| Clear your doubts now.



- 5. Advocate of Ethical and Participatory Democracy:** He emphasized the importance of clean politics and active participation in democratic processes, advocating for policy-making focused on public welfare and integrity.
- 6. Environmental Consciousness and Social Reform:** Acharya Ji promoted environmental sustainability and modern, sustainable agriculture, understanding the importance of ecological balance. He also engaged in reforming jail inmates, demonstrating his commitment to societal improvement.

Mains easy language

The passing of Sant Shiromani Acharya Shri 108 Vidhyasagar Ji Maharaj Ji marks the loss of a spiritual giant whose life and teachings profoundly impacted not just the Jain community but people across diverse faiths. Renowned for his deep wisdom, compassion, and commitment to uplifting humanity, his life epitomized the core principles of Jainism. His approach to spirituality was marked by a deep respect for all living beings, embodying Jainism's ideals in both actions and teachings. Acharya Ji was a strong advocate for education, viewing it as crucial for building a just and enlightened society. He believed in the power of knowledge and self-awareness, promoting a holistic educational approach that combined self-study with cultural ethos. His writings, especially in Sanskrit, Prakrit, and Hindi, reflect his intellectual depth and commitment to spiritual discourse. His contributions extended to healthcare, emphasizing a holistic approach that combined physical well-being with spiritual wellness. Acharya Ji also actively participated in societal reforms, including environmental sustainability and modernizing agriculture. He championed clean politics and democratic participation, seeing these as foundational for national development. In essence, Acharya Vidhyasagar Ji's life was a beacon of spiritual guidance, ethical living, and societal betterment, leaving a lasting legacy that continues to inspire many.

[Why are we falling ill so often?-Indian Express Editorial](#)

Science

Key takeaways

- 1. Rising Influenza A Cases:** India is witnessing a resurgence of Influenza A (H1N1), with increased cases and some fatalities reported across multiple states. The National Centre for Disease Control (NCDC) has identified several influenza virus strains, including A(H1N1) pdm09, A(H3N2), and Type B Victoria lineage.
- 2. Vaccination Advisory:** In response to the growing influenza infections, NCDC recommends the prudent use of the Southern Hemisphere's 2024 quadrivalent influenza vaccine. Health experts also suggest testing for both flu and Covid-19 in people showing respiratory symptoms.
- 3. Characteristics of Seasonal Influenza:** Seasonal influenza is a highly contagious respiratory infection with symptoms like sudden fever, cough, and severe malaise. While most people recover without medical intervention, it poses severe risks, particularly to the elderly and those with preexisting health conditions.
- 4. Influence of Environmental Factors:** The spread and severity of influenza are impacted by various factors including high population density, poor hygiene, weather conditions favorable to virus survival, and climate change. Climate change, in particular, is altering the patterns of influenza epidemics.
- 5. Concerns of Antimicrobial Resistance (AMR):** The indiscriminate use of antibiotics for respiratory infections, including influenza, is contributing to growing levels of AMR in India. Over 80% of antibiotics are prescribed unnecessarily in low- and middle-income countries for influenza-like illnesses, exacerbating the AMR challenge.
- 6. Need for Enhanced Immunization Programs:** There's a pressing need to expand immunization programs to include influenza vaccines, especially for high-risk groups. Such measures can reduce community transmission, decrease the need for antibiotics, and align with pandemic preparedness and AMR containment efforts.



| Clear your doubts now.



Mains easy language

India is experiencing a concerning resurgence of Influenza A (H1N1), with significant outbreaks reported across several states. The National Centre for Disease Control (NCDC) has identified various influenza strains, including the A(H1N1) pdm09, A(H3N2), and Type B Victoria lineage, prevalent in the country. This rise in influenza cases has led to increased hospital admissions and chest infections, prompting health authorities to recommend the Southern Hemisphere's 2024 quadrivalent influenza vaccine.

Seasonal influenza, characterized by symptoms like fever, cough, and malaise, is a highly contagious respiratory infection that poses serious risks, especially to the elderly and those with pre-existing health conditions. The virus's spread is influenced by factors such as population density, hygiene practices, and environmental conditions, including climate change. Climate change, in particular, is reshaping the patterns and severity of influenza epidemics. A major concern accompanying this resurgence is the increasing antimicrobial resistance (AMR) due to the overuse of antibiotics in treating respiratory infections. Overprescription of antibiotics, especially in low- and middle-income countries, is exacerbating AMR challenges. To combat this issue and enhance pandemic preparedness, there is a growing emphasis on expanding immunization programs to include influenza vaccines, particularly for high-risk groups. This approach aims to reduce community transmission, minimize unnecessary antibiotic use, and address complications arising from influenza infections.

[EL NINO, LA NINA-Indian Express Editorial](#)

Geography

Key takeaways

- 1. Link Between Air Pollution and External Factors:** A new study has established a connection between air pollution in Indian cities and external phenomena like El Nino and La Nina, along with climate change. This is the first time such a correlation has been observed in India.
- 2. Impact on Meteorological Conditions:** These external factors don't create new pollution sources but can influence the distribution of pollutants by altering meteorological conditions like wind patterns and temperatures.
- 3. Case Study of Delhi and Mumbai:** The study highlights how the cleaner air in Delhi and more polluted air in Mumbai during the winter of 2022 were partly due to a record-breaking La Nina event, demonstrating the impact of these external factors.
- 4. Current Weak Influence, Potential Future Growth:** Currently, only strong El Nino or La Nina events significantly impact local meteorological conditions. However, this influence could grow stronger under future climate change scenarios, posing additional challenges to air pollution control in India.
- 5. Need for Direct Emission Reduction:** The study underscores that tackling emissions at the source remains the most effective way to address air pollution. High baseline emissions are the primary cause of poor air quality in Indian cities.
- 6. Inadequacy of Short-Term Solutions:** Short-term measures like artificial rain or odd-even schemes are seen as inadequate. The study recommends focusing on long-term strategies to reduce emissions directly from the sources, benefiting both air quality and climate change mitigation.

Mains easy language

A new study has linked air pollution in Indian cities like Delhi and Mumbai to external factors such as El Nino and La Nina events, and climate change, marking the first time such phenomena have been observed to impact air quality in India. These external factors don't generate new pollution sources but can alter meteorological conditions like wind patterns and temperatures, affecting pollutant distribution. The study noted that the unusually cleaner air in Delhi and dirtier air in Mumbai during the winter of 2022 could partly be attributed to the record-breaking La Nina event in the Pacific Ocean. The study suggests that the impact of El Nino or La Nina on local meteorological conditions is currently weak, only becoming significant during strong events. However, under climate change scenarios, which might



| Clear your doubts now.



enhance the frequency and intensity of these events, their influence could grow, posing an additional challenge to India's air pollution control efforts. Addressing air pollution effectively still requires tackling the emissions at the source. High baseline emissions in Indian cities are the primary cause of air pollution, and meteorological conditions can only occasionally mitigate this. The study emphasizes that reliance on short-term solutions like artificial rain or odd-even schemes is inadequate. Instead, the focus should be on long-term strategies to reduce emissions directly from the sources, which would benefit both air quality and climate change efforts.

Having panchayats as self-governing institutions-The Hindu Editorial

Polity

Key takeaways

1. **Varied Progress in Panchayat Devolution:** Since the 73rd and 74th Constitutional Amendments, Indian states have shown mixed progress in empowering panchayats as local self-governing bodies, with the effectiveness largely depending on state governments' commitment to decentralization.
2. **Fiscal Responsibilities and Revenue Generation:** The constitutional amendments intended for panchayats to generate their own revenues through taxes and non-tax sources. However, a significant portion of their revenue still comes from central and state grants.
3. **Revenue Generation Potential for Panchayats:** Panchayats have the capacity to earn income from various sources like property tax and user charges for services. Effective tax management is crucial for tapping into these revenue streams.
4. **Gram Sabhas' Role in Local Revenue:** Gram sabhas are instrumental in local revenue generation, enabling community-based planning and decision-making for financial initiatives.
5. **Resource Mobilization Challenges:** Panchayats face hurdles in resource mobilization due to political reluctance to impose taxes, dependency on government grants, and public resistance to taxation.
6. **Reducing Dependency on Grants:** Panchayats need to focus on generating their own resources to become self-sufficient, requiring education of public and elected officials about the importance of local revenue and concerted efforts across governance levels.

Mains easy language

Three decades post the 73rd and 74th Constitutional Amendments, the progress of panchayats in India as self-governing institutions has been uneven, with significant variations across states. While some states have advanced in empowering panchayats, others lag, largely due to differing levels of commitment to decentralization. The amendments aimed for fiscal devolution, including the generation of own revenues through taxation and other sources. However, panchayats still rely heavily on grants from central and state governments, with a report revealing that a major portion of their revenue comes from these grants. The potential for panchayats to generate substantial income from property taxes, cess, surcharges, and user charges remains largely untapped. Effective financial management is key to maximizing these revenue sources. The role of gram sabhas is critical in fostering local resource mobilization and community participation in financial decision-making. Despite the potential for self-generated revenue, panchayats face challenges in imposing taxes due to political reasons, a culture of dependency on grants, and public resistance to taxation. To transition towards self-sufficiency, there's a need for a paradigm shift in both the mindset of elected representatives and public perception. Education and sensitization about the importance of local revenue generation, combined with a concerted effort at all levels of governance, are crucial for this transition.

Amount of tiny plastic particles in bottled water underestimated: study-The Hindu Science

Science

Key takeaways



| Clear your doubts now.



1. **Significant Presence of Nanoplastics in Bottled Water:** A new study reveals that a liter of bottled water contains over 100,000 particles of micro- and nano-plastics, with 90% being nanoplastics, much higher than previously estimated.
2. **Advanced Detection Techniques Used:** Columbia University scientists employed a hyperspectral stimulated Raman scattering (SRS) imaging platform along with an automated algorithm for detecting and analyzing these tiny plastic particles, surpassing the capabilities of conventional imaging methods.
3. **Challenges in Nanoplastic Analysis:** Nanoplastics have been difficult to analyze due to their minuscule size and the limitations of traditional diagnostic techniques in identifying them.
4. **Complex Relationship Between Particle Types:** The study found a complex interplay between the compositions, shapes, and sizes of plastic particles, indicating that some types of plastics dominate in mass while others in particle count.
5. **Plastics Identified in Water:** Various types of plastics were identified in the bottled water, including polyamide 66, polypropylene, polyethylene, polymethyl methacrylate, PVC, polystyrene, and PET.
6. **Implications for Human Health and Environment:** The fragmentation of plastics into sub-micrometer pieces poses significant concerns, as they can penetrate biological barriers and affect living organisms, highlighting the urgency in addressing plastic pollution.
7. **Study's Contribution to Plastic Pollution Research:** This study bridges the knowledge gap in nanoplastic analysis and provides crucial insights into plastic pollution at the nanometer level, contributing significantly to the understanding of the scope and impact of plastic contamination in the environment.

Mains easy language

A recent study has uncovered that bottled water contains over one lakh micro- and nano-plastic particles per liter, with 90% being nanoplastics. This finding indicates a significantly higher concentration of these tiny plastics than previously known. Conducted by Columbia University scientists and published in the Proceedings of the National Academy of Sciences, the study employed a hyperspectral stimulated Raman scattering (SRS) imaging platform combined with an automated algorithm. This advanced approach allowed for the detailed analysis of nanoplastics, overcoming the limitations of conventional imaging methods. The study highlights the challenge of analyzing nanoplastics due to their small size and the inadequacy of traditional diagnostic techniques. Researchers discovered a diverse array of plastic types in the water, including polyamide 66, polypropylene, polyethylene, and several others. The findings also revealed a complex relationship between the composition, shape, and size of plastic particles, with some dominating in mass and others in particle count. The presence of such minute plastic particles raises significant health and environmental concerns, as they can breach biological barriers and enter living organisms. This study contributes crucial information to the field of plastic pollution research, particularly at the nanometer level, underscoring the urgent need to address the growing problem of plastic contamination in our environment.

22nd February 2024

Fali in court:9 notable cases-Indian Express Explained

Polity

Key takeaways

Throughout his 75-year legal career, eminent jurist Fali S. Nariman significantly impacted Indian jurisprudence through his involvement in several landmark cases:

1. **Second Judges Case (1993):** Nariman's argument led to the establishment of the Supreme Court collegium system, shifting the final say in judicial appointments from the Centre to a collegium of judges.



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2. **Third Judges Case (1998):** He contributed to clarifying that the Chief Justice of India must consult other Supreme Court judges before making judicial appointments, expanding the collegium to five senior-most judges.
3. **NJAC Case (2015):** Nariman argued against the National Judicial Appointments Commission Act, leading to its striking down as it impinged upon judicial independence.
4. **Golaknath Case (1967):** Representing intervenors, Nariman helped establish that Parliament cannot curtail fundamental rights, particularly regarding the right to property.
5. **Union Carbide Case (1984):** Nariman represented Union Carbide in the Bhopal gas tragedy case, resulting in a \$470 million compensation settlement for victims.
6. **TMA Pai Foundation Case (2002):** He supported minority rights to establish and administer educational institutions, leading to a ruling that protected these rights while allowing government regulations.
7. **Arunachal Political Crisis Case (2016):** Nariman argued for the power limitation of a governor in advancing Assembly sessions, successfully restoring the Congress government in Arunachal Pradesh.
8. **Jayalithaa Corruption Case:** He secured bail for former Tamil Nadu CM Jayalithaa, contesting her conviction for disproportionate assets.
9. **Cauvery Water Dispute Case:** Representing Karnataka, Nariman negotiated several interim orders over 30 years, affecting the sharing of Cauvery river water with Tamil Nadu.

Nariman's contributions have shaped key legal principles in India, from federalism and judicial independence to fundamental rights and minority protections.

Mains easy language

Fali S. Nariman, a renowned jurist, significantly influenced Indian jurisprudence over his 75-year career through key legal battles. In the Second Judges Case (1993), he played a pivotal role in establishing the Supreme Court collegium system, shifting the power of judicial appointments from the government to a collegium of judges, a crucial step for maintaining judicial independence. Nariman's involvement in the Third Judges Case (1998) refined the judicial appointment process, mandating the Chief Justice of India to consult with other Supreme Court judges. In the NJAC Case (2015), his arguments led to the striking down of the National Judicial Appointments Commission Act, upholding judicial autonomy. His representation in the Golaknath Case (1967) affirmed that Parliament cannot curtail fundamental rights. In the Union Carbide Case (1984), he negotiated a significant compensation settlement for Bhopal gas tragedy victims. Nariman's advocacy in the TMA Pai Foundation Case (2002) balanced minority rights to establish educational institutions with governmental regulation. His arguments in the Arunachal Political Crisis Case (2016) and the Jayalithaa Corruption Case demonstrated his acumen in constitutional law. In the Cauvery Water Dispute Case, he adeptly represented Karnataka, influencing water-sharing arrangements with Tamil Nadu. Nariman's legal prowess across these cases has left a profound impact on India's legal system, particularly in areas of judicial independence, federalism, fundamental rights, and minority education rights.

[IN CANADA PARLIAMENT: WHY OPPN LEADER DEMANDED TO KNOW WTF! - Indian Express Explained](#)

International relations

Key takeaways

1. **Allegations of Impropriety:** Poilievre highlighted the disproportionate sum received by GC Services, a company with only four employees, housed in a basement, and lacking IT expertise. He questioned the rationale behind such a substantial allocation of funds to a seemingly underqualified firm.



| Clear your doubts now.



2. **Parliamentary Language:** When cautioned against using unparliamentary language for exclaiming "WTF!", Poilievre cleverly retorted with "Where's The Funds?", maintaining his critical stance on the issue.
3. **Audit Report Findings:** A performance audit conducted by Auditor General Karen Hogan found significant lapses in management practices regarding the contracting, development, and implementation of the ArriveCAN application. The report pointed out failures in documenting decisions and the prudent use of public funds.
4. **Contract Award Process:** The audit revealed a lack of proper documentation supporting the non-competitive process used to award the ArriveCAN contract to GC Strategies. Concerns were raised about the absence of proposals from other potential contractors.
5. **Government's Response:** Prime Minister Trudeau acknowledged the Auditor General's concerns and emphasized the government's commitment to keeping Canadians safe during the pandemic. However, he conceded that rules should be followed, especially during challenging times, and expressed support for investigating any irregularities or rule-breaking in contract awards.

Mains easy language

In the Canadian Parliament, Opposition Leader Pierre Poilievre criticized the government for awarding CAD 258 million in contracts to GC Services, a small company involved in developing the ArriveCAN app during the COVID-19 pandemic. He pointed out the company's limited capacity, with only four employees and no IT expertise, raising questions about the allocation of such a significant sum. When cautioned against using unparliamentary language after exclaiming "WTF!", he retorted with "Where's The Funds?", maintaining his stance on the issue. The Auditor General's performance audit revealed failures in management practices related to the contracting and implementation of the ArriveCAN application, including insufficient documentation and non-competitive contract awarding processes. Prime Minister Justin Trudeau acknowledged the concerns raised and emphasized the importance of following rules, even in emergencies, pledging support for investigations into any irregularities or rule violations in the contract awards. This situation underscores the need for transparency and accountability in government contracting, especially during crises.

Ending discrimination-The Hindu Editorial

Sociology

Key takeaways

1. **Unconstitutional Discrimination Against Married Women:** The Supreme Court declared that rules penalizing women employees for getting married are unconstitutional, highlighting a significant move against gender-based discrimination in the workplace.
2. **Case of Selina John:** The ruling came in the case of Selina John, a former lieutenant in the Military Nursing Service, who was discharged from service for marrying, underscoring the impact of archaic, patriarchal rules in professional spaces.
3. **Compensation Ordered:** The Court directed the Union Government to pay ₹60 lakh in compensation to Ms. John, recognizing the injustice and discrimination she faced due to her marital status.
4. **Gender Bias in Military:** The discrimination was particularly noted in the military, where such rules against marriage were applicable only to women nursing officers, reflecting gender-specific challenges within the armed forces.
5. **Broader Workplace Issues:** The judgment sheds light on the broader issues of gender bias in civilian workplaces, where women often face discriminatory questions about marriage and motherhood during job interviews.
6. **Need for Increased Female Labour Participation:** Highlighting the low percentage of women in India's workforce, the ruling emphasizes the need to remove educational, employment, and societal barriers that limit women's participation in the labor force.
7. **Call for Organizational Reform:** The Court's decision is a call to action for all organizations to eliminate discriminatory practices and ensure the workplace is a supportive and enabling environment for women.



| Clear your doubts now.



Mains easy language

The Supreme Court of India's recent ruling against workplace discrimination towards women is a landmark decision emphasizing gender equality. In this case, Selina John, a former lieutenant in the Military Nursing Service, was discharged in 1988 for getting married, highlighting the persistence of archaic, patriarchal norms in professional environments. The Court ruled such practices unconstitutional, marking a crucial stand against gender discrimination and underlining the importance of human dignity and fair treatment. The Court ordered the Union Government to compensate Ms. John with ₹60 lakh, acknowledging the injustice she endured due to discriminatory workplace rules. This decision particularly sheds light on the gender biases within the military, where rules against marriage were specifically applied to women nursing officers, thereby revealing the sector-specific challenges women face. Furthermore, the ruling reflects broader issues of gender bias prevalent in civilian workplaces, where women are often subjected to discriminatory scrutiny regarding their marital and maternal status during job interviews. The low percentage of women in India's workforce, currently at 19.9%, underscores the urgent need to dismantle barriers in education, employment, and societal attitudes. This ruling serves as a critical call to all organizations to reform and ensure workplaces become enablers of gender equality, rather than hurdles. It underscores the necessity for systemic changes to foster an inclusive and supportive work environment for women across all sectors.

Beyond shelter, dweller needs within the four walls-The Hindu Editorial

Sociology

Key takeaways

- 1. Expansion of Affordable Housing:** The budget aims to build on the success of PMAY, which has already facilitated the construction of nearly 3 crore rural and 80 lakh urban affordable houses since 2015.
- 2. Trade-offs with Quality of Life and Environment:** The rapid expansion of the housing sector raises concerns about quality of life and environmental impact. Emphasis on mass production often overlooks factors like thermal comfort and low-carbon infrastructure.
- 3. Modern Technologies in Affordable Housing:** Light House Projects (LHPs) under the Global Housing Technology Challenge (GHTC) aim to reduce construction time and build resilient, affordable houses using innovative technologies like Mivan.
- 4. Challenges with Current Construction Technologies:** Technologies like Mivan, while efficient, may lead to increased heat gain due to inadequate insulation, resulting in higher energy consumption for cooling.
- 5. Prioritizing Thermal Comfort:** There's an increasing need to integrate passive design strategies in housing to make communities resilient to heat stress, particularly among low-income groups.
- 6. Implementing Building Codes:** Adhering to building codes, like Eco Niwas Samhita, which focus on climate-specific building envelope characteristics, is crucial for ensuring thermal comfort.
- 7. Challenges in Implementation:** The multi-stakeholder nature of the building value chain, encompassing architects, engineers, contractors, and end-users, presents challenges in the adoption of sustainable practices. Raising awareness and fostering collaboration among these stakeholders are vital for implementing passive designs effectively.

Mains easy language

The interim Budget 2024's focus on constructing two crore additional houses under the Pradhan Mantri Awas Yojana Gramin (PMAY-G) and introducing a new scheme for the middle class reflects a commitment to expanding affordable housing in India. However, this rapid expansion raises concerns regarding quality of life and environmental impact. The emphasis on mass production often overlooks factors like thermal comfort and sustainable infrastructure. Innovative construction technologies, such as those employed in Light House Projects (LHPs) under the Global Housing Technology Challenge (GHTC), are being utilized to reduce construction time and build resilient houses. Yet, technologies like Mivan, while efficient, may increase energy consumption for cooling due to inadequate insulation. The integration of passive



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design strategies to ensure thermal comfort is crucial, especially for low-income communities susceptible to heat stress. Adhering to building codes focused on climate-specific building characteristics is vital. However, the implementation faces challenges due to the diverse priorities and awareness levels among stakeholders in the building value chain. Addressing these challenges is essential for sustainable, comfortable, and environmentally friendly housing development.

On Financial devolution among States-The Hindu Text and Context

Polity

Key takeaways

1. **Divisible Pool of Taxes:** Under Article 270 of the Constitution, certain taxes collected by the Union government, such as corporation tax, personal income tax, Central GST, and the Centre's share of the IGST, are shared with states. This sharing is based on the Finance Commission's recommendations.
2. **Finance Commission's Role:** The Finance Commission (FC), constituted every five years, determines the basis for tax revenue allocation between the Centre and the states. Its composition and terms are set by the President.
3. **Basis for Allocation:** The 15th FC recommended a 41% share for states from the divisible pool. Allocation among states (horizontal devolution) is based on criteria like income distance, population, forest and ecology, demographic performance, and tax effort.
4. **Issues Raised by States:** Southern states have expressed concerns about receiving a lesser share of tax revenue compared to their contributions. This is compounded by the fact that cess and surcharge collected by the Union are not part of the divisible pool and hence not shared with states.
5. **Disproportionate Returns:** There's a noticeable variation in the amount each state receives for every rupee contributed to central taxes. Industrially developed states often receive less than a rupee for each rupee contributed.
6. **Reducing Share for Southern States:** Over the last six Finance Commissions, the share in the divisible pool of taxes for southern states has been reducing, attributed to greater weightage for equity and needs over efficiency.
7. **Potential Solutions:** To address these concerns, suggestions include enlarging the divisible pool by including some portion of cess and surcharge, increasing the weightage for efficiency criteria in horizontal devolution, and formalizing state participation in the constitution and workings of the FC.

Mains easy language

The issue of financial devolution in India, particularly concerning southern states, brings into focus the distribution of tax revenues between the Union and states. As per Article 270 of the Constitution, certain taxes are shared, based on the recommendations of the Finance Commission (FC), which is constituted every five years. The 15th FC recommended a 41% share for states from the divisible pool of taxes, with allocation criteria including income distance, population, forest cover, demographic performance, and tax efficiency. However, southern states have raised concerns about receiving a lesser share compared to their contributions, particularly since cess and surcharges collected by the Union are not shared.

This disparity is further highlighted by the fact that industrially developed states often receive less per rupee contributed to central taxes. To address these imbalances, potential solutions include expanding the divisible pool to include cess and surcharges, revising the allocation criteria to give more weight to efficiency, and enhancing state participation in the FC's processes. These challenges underscore the need for a more equitable approach to financial devolution, balancing federal principles with the goal of uniform development across states.

Astronomers find the small, hot helium stars they were looking for-The Hindu Science

Science and technology



| Clear your doubts now.



Key takeaways

1. **Unique Class of Stars Identified:** A team led by Maria Drout at the University of Toronto has discovered a group of hot, small helium stars, a decade-long quest in astronomy.
2. **Importance of the Discovery:** This finding provides concrete evidence supporting theoretical predictions about stars and their complex roles in the cosmos.
3. **Challenge of Detection:** The difficulty in finding these stars stemmed from their tendency to be outshone by their main sequence companions in binary systems, making them less visible in certain light frequencies.
4. **Methodology and Findings:** By cataloging half a million stars in the Large and Small Magellanic Clouds with ultraviolet-sensitive telescopes, the team identified bright outliers, which, upon further examination, revealed the presence of helium-rich and hydrogen-depleted stars.
5. **Astrophysical Implications:** These stars are significant for understanding supernovae and the creation of neutron stars, which may collide to produce powerful kilonova explosions, emitting gravitational waves.
6. **Binary Systems and Helium Stars:** Many binary systems begin with two main sequence stars, one of which strips the hydrogen layer from the other, resulting in a helium star and a main sequence companion.

Mains easy language

Astronomers have made a groundbreaking discovery of a unique class of stars, hot and small, primarily composed of helium. This discovery, led by Maria Drout at the University of Toronto, validates longstanding astrophysical theories and opens new avenues in understanding the universe's dynamics. These stars, predicted to be fairly common, had eluded detection due to their being outshone by companion stars in binary systems. The research team, after extensive cataloging of stars in the Large and Small Magellanic Clouds using ultraviolet-sensitive telescopes, identified these helium-rich, hydrogen-depleted stars. This discovery is significant as it provides concrete evidence of stars that play crucial roles in cosmic phenomena like the creation of heavy elements and gravitational waves.

The findings highlight the complexity of binary systems, where one star can strip the hydrogen layer off its companion, resulting in a helium star. This discovery, marking the culmination of a decade-long search, is a critical milestone in astrophysics, enhancing our understanding of stellar evolution, supernovae, and their broader impact on the cosmos.

[How SpaceX became Indonesia's launcher of choice-The Hindu Science](#)

Science and technology

Key takeaways

1. **Turning Point:** The rocket failure marked a turning point for Indonesia, prompting a move away from Chinese space contractors in favor of SpaceX. This shift was influenced by the reliability concerns raised by the incident.
2. **SpaceX's Advantages:** SpaceX gained the edge due to its launch reliability, cost-effectiveness with reusable rockets, and Elon Musk's personal engagement with Indonesian President Joko Widodo. A meeting between Musk and Widodo in Texas in 2022 further solidified this relationship, leading to regulatory approval for SpaceX's Starlink satellite internet service in Indonesia.
3. **Indonesia's Space Ambitions:** Indonesia, Southeast Asia's largest economy, is a key space growth market. The country's telecommunications sector, traditionally dominated by Chinese firms offering low costs and easy financing, is seeing a rare instance of Western company penetration with SpaceX's involvement.
4. **Launch Statistics:** China launched a record 67 rockets in the previous year, with the majority by CGWIC, showcasing its global space presence. However, the U.S., led largely by SpaceX's 90% contribution, surpassed China with 109 launches.



| Clear your doubts now.



5. Global Satellite Market: The incident comes in the context of a burgeoning global satellite market, worth \$281 billion in 2022, and the broader competitive landscape of satellite-based communications networks, particularly between the U.S. and China.

Mains easy language

The shift in Indonesia's satellite launch preference from China Great Wall Industry Corp. (CGWIC) to SpaceX highlights a significant change in the global space industry dynamics. This transition was triggered by the failure of a Chinese rocket in April 2020, resulting in the loss of Indonesia's \$220 million Nusantara-2 satellite. SpaceX, led by Elon Musk, capitalized on this opportunity by offering reliable, cost-effective launch options with reusable rockets, and Musk's personal outreach to Indonesian President Joko Widodo bolstered this relationship. Since the incident, SpaceX has successfully launched two Indonesian satellites with another in progress, while China has not conducted any further launches for Indonesia. This move is notable in Indonesia's telecommunications sector, traditionally dominated by Chinese firms. The global satellite market's growth, valued at \$281 billion, and the competitive satellite communication networks, especially between the U.S. and China, provide context to this development. SpaceX's success in Indonesia represents a strategic shift in the country's space ambitions and a rare instance of a Western company making significant inroads in the region.

23rd February 2024

Kiru Hydel Project, focus of allegations against Satya Pal Malik-Indian Express Explained

Geography

Key takeaways

The Kiru Hydel Project is a significant hydroelectric project located in Jammu and Kashmir's Kishtwar district, India.

1. About Kiru Hydel Project:

1. Location: Situated between Kirthai II and Kwar hydel power projects, near the confluence of the Chenab River and Singad and Bela streams.
2. Villages Involved: Near Patharnakki and Kiru villages in Kishtwar.
3. Estimated Cost: Approximately Rs 4,287 crore.
4. Deadline: Commercial operations are scheduled to begin by July 2025.
5. Project Features:
 - A 123-meter tall dam on the Chenab River.
 - Reservoir with a storage capacity of 41.5 million cubic meters.
 - An underground powerhouse with four turbines, each of 156 MW, totaling 624 MW.
 - A 700-meter long, horse-shoe-shaped diversion tunnel.
6. Purpose: To address energy demands in northern India, support rural areas, and boost small-scale and cottage industries.

2. Development and Administration:

1. Developed By: Chenab Valley Power Projects Private Limited (CVPPPL), a joint venture of NHPC, J&K State Power Development Corporation, and Power Trading Corporation.
2. Stakeholders: NHPC and JKSPDC each hold a 49% stake, and PTC has 2%.
3. Environmental Approvals: Received from the Ministry of Environment, Forests and Climate Change.

3. Construction Details:



| Clear your doubts now.



1. Contract Awarded: Patel Engineering received a contract for civil works worth over Rs 2,200 crore.
2. Scope of Work: Includes construction of a diversion tunnel, concrete dam, pressure shafts, cofferdams, tailrace tunnels, and a powerhouse.
3. Other Contractors: PES Engineers for hydromechanical work and Andritz Hydro for electromechanical work.
4. Progress: Some excavation and concreting work is underway.

4. Corruption Allegations:

1. Against Whom: Former CVPPPPL Chairman Naveen Choudhary, MD MS Babu, Directors MK Mittal and Arun Mishra, along with Patel Engineering.
2. Nature of Allegations:
 - Irregularities in awarding civil works to Patel Engineering.
 - Accusations of bypassing e-tendering guidelines.
 - Allegations of substandard work and not providing jobs to local youth.
3. Investigation: Conducted by the J&K Anti-Corruption Bureau, Power Department, and now the Central Bureau of Investigation (CBI).
4. Action Taken: CBI raided 30 places across the country, including locations linked to former Jammu and Kashmir Governor Satya Pal Malik.

This project, while crucial for energy development, is currently embroiled in serious allegations of corruption, raising questions about the integrity of the processes involved in its execution

Mains easy language

The Kiru Hydel Project, a significant hydroelectric initiative in Jammu and Kashmir's Kishtwar district, is embroiled in corruption allegations, drawing the scrutiny of the Central Bureau of Investigation (CBI). Estimated at Rs 4,287 crore, this project features a 123-meter tall dam on the Chenab River and aims to generate 624 MW of power. Developed by the Chenab Valley Power Projects Private Limited, a joint venture, it's a key venture for energy needs in northern India. However, the project faces serious accusations of procedural irregularities in awarding construction contracts, particularly to Patel Engineering. These allegations include bypassing e-tendering guidelines and substandard work quality. The CBI's involvement has escalated the issue, leading to widespread raids across the country, including locations linked to former Jammu and Kashmir Governor Satya Pal Malik. This case highlights critical concerns about governance and transparency in large-scale infrastructure projects in India.

[The situation of farmers-Indian Express Explained](#)

Economy

Key takeaways

1. **Economic Role of Agriculture:** Since independence, agriculture's contribution to GDP has fallen from 54% to less than 18%, yet over 54% of the workforce remains in farming.
2. **Shift in Agricultural Workforce:** The proportion of cultivators to laborers has shifted dramatically, with laborers now making up 55% of farmworkers, indicating the unfeasibility of farming for many.
3. **Landholdings and Indebtedness:** Most Indian farmers have small land holdings, and nearly half are in debt, with a significant number unable to sustain above the poverty line.



| Clear your doubts now.



- 4. Income and Debt Disparities:** There are state-wise disparities in income and indebtedness, with some states like Andhra Pradesh and Telangana having high levels of indebtedness despite average income levels.
- 5. Terms of Trade:** The index of terms of trade for farmers has been mostly unfavorable, indicating that farmers are not making enough from their produce.
- 6. International Comparison:** Compared to farmers in other countries, Indian farmers receive significantly less support, both in terms of producer protection and total support estimate.
- 7. MSP as a Solution?:** While the MSP debate is prominent, it is only a part of the larger problem. The nature of farm distress is structural, with issues like small farm sizes, insufficient support, and lack of alternative employment opportunities.

Mains easy language

The current plight of Indian farmers, starkly highlighted by ongoing protests demanding guaranteed minimum support prices (MSP), delves into the deeper crisis of agriculture being an unprofitable venture for many. Despite agriculture's diminished contribution to the GDP, falling to less than 18%, it disproportionately employs over half of the country's workforce. This mismatch underscores a systemic inefficiency and the sector's dwindling economic viability. Significantly, there's a shift in the agricultural workforce from cultivators to laborers, indicating the increasing unfeasibility of farming. This trend is exacerbated by the prevalence of small and marginal landholdings coupled with widespread indebtedness among farmers. The scenario varies across states, with some experiencing high indebtedness despite average income levels. Another aspect of the farmers' distress is the unfavorable terms of trade. Farmers are not earning sufficiently from their produce, a situation worsened by inadequate support when compared globally. Indian farmers receive significantly less assistance in terms of producer protection and agricultural subsidies. The MSP issue, while critical, is just a part of a larger, structural problem. Addressing this crisis necessitates a comprehensive approach that goes beyond short-term fixes to tackle fundamental challenges such as small land sizes, limited support mechanisms, and the need for diversifying employment opportunities outside agriculture.

[RUSSIA CAPTURES AVDIIVKA: WHAT THIS MEANS FOR UKRAINE, EUROPE-Indian Express Explained](#)

International relations

Key takeaways

The recent capture of Avdiivka by Russia marks a significant strategic gain in the ongoing Ukraine conflict, with several implications:

- 1. Strategic Importance:** Avdiivka's capture represents a major victory for Russia, facilitating easier access to other Ukrainian regions and strengthening control over the occupied Donetsk city.
- 2. Impact on Ukrainian Forces:** This development could adversely affect the morale of Ukrainian soldiers, who have been engaged in a prolonged conflict with mounting losses.
- 3. Arms Shortage in Ukraine:** The battle highlighted Ukraine's critical shortage of arms and ammunition, with President Zelenskiy emphasizing the need for more weapons.
- 4. US Aid and Political Dynamics:** Internal US politics, particularly Republican opposition in the House of Representatives, are delaying a significant foreign aid package for Ukraine, affecting arms supplies.
- 5. European Defense Reassessment:** The ongoing conflict is prompting European countries to reassess their defense spending, realizing the need for increased investment and reduced reliance on US security support.

Mains easy language

The capture of Avdiivka by Russia, a key town in eastern Ukraine, marks a significant strategic victory, potentially altering the dynamics of the ongoing conflict. This development follows Russia's prior success in Bakhmut and signifies a crucial breakthrough, enabling further



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advancement into Ukrainian territory and bolstering the security of occupied areas like Donetsk. The fall of Avdiivka has serious implications for Ukrainian forces, particularly concerning morale and military strategy. It underscores Ukraine's pressing challenge of an arms shortage, a point emphasized by President Zelenskyy. This shortage is partly attributed to delayed foreign aid from the US, where internal political disputes have stalled significant funding. Europe is also feeling the reverberations of this conflict, as the Russian threat prompts a reevaluation of defense spending across European nations. This situation highlights the need for increased self-reliance in defense, moving away from heavy dependence on US security support.

[CBSE open book exam plan: what is it, why now, how it can impact students-Indian Express Explained](#)

Sociology

Key Takeaways:

1. **Open-Book Exam Format:** OBE allows students to refer to books and notes during exams. It focuses on applying concepts rather than memorizing facts, aiming to assess students' understanding and analytical skills.
2. **History and Context:** The CBSE previously experimented with Open Text Based Assessment but discontinued it due to its inability to foster critical thinking. OBEs are common in higher education and were adopted by various universities during the pandemic.
3. **Challenges of OBE:** Contrary to popular belief, OBEs are not necessarily easier than traditional exams. They require well-designed questions that test more than just factual knowledge.
4. **Rationale Behind CBSE's Proposal:** This move is part of broader educational reforms focusing on transitioning from rote learning to competency-based education, as emphasized in the National Education Policy 2020.
5. **Research on OBE:** Studies indicate that OBEs can be less stressful for students. However, they also highlight the need for proper training and skill development in students to effectively utilize the OBE format.

Mains easy language

The Central Board of Secondary Education (CBSE) in India is considering implementing open-book exams (OBE) for Classes 9 to 12. This pilot study, proposed in select schools for subjects like English, Mathematics, Science, and Biology, is part of an initiative to transition from traditional rote learning to a more application-based educational approach, in line with the National Curriculum Framework. The concept of OBE isn't new to CBSE; a similar approach was previously attempted with Open Text Based Assessment but was later discontinued. In OBE, students are allowed to reference their textbooks and notes during exams. This method is intended to assess students' understanding and application of concepts rather than just their memorization skills. The design of these exams is challenging, as questions need to encourage analytical and critical thinking. Research on OBE suggests that while these exams can be less stressful for students, they require a different set of skills. Studies have shown that OBEs necessitate training students to effectively analyze and apply concepts. This new assessment form aims to better prepare students for practical applications of their knowledge, aligning with global educational trends towards competency-based learning.

[A long institutional road-Indian Express Editorial](#)

Polity

Key takeaways

1. **Judicial Activism:** The Supreme Court's decisions on the electoral bonds and Chandigarh mayoral election represent a notable instance of judicial activism, suggesting a shift from its earlier perceived passivity in relation to executive power.
2. **Democratic Principles:** These rulings are seen as upholding democratic principles, particularly in the context of electoral integrity and fair political competition.



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3. **Temporary Reprieve vs. Systemic Change:** While the decisions are significant, they may offer only a temporary reprieve rather than indicating a broader systemic change in judicial approach or governance.
4. **Complex Judiciary-Executive Dynamics:** The cases highlight the complex relationship between the judiciary and the executive in India, with the Supreme Court balancing its own legitimacy and independence against potential executive interference or influence.
5. **Limited Political Impact:** Despite their importance, the decisions have not led to significant political mobilization or public outrage, suggesting a normalization of such judicial interventions without substantial impact on the ruling party's standing.
6. **Need for Broader Reform:** These rulings should be seen as part of a larger need for sustained efforts to strengthen democratic norms and institutions in India, rather than as isolated victories.

Mains easy language

The Supreme Court of India's recent decisions on the electoral bonds scheme and the Chandigarh mayoral election mark significant judicial interventions, signaling a possible shift in the Court's approach towards executive power and democratic norms. These rulings, breaking from the Court's previously perceived passivity, are seen as upholding crucial aspects of electoral democracy and fair political competition. However, they may represent just a temporary shift rather than indicating a broader, systemic change in the judiciary's behavior. Despite their importance, these decisions have not elicited significant political action or public outrage. This muted response could suggest a normalization of such interventions, with limited impact on the political standing of the ruling party. In the broader narrative of Indian democracy, these judgments highlight the ongoing need for strengthening democratic institutions and norms. While the Supreme Court's role is crucial in this process, it should ideally be part of a more comprehensive effort involving political and civic engagement to ensure meaningful and lasting democratic reform in India.

[EU mulls sweeping forced labour-The Hindu Text and Context](#)

Economy

Key takeaways

1. **Corporate Responses:** Corporations like VW and Apple typically respond to these allegations with denial or attempts to distance themselves. VW has claimed ignorance about the origin of components linked to forced labor, and BASF denies evidence of forced labor in its supply chains.
2. **U.S. Legislation:** The Uyghur Forced Labour Prevention Act (UFLPA) in the U.S. is stringent, presuming that all imports from Xinjiang involve forced labor. It requires companies to certify that their products do not include forced labor from the region.
3. **China's Reaction:** In response to international scrutiny, China initially denied the existence of internment camps, later describing them as vocational training centers. Beijing has also shifted detainees and rerouted exports to counteract the impact of foreign legislation.
4. **EU Legislation:** The European Union is considering a comprehensive law targeting all products made with forced labor, not just those from Xinjiang. This approach aims to avoid potential discrimination issues under World Trade Organization rules.
5. **German and EU Supply Chain Proposals:** Germany's national legislation on supply chain sustainability faced resistance, leading to a broader proposal at the EU level. However, similar objections have emerged at the EU stage, reflecting the complex balance between business interests and human rights.
6. **Global Debate on Corporate Accountability:** VW's current challenges with the UFLPA highlight the ongoing global debate regarding corporate accountability and governance standards in the context of human rights and supply chain transparency.

Mains easy language



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German companies like Volkswagen (VW) and BASF are facing the challenge of aligning business practices in China with increasing concerns over human rights, particularly forced labor in supply chains. Their typical response to such allegations involves denial or distancing themselves from reported illegalities. VW, for instance, claimed unawareness of component origins linked to forced labor, while BASF denied evidence of such practices in its operations. The U.S.'s Uyghur Forced Labour Prevention Act exemplifies stringent measures against human rights violations, presuming all imports from Xinjiang to involve forced labor. It mandates companies to certify their products as free from such labor practices. China's response to international scrutiny and legislation includes denial of internment camps, rebranding them as vocational centers, and rerouting exports from other regions. The EU is contemplating a broader legislation targeting all products made with forced labor, aiming to avoid discrimination issues under World Trade Organization rules. This comprehensive approach contrasts with Germany's national legislation on supply chain sustainability, which has faced resistance. VW's current predicament under the UFLPA underscores the global debate on corporate accountability and governance standards, highlighting the need for a delicate balance between business interests and ethical supply chain practices.

[Are Interpol's notices being politically exploited?-The Hindu Text and Context](#)

Internal security

Key takeaways

1. **Interpol's Role in Global Law Enforcement:** Interpol, with 194 member countries, is essential for international cooperation in combating transnational crimes.
2. **Blue Corner Notices:** These are "enquiry notices" used for sharing critical crime-related information, such as identifying and locating individuals, before criminal charges are filed.
3. **Red Corner Notices:** Issued for arresting wanted criminals based on arrest warrants or court decisions, these notices typically follow criminal convictions and have more severe consequences.
4. **Potential for Political Misuse:** Concerns have been raised about the exploitation of Interpol's notice system, especially blue corner notices, by some countries to target political dissidents and refugees.
5. **Differences in Scrutiny:** Blue corner notices are less scrutinized compared to red corner notices, raising questions about the effectiveness of Interpol's oversight in preventing their misuse for political agendas.

Mains easy language

Interpol's role as a facilitator of international law enforcement cooperation is facing challenges due to concerns over the potential misuse of its notice system. The organization, comprising 194 member countries, issues various types of notices, among which the blue and red corner notices are prominent. Blue corner notices, also known as "enquiry notices," are used for sharing critical crime-related information among member states, such as verifying identities or locating individuals, typically before criminal charges are filed. On the other hand, red corner notices are more severe, issued for the arrest of wanted individuals based on arrest warrants or court decisions, usually after criminal convictions.

However, there have been growing concerns about the political exploitation of these notices, particularly the blue corner notices, which are less scrutinized than red corner notices. Some countries have been accused of using Interpol's system to target political dissidents and refugees, rather than for genuine law enforcement purposes. This potential misuse raises significant questions about the effectiveness of Interpol's oversight mechanisms and the balance between facilitating international police cooperation and preventing the system's exploitation for political agendas. These challenges highlight the need for stricter scrutiny and more robust safeguards within Interpol's framework to ensure its notice system is used appropriately and effectively.





The women of ASHA: overworked, underpaid and on the edge of breakdown-The Hindu Science

Sociology

Key takeaways

Accredited Social Health Activists (ASHAs) in India, critical to the country's healthcare system, are facing severe challenges due to their demanding roles and inadequate recognition. These women health workers, vital in connecting communities with healthcare services, endure significant hardships:

1. **Dual Burden of Work:** ASHAs balance demanding community health duties with their domestic responsibilities, leading to issues like improper nutrition, inadequate sleep, and neglect of their own health.
2. **Health Risks:** They face heightened risks of anaemia, malnutrition, and non-communicable diseases due to their strenuous work conditions and lack of self-care.
3. **Triple Shift Workload:** ASHAs undertake a 'triple shift', managing household duties, community responsibilities, and work at health centers, resulting in being overworked and underpaid.
4. **Structural Inequities:** Their role is compounded by gender, caste, and economic disparities. Despite being crucial care providers, they lack sufficient support and recognition from the healthcare system.
5. **Inadequate Compensation:** Although they receive an honorarium and performance-based incentives, delays in payment and fixed honorariums often lead to economic strain.
6. **Exposure to Violence and Stress:** Working within a male-dominated healthcare system and facing societal hierarchies, ASHAs often encounter abuse and harassment, adding to their stress and vulnerability.

These challenges underscore the urgent need for systemic changes to improve the working conditions and recognition of ASHAs, ensuring they receive adequate support and compensation for their indispensable role in India's healthcare system.

Mains easy language

Accredited Social Health Activists (ASHAs) in India are grappling with significant challenges due to their demanding roles in the healthcare system. These women, integral to connecting communities with healthcare services, face a dual burden of domestic responsibilities and community health duties. This imbalance leads to health risks such as anaemia, malnutrition, and non-communicable diseases, exacerbated by their lack of self-care. ASHAs undertake a 'triple shift', managing household chores, community health responsibilities, and duties at health centers. Despite their critical role, they are overworked and underpaid, reflecting systemic gender, caste, and economic inequities. They receive an honorarium and performance-based incentives, but these are often delayed, leading to financial strain. Furthermore, ASHAs are exposed to violence and stress within a male-dominated healthcare system, encountering societal hierarchies that add to their vulnerability. Their role, essential yet undervalued, highlights the need for systemic changes in the healthcare sector. Improving working conditions, recognition, and adequate compensation for ASHAs is crucial for supporting their indispensable role in India's healthcare system and ensuring the well-being of both the workers and the communities they serve.

World's race to eradicate Guinea worm disease nears the finish line-The Hindu Science

Science

Key takeaways

1. **Dramatic Decline in Cases:** Guinea worm disease has seen a remarkable decrease from over 3.5 million cases in the 1980s to just six cases in 2023, nearing the threshold of eradication.
2. **No Vaccines or Advanced Medicine Involved:** The fight against Guinea worm disease has been unique in that it didn't rely on vaccines or advanced medical treatments, but rather on basic public health strategies.



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3. **Nature of the Disease:** Caused by the parasite *Dracunculus medinensis*, Guinea worm disease is characterized by painful blisters and worms emerging from the skin, primarily in the lower limbs.
4. **Impact on Impoverished Communities:** The disease predominantly affects people in poverty-stricken areas with limited access to safe drinking water and health education.
5. **India's Successful Eradication Effort:** India eradicated Guinea worm disease in the 1990s through effective surveillance, water safety interventions, and community education.
6. **Global Strategy and Challenges:** The global strategy against the disease focused on community participation, clean water access, and health education. Recent findings of the worm in animal reservoirs, like dogs, and challenges such as civil unrest and poverty, add complexity to the eradication efforts.
7. **Significance of Eradication:** Eliminating Guinea worm disease would be a monumental public health triumph, demonstrating the impact of global cooperation and the importance of addressing health disparities in vulnerable communities.

Mains easy language

The world is on the cusp of eradicating Guinea worm disease, a remarkable public health achievement, given the drastic reduction from over 3.5 million cases in the 1980s to just six in 2023. This success story is notable for its reliance on basic public health measures rather than advanced medical interventions like vaccines. The disease, caused by the parasite *Dracunculus medinensis*, primarily affects impoverished communities lacking access to safe drinking water. India's successful eradication in the 1990s, achieved through surveillance, community education, and water safety interventions, exemplifies a model approach. Recent discoveries of the worm in animal hosts like dogs present new challenges, underscoring the need for adaptable strategies and continued vigilance. The potential eradication of Guinea worm disease symbolizes not just a victory over a parasitic affliction but also highlights the critical role of global cooperation and addressing health disparities in the fight against diseases.

24th February 2024

[Russia-Ukraine war, two years on-Indian Express Explained](#)

International relations

Key takeaways

1. **Unexpected Ukrainian Resistance:** Contrary to initial expectations of a quick Russian victory, Ukraine has displayed significant resilience and has been able to defend its territory more effectively than anticipated.
2. **Russia's Tactical Adaptation and Economic Resilience:** Russia has successfully adapted its military tactics in the face of prolonged conflict and has managed to protect its economy from the effects of Western sanctions, which have not been as crippling as expected.
3. **Evolution into a War of Attrition:** The conflict has transformed from an expected swift military campaign to a prolonged war of attrition, characterized by sustained fighting and the extensive use of drones and modern warfare technology by both sides.
4. **Strengthening of NATO:** The war has inadvertently led to the strengthening of NATO, with new members like Finland and Sweden joining, and an increased focus on defense among European nations.
5. **Economic and Political Strain in Europe:** European countries are experiencing economic difficulties exacerbated by the war, which could lead to changes in political attitudes and support for Ukraine, especially as war fatigue sets in.



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- 6. Global Attention and Resources Diverted by the Gaza Conflict:** The conflict in Gaza has shifted global focus and resources, potentially impacting the level of attention and support Ukraine receives, especially from the United States.
- 7. Uncertain Outlook for Peace Negotiations:** The prospects for peace talks remain bleak in the near term, with significant differences in the objectives and conditions set by Ukraine and Russia. Any meaningful negotiations are likely to require involvement from major global powers, including the U.S. and potentially NATO.

Mains easy language

Two years into the Russia-Ukraine war, the situation remains complex. Initially, many thought Russia would quickly overpower Ukraine, but Ukraine has surprisingly held strong, challenging Russian forces effectively. The war has changed from a quick operation to a long, tough fight, with both sides using advanced technology like drones. Interestingly, despite heavy sanctions from the West, Russia's economy hasn't been as badly hit as expected. NATO, the military alliance between North American and European countries, has actually gotten stronger because of this conflict, with countries like Finland and Sweden joining. However, Europe is facing economic troubles partly due to the war, which might change how much support Ukraine gets in the future. The ongoing conflict in Gaza has also shifted the world's attention and resources, affecting the support Ukraine receives, particularly from the U.S. As for peace talks, they seem unlikely soon. Ukraine and Russia have very different views on how to end the war, and it looks like any real peace discussion would need big countries like the U.S. to get involved.

RUSSIAN ADVANCE, UKRAINIAN COUNTER OFFENSIVES, & STALEMATE-Indian Express Explained

International relations

Key takeaways

1. Before the War (April 2021-Feb 2022):

Russia started gathering its army near Ukraine, making people worried. But most thought Russia wouldn't actually start a war.

2. First Part of the War (Feb-July 2022):

Russia suddenly attacked Ukraine with bombs and soldiers from three sides. The Ukrainian capital, Kyiv, fought back really hard. Russia then focused on the eastern part of Ukraine, capturing a big city called Mariupol and controlling the coast.

3. Ukraine Fights Back (Aug-Dec 2022):

Later, Ukraine hit back, especially in the south. They managed to take back some areas they had lost, like Kharkiv and Kherson. By the end of the year, Russia didn't control as much of Ukraine as before.

4. Stuck in a Tough Fight (Jan-May 2023):

Countries from NATO (a big military group) gave tanks to Ukraine, but the fight didn't move much. Both sides were losing a lot but not gaining much. The fight over a place called Bakhmut showed how hard the war was. Russia said they would take over more areas, but it was tough.

5. Ukraine's Big Effort (June-Nov 2023):

In the summer, Ukraine tried really hard to push Russia back. There was a brief rebellion in Russia's army, but it didn't last long. Ukraine couldn't get all its land back and had many losses.

6. Recent Times (Dec 2023-Present):

Recently, Russia started bombing more and captured a town called Avdiivka. It's been a long time since they had a big win like that. So, the war has been like a seesaw, with both sides having some wins and losses, but no clear winner yet. It's been tough and costly for everyone involved.

Mains easy language



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Since April 2021, tensions escalated as Russia amassed troops near Ukraine, leading to a full-scale invasion in February 2022. Initially, Russia attacked major Ukrainian cities and advanced from multiple directions, expecting a swift victory. However, Ukraine's fierce resistance, particularly around Kyiv, led to a significant standoff, defying initial expectations. By mid-2022, Russia redirected its focus to eastern Ukraine, capturing key areas including Mariupol, yet faced strong Ukrainian counterattacks later in the year. Ukraine's counteroffensive, starting August 2022, regained significant territories, particularly in the south, challenging the Russian advance. The conflict, however, settled into a costly and bloody stalemate with neither side achieving a decisive breakthrough. The situation remained tense with sporadic gains for both sides but no conclusive shift in the front lines. By late 2023, the war's dynamics showed little sign of a definitive resolution. Russia's capture of Avdiivka marked a notable advance, yet the overall picture remained one of a prolonged and grinding conflict. The war, characterized by shifting front lines and continuous fighting, has led to extensive losses and a humanitarian crisis, with no clear end in sight.

[Donor gametes are allowed: what the new rule on surrogacy says-Indian Express Explained](#)

Science and technology

Key takeaways

1. **Donor Eggs and Sperm Allowed:** Couples can now use eggs or sperm from a donor if they need to for medical reasons when trying to have a baby through surrogacy.
2. **Special Permission for Medical Cases:** If a doctor's board says a couple really needs to use a donor because of health issues, they can go ahead with it.
3. **Rules for Single Women:** If a single woman (either a widow or divorced) wants to use surrogacy, she must use her own eggs and can only use sperm from a donor.
4. **Help for Older Women:** This change is good news for older women or those who can't make healthy eggs, as they can now use eggs from a donor.
5. **Egg Quality with Age:** The rule recognizes that as women get older, their eggs might not be as good for pregnancy, so using a donor's eggs becomes a better option.
6. **Not Everyone Needs This:** The need for both a donor egg and surrogacy is quite rare. It's usually for women who can't carry a baby for specific medical reasons.
7. **Restrictions and Debates:** The new rules don't allow unmarried women and LGBTQ couples to use surrogacy. There's debate and legal challenges about these restrictions.

Mains easy language

India's recent amendment to its surrogacy laws marks a significant shift in reproductive health policy. Now, couples are allowed to use donor eggs or sperm in surrogacy if medically necessary, a change from the previous rule which prohibited the use of donor gametes. This decision is especially beneficial for older women or those unable to produce viable eggs due to medical conditions, as it expands their options for having a child through surrogacy. However, the rules maintain certain restrictions, particularly for single women. Widowed or divorced women opting for surrogacy are required to use their own eggs, thereby limiting their choices compared to couples. This has raised questions about the fairness of the policy, especially for single women who might be at an age where using their own eggs is less feasible. The amendment has sparked debates and legal challenges, focusing on its implications for single women and the LGBTQ community, who are still largely excluded from accessing surrogacy services under these rules. While the new policy opens doors for some, it also highlights ongoing issues of inclusivity and equal access in reproductive rights. The law aims to balance medical needs with ethical and social considerations, yet continues to face scrutiny over its limitations.



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A GOOD REPORT CARD-Indian Express Editorial

Economy

Key takeaways

1. **Sustained Economic Momentum:** The RBI report suggests that the economic momentum seen in the first half of the year has continued into the subsequent months, with growth for the October-December quarter estimated at 7 percent.
2. **Growth Projections:** The National Statistical Office's projection of 7.3 percent growth for the full year implies a similar growth rate of around 7 percent for the January-March quarter.
3. **Inflation Trends:** Retail inflation moderated in January after being elevated in November and December, indicating a favorable trend on the inflation front.
4. **Rural-Urban Growth Gap Narrowing:** Data shows a closing gap between rural and urban areas, with both sectors showing healthy growth in terms of private consumption indicators like FMCG, passenger vehicles, and two-wheelers.
5. **Real Estate and Construction Growth:** These sectors continue to experience robust growth, driven by household investments in residential real estate and public sector capital expenditure.
6. **Optimism for Private Investments:** The RBI Governor Shaktikanta Das expressed optimism about private investments picking up to fuel the next round of growth.
7. **Inflation Outlook and Monetary Policy:** The RBI forecasts inflation at around 4.5 percent in 2024-25. If inflation aligns with these projections, it could provide room for policy adjustments. However, the RBI maintains that vigilance on the inflation front is still necessary.

Mains easy language

The Reserve Bank of India's recent report offers an optimistic view of India's economic prospects, indicating a combination of sustained growth and manageable inflation. The report estimates a 7 percent growth for the October-December quarter, surpassing some analysts' expectations and aligning with the National Statistical Office's forecast of 7.3 percent growth for the full year. This suggests a continuation of this growth trend into the current quarter. On inflation, the report notes a favorable trend, with a moderation in retail inflation in January following higher rates in the preceding months. This combination of steady growth and moderate inflation is seen as a positive sign for the macroeconomic environment. However, there are areas requiring attention. While rural and urban growth gaps are narrowing and sectors like real estate and construction show robust growth, challenges remain in broader investment activity and job creation. The RBI remains vigilant on inflation, suggesting that while the immediate outlook is positive, careful monitoring and policy adjustments will be essential moving forward.

Design of a subsidy-Indian Express Editorial

Economy

Key takeaways

1. **Goal of Increasing LPG Usage:** The Indian government aims to boost LPG (cooking gas) use in low-income homes as part of its energy transition plan. This is important because many rural homes still rely on biomass (like wood or dung) for cooking.
2. **Subsidy Program Changes:** There have been several changes in the LPG refill subsidy policy. Earlier, all households got subsidies. Then, for a time, there were no subsidies. Now, only low-income families under the Pradhan Mantri Ujjwala Yojana (PMUY) get a fixed subsidy.



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- 3. Payment Challenges for Low-Income Families:** The current subsidy system requires families to pay the full refill price first and then get a subsidy later. This upfront cost is hard for many low-income families.
- 4. Impact of Upfront Costs on Usage:** When the cost of LPG refills goes up, PMUY families tend to buy less gas, even though they get a subsidy later. This shows that the upfront cost is a big barrier.
- 5. Success of Upfront Subsidy:** In 2020, the government tried giving PMUY households three free LPG refills. This led to a big jump in LPG use, showing that if the subsidy is given upfront, more families will use LPG.
- 6. Possible Solutions:** To make it easier, the subsidy could be given directly at the time of purchase, maybe through digital payments like e-RUPI or a RUPAY debit card. This would remove the burden of paying the full price first.
- 7. Benefits of Removing Delay in Subsidy:** If families get the subsidy without delay, they're more likely to use LPG. This is better for their health and saves time, especially for women and children in these households.

Mains easy language

In India, the government wants more low-income families to use LPG (cooking gas) instead of wood or dung. This is part of their plan to improve energy use. But, many families find it hard to buy LPG because it's expensive upfront, even though they get some money back as a subsidy later.

To fix this, the government changed the subsidy program. Now, only families in the Pradhan Mantri Ujjwala Yojana (PMUY) program get a fixed subsidy. But, these families still have to pay the full price for the gas first and then wait for the subsidy. This is tough for them because they don't have a lot of money. In 2020, the government tried giving these families three free LPG refills, and it worked well. More families started using LPG. This shows that if the subsidy is given right away, without waiting, more families will use LPG. The government could make it easier by using digital payments to give the subsidy directly when buying the gas. This would mean families don't have to pay the full price first. Making LPG easier to buy can help families a lot, especially women and children, by saving time and being healthier.

[The NB8 visit to India focuses on cooperation and trust-The Hindu Editorial](#)

International relations

Key takeaways

- 1. Focus on Trust and Cooperation:** The NB8's joint appearance at the Raisina Dialogue in New Delhi underlines their commitment to promoting trust, dialogue, and cooperation in challenging times.
- 2. Shared Values and Integration:** These countries, geographically linked and sharing deep historical and cultural ties, are known for their democracy, human rights commitment, and integrated economies. They are actively involved in the European Common Market.
- 3. Strong Indo-Nordic-Baltic Ties:** The NB8's productive cooperation with India is rooted in shared democratic values and increasingly close ties with the Indo-Pacific region.
- 4. Diverse Collaborations with India:** Their collaboration covers various fields like green transition, innovation, maritime, health, and more, indicating a robust and growing partnership.
- 5. Geopolitical and Security Interests:** With the current geopolitical shifts, there's an acknowledgment that the security of the Nordic-Baltic region and the Indo-Pacific, including India, is interconnected.
- 6. India's Global Role:** India's growing importance in international politics is recognized, and its leadership, like the G-20 presidency, is seen as crucial for global security and prosperity.



| Clear your doubts now.



- 7. Aim of the Visit:** The main objective of the NB8's visit is to strengthen global cooperation on shared challenges, acknowledging that the interconnected world requires joint efforts to address issues like health, climate change, and geopolitical shocks.
- 8. Impact of the Ukraine War:** The Russian war against Ukraine is seen as a significant global concern, affecting food and energy security and violating international laws. The NB8 supports Ukraine's efforts for peace and international law.
- 9. Partnership Goals:** The delegation aims to deepen partnerships with India, focusing on development, health, green transition, digitalization, and peace and stability.

Mains easy language

The Nordic-Baltic countries (NB8) – Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden – emphasized cooperation and trust during their visit to India, especially against the backdrop of global challenges such as Russia's invasion of Ukraine. Their participation in the Raisina Dialogue in New Delhi highlights a unified stance on fostering trust, dialogue, and cooperation in times of conflict and uncertainty. These countries, sharing close geographical, historical, and cultural connections, are integral to the European Common Market. Their collaboration with India spans diverse areas including innovation, green transition, and health, reflecting a robust and growing partnership. The visit underscores the interlinked security interests between the Nordic-Baltic region and the Indo-Pacific, acknowledging India's increasing role in global politics and its leadership in forums like the G-20. The delegation's visit, the first high-level NB8 group outside Europe, aims to strengthen global cooperation on shared challenges, recognizing the need for joint efforts in addressing issues like health, climate change, and geopolitical instability. They support Ukraine's peace efforts and uphold international law, viewing Russia's actions as a threat to global order. The partnership with India focuses on development, health, green transition, digitalization, peace, and stability, demonstrating a commitment to multilateralism and international collaboration.

Changing the growth paradigm-The Hindu Editorial

Economy

Key takeaways

- 1. GDP vs. Citizen Well-being:** Despite India's impressive GDP growth, this has not translated into improved well-being for citizens, with many still lacking decent jobs and adequate income.
- 2. Questioning the Growth Paradigm:** The current focus on GDP growth as the main indicator of economic health is being questioned, as it does not necessarily ensure equitable wealth distribution or improved living standards.
- 3. Inequality in Economic Progress:** India's economic model has led to it becoming one of the most unequal countries, showing the limitations of a growth model that prioritizes GDP above all else.
- 4. Fossil Fuel Dependency:** Vaclav Smil's analysis highlights how integral fossil fuels are to the modern economy, including in critical sectors like food production, transportation, and construction.
- 5. Balancing Economic Growth and Sustainability:** India faces the challenge of growing its economy while addressing environmental sustainability, especially in the context of global climate change commitments.
- 6. Shift to Local, Community-Driven Solutions:** There is a call for a shift away from Western-dominated economic models towards locally driven solutions, particularly in rural areas, for more inclusive and sustainable growth.
- 7. Reimagining Development Paths:** The letter suggests India should not simply follow the historical development paths of richer nations but instead leverage its unique circumstances to lead in developing innovative solutions for inclusive and sustainable growth.

Mains easy language



| Clear your doubts now.



The Reserve Bank of India's Governor has raised concerns about India's economic health in a letter to Finance Minister Nirmala Sitharaman. Despite India's significant GDP growth, this has not translated into improved well-being for its citizens, with many lacking decent jobs and sufficient income. This situation challenges the current economic growth model, which prioritizes GDP growth but fails to ensure equitable wealth distribution or improved living standards. The letter highlights the need to redefine India's growth paradigm, moving away from GDP-centric policies that have prevailed since the 1991 liberalization. India's adherence to this model has made it one of the most unequal countries, indicating the limitations of GDP-focused growth. Environmental scientist Vaclav Smil's insights into the modern economy's reliance on fossil fuels, especially in critical sectors, point to the challenge India faces in balancing economic growth with environmental sustainability. The letter suggests a shift towards local, community-driven solutions, particularly in rural areas, for inclusive and sustainable development. It advocates for India to depart from Western-dominated economic models and leverage its unique circumstances, focusing on Gandhian principles of self-sufficient, locally-driven development. This approach could position India as a leader in innovative solutions for global challenges.

25th February.,2024

How Indira in 1971 ended 'one nation, one election' - Indian Express Opinion

-History

Key Takeaways

Historical Context:

- Between December 1951 and February 1952, India held its first elections post-independence, simultaneously for the Lok Sabha and State Legislative Assemblies.
- The pattern of joint elections was disrupted in the late 1960s due to unstable state governments, leading to midterm elections.
- The 1971 general elections marked a significant break from simultaneous polls, primarily due to then Prime Minister Indira Gandhi advancing the election dates.

Factors Leading to Disruption:

- Declining performance of the Congress party due to various national crises and the rise of opposition parties and coalitions.
- Formation of Sanyukta Vidhayak Dal (SVD) governments in states and subsequent instability.
- Indira Gandhi's populist measures and the split of Congress, leading to early Lok Sabha elections in 1971.

Impact of Delinking Elections:

- Voter turnout showed a decline when state and Lok Sabha elections were held separately.
- Rise of regional parties benefited from the separation of national and state electoral cycles.
- Regional parties became crucial in the national electoral landscape, especially post-1990 with the decline of Congress and the rise of BJP.

Current Scenario:

- The government's attempt to reintroduce simultaneous polls with the "One Nation, One Election" proposal.

The proposal aims to align the electoral cycles of the Lok Sabha and state assemblies once again.

Easy Explanation:



| Clear your doubts now.



Back in the early 1950s, right after India became independent, the whole country would vote for both the national government (Lok Sabha) and state governments at the same time. This was a big deal because everyone got to vote for their leaders all at once, making things simpler and more unified.

But as time went on, this changed. Some state governments didn't last their full term, leading to early elections just for those states. This started messing up the whole "vote for everything at once" system. The big change came in 1971 when the Prime Minister at the time, Indira Gandhi, decided to have the national election early. She wanted the election to focus on her big policy changes and her leadership. This move completely separated the timing of national and state elections.

This separation led to some interesting changes in Indian politics. For one, the turnout for voting started to drop when elections weren't held together. Also, regional parties, which focus on specific states or areas, started to become more important. They could now focus on state issues without getting overshadowed by national politics. Over time, these regional parties became key players, even in national elections, by teaming up with the big national parties.

Now, there's talk about trying to get back to the old days of voting for the Lok Sabha and state assemblies at the same time. This idea, called "One Nation, One Election," is being discussed, with some people thinking it could make things more straightforward and cohesive again, just like in the early years of independent India.

Prehistoric Case of Edwards Syndrome found for the first time- The Hindu Science

-Science tech

Key Takeaways

Discovery of Chromosomal Disorders in Prehistoric Remains:

- Researchers have identified cases of chromosomal disorders in ancient human remains, including six instances of Down syndrome and one case of Edwards syndrome.

Significance of the Findings:

- This research might be the first time Edwards syndrome has been recognized in historic or prehistoric remains, marking a significant advancement in our understanding of genetic disorders in ancient populations.

Challenges in Identifying Genetic Disorders in Ancient Remains:

- Identifying genetic disorders in ancient individuals has been difficult due to limitations in analyzing ancient DNA samples with modern techniques.

Research Methodology and Results:

- Almost 10,000 genomes from ancient human skeletal remains across various regions (Ireland, Bulgaria, Greece, Spain, and Finland) were screened for chromosomal trisomies.
- The identified individuals mostly died at birth or shortly after, with some cases dating back to the Bronze Age and Neolithic period.

Cultural and Societal Responses to Genetic Disorders:

- The burial practices observed for these individuals suggest they were recognized and accepted as part of their communities.
- Some individuals received special burial treatments or were buried with elaborate grave goods, indicating care and recognition by their societies.

Examples of Special Burial Practices:

An individual buried in Early Iron Age Spain received a burial with bronze rings, a Mediterranean seashell, and was surrounded by the remains of three sheep and/or goats.



| Clear your doubts now.



Easy Explanation:

Imagine archaeologists digging up old bones and finding clues that some people from thousands of years ago had certain genetic conditions we see today, like Down syndrome and Edwards syndrome. These conditions happen when someone has an extra copy of a particular chromosome - it's like having an extra page in a book that changes the story.

For a long time, it was really hard to tell if ancient people had these conditions because we didn't have the technology to look closely at their DNA, which is like the instruction manual for building a person. But now, scientists have gotten much better at reading this ancient DNA, and they've found evidence of these genetic conditions in several old skeletons, some even dating back to the time of the ancient Bronze Age cities and Neolithic farmers.

What's really interesting is how these ancient people with genetic conditions were treated after they died. The way they were buried shows us that their communities cared for them and included them, even in death. For example, one person from what is now Spain was buried with special items like bronze rings and a seashell, and even had animals buried alongside them. This suggests that people back then might have recognized and accepted those with genetic conditions as part of their group, just like anyone else.

So, this discovery isn't just about finding old bones; it's about understanding how ancient societies viewed and treated people who were different, showing us a glimpse of their compassion and inclusivity.

Kerala takes a pioneering step to curb antimicrobial resistance- The Hindu Science

-Science

Key Takeaways

Introduction of the H1 Rule:

- In 2011, India introduced the H1 rule to prevent over-the-counter sales of antibiotics without a prescription to combat antimicrobial resistance (AMR).
- In 2013, the rule was modified to restrict only second and third-line antibiotics, allowing first-line antibiotics to be sold without a prescription.

Kerala's Implementation of the H1 Rule:

- Kerala has initiated Operation AMRITH, enforcing the original H1 rule, requiring a doctor's prescription for all classes of antibiotics.
- The State's high doctor-patient ratio and literacy rate are expected to aid in the effective implementation of this rule.

Challenges and Solutions:

- Over 50-70% of antibiotic prescriptions are considered unnecessary, often due to the lack of affordable diagnostic tests.
- Improving laboratory facilities for accurate infection diagnoses is crucial.
- Educating patients about the limitations of antibiotics is necessary to reduce pressure on doctors for unnecessary prescriptions.

Importance of Addressing Hospital-Acquired Infections:

- Kerala demands hospitals disclose the incidence of hospital-acquired infections.
- Public health infrastructure improvements, sanitation facilities, and governance are vital in reducing the spread of infections and dependence on antibiotics.
- All hospitals should report rates of hospital-acquired infections to the State, and ideally, this data should be made public.

Additional Measures Needed:



| Clear your doubts now.



- Rationalizing antibiotic use in hospitals and banning the growth-promotional use of antibiotics in agriculture and aquaculture are essential.
- Supporting the development of new antibiotics, diagnostics, and vaccines is crucial.
- Startups based on novel service delivery models could help optimize resources for antibiotic stewardship and infection prevention.

Conclusion:

- Enforcing the OTC regulation is a positive step, but addressing the major drivers of antimicrobial resistance requires a comprehensive approach.

Tackling the root causes of AMR, such as healthcare-associated infections and irrational antibiotic use, is the real challenge.

Easy Explanation:

Imagine antibiotics are like a powerful weapon that doctors use to fight off bad germs making people sick. But if these weapons are used too often or incorrectly, the bad germs learn how to defend themselves, making the weapons less effective. This is called antimicrobial resistance (AMR), and it's a big problem worldwide because it can make it really hard to treat common infections.

In India, a rule called H1 was introduced to control how antibiotics are given out. It said you need a doctor's note to get these medicines, so they're not used carelessly. But enforcing this rule has been tricky, and not all places followed it strictly. Kerala, a state in India, is now taking a strong stand by strictly applying this rule, hoping to prevent germs from becoming too strong.

However, there are other big challenges. Sometimes doctors give antibiotics when they're not really needed, and it's hard for them to always know when they are needed because tests can be expensive or not available. Plus, hospitals need to be really clean and careful to stop germs from spreading and getting stronger.

Kerala is also asking hospitals to share information about infections caught in hospitals to understand and control the problem better. Other important steps include using antibiotics wisely in hospitals and not using them to make animals grow faster in farms.

While Kerala's efforts are a good start, solving the problem of super-strong germs needs many actions at once, like better tests, educating everyone about when antibiotics should be used, and making sure hospitals are doing their part to stop infections. It's like a big team effort to keep our weapons against germs working well.

[Is the Ukraine war changing world order- The Hindu FAQ](#)

-International Affairs

Key Takeaways

Overview of the Russia-Ukraine War:

- The conflict has become Europe's largest land war since World War II.
- Russia, under President Vladimir Putin, expected a swift victory but faced strong resistance and Western support for Ukraine.
- Many countries, including India, have remained neutral.

Putin's Strategic Miscalculation:

- Initial underestimation of Ukraine's defense and NATO's involvement led to a prolonged conflict.
- Russia shifted focus to defensive strategies and limited offensive battles after early setbacks.

Current State of the War:

- Ukraine's counteroffensive has largely failed, leading to significant losses and reliance on Western aid.
- Russia has made advances in Donetsk and Kherson, capturing strategic locations.



| Clear your doubts now.



Western Strategy and Its Limitations:

- The West aimed to support Ukraine and weaken Russia through sanctions.
- Uncertainty in U.S. aid and the effectiveness of sanctions have posed challenges.

Impact of Sanctions on Russia:

- Despite sanctions, Russia has adapted by finding new trade partners, setting up alternative systems, and increasing domestic production.
- Russia's energy exports, particularly to Asia, have remained robust.

Internal and External Transformations in Russia:

- NATO's expansion and deteriorating relations with Europe have isolated Russia.
- Dependence on China and internal crackdowns on dissent indicate a shift towards a more authoritarian state.

Global Implications:

- The war highlights the limitations of Western influence and the need for cooperation with other major economies.

China emerges relatively unscathed, benefiting from the geopolitical shifts.

Easy Explanation:

Imagine two neighbors, Russia and Ukraine, getting into a big fight. Russia thought it would win quickly, but Ukraine fought back hard, and their other neighbors (the West) helped them out. This fight wasn't just between the two; it became a big deal for the whole neighborhood (the world).

Russia's leader, Putin, thought he had a good plan, but things didn't go as expected. The fight has been going on for two years now, and it's become the biggest tussle in their area since a really long time ago (since World War II).

As the fight continued, Russia tried to protect itself and also tried to gain some ground. Ukraine tried to push back with help from friends, but it's been tough, and they're waiting for more help to come.

The friends helping Ukraine also tried to make things hard for Russia by not trading with them (sanctions), but Russia found new friends to trade with, especially in Asia, and kept its economy going.

Inside Russia, things are getting stricter, and the leader is making sure no one disagrees with him. This fight has also made Russia's relationship with its European neighbors worse, and it's now leaning more on a big friend far away (China).

For the rest of the world, this fight shows that the old ways of influencing big decisions (like sanctions) don't work as well anymore, especially when other big players (like China and India) have their own interests.

In the end, while Russia and the West are both feeling the heat from this fight, China is watching from the sidelines, not getting hurt and possibly even gaining from the situation.

[What is the SC's interim order on the Forest Act?- the Hindu FAQ](#)

-Polity

Key takeaways

Overview:

- The Supreme Court has ordered the continuation of the broad definition of forests from the 1996 T.N. Godavarman Thirumulpad case.
- This ruling comes in response to challenges against the amended Forest Conservation Act of 2023.

Forest Conservation Act Background:



| Clear your doubts now.



- The original 1980 Act aimed to prevent deforestation, with a significant decrease in forest land diversion.
- The 1996 Supreme Court decision expanded protection to all forest-like areas, introducing "deemed forests."

Variability in Forest Definition:

- States have different criteria for defining forests, leading to varying estimates of deemed forest areas.
- The recent amendments sought to clarify these definitions, aiming to exclude certain deemed forests from protection.

Key Amendments:

- Exemptions for small forest areas near infrastructure or strategic projects.
- Aimed to facilitate infrastructure in tribal areas and promote ecotourism, but critics argue similar provisions exist in the Forest Rights Act, 2006.

Supreme Court's Interim Order:

- Maintains the broad definition of forests, pending a final verdict.

Requires States to report on deemed forests, striking down certain schemes for zoos and safari parks on forest land.

Easy Explanation:

Think of a vast green forest, home to animals and plants, playing a crucial role in our environment. Now, imagine if parts of this forest could suddenly be considered "not a forest" based on certain rules, making it easier for them to be cut down or built over. That's the crux of the debate around the Forest Conservation Act in India.

Back in 1980, India decided it was important to protect its forests and made a law that said, "You can't just clear out forests without permission." This law was pretty strict about what counted as a forest. But in 1996, India's top court said, "Wait, even areas that look and function like a forest but aren't officially marked as one should also be protected." These areas got a special name: "deemed forests."

Fast forward to 2023, and there's a new change to the law. The government says, "Let's make things clearer and not count some of these 'deemed forests' as forests anymore, especially if they're already being used for something else." They also wanted to make exceptions for small areas near roads or borders for security and development reasons.

But, not everyone's happy with these changes. Some people worry it could lead to losing more forest areas. So, the Supreme Court stepped in and said, "Hold on, let's stick with the broad view of what counts as a forest from 1996 until we sort this out." They also asked for a detailed report on all the forest areas from different parts of India.

In a nutshell, it's all about finding the balance between protecting nature and allowing for development, with a big emphasis on making sure we don't lose valuable forest areas in the process.

The Global South's stand on Israel's war in Gaza- The Hindu FAQ

-International Relations

Key takeaways

Overview:

- The International Court of Justice (ICJ) is holding hearings on illegal Israeli settlements, prompted by a UN General Assembly request.
- The hearings are influenced by the ongoing conflict between Israel and Hamas, highlighting a divide between Western countries and the Global South.

ICJ Hearings:



| Clear your doubts now.



- The hearings address Israel's policies since the 1967 war, particularly "occupations, settlement and annexation" of Palestinian territories.
- Over 50 states and international organizations are participating, with a mix of support and criticism for Israel's actions.

Key Arguments:

- Palestinian representatives accuse Israel of severe human rights violations against Palestinians.
- Western countries, while condemning Hamas's October 7 attack, defend Israel's "right to self-defense."
- Brazil and other Global South countries criticize Israel's territorial policies, calling for ICJ to declare them illegal.

Brazil-Israel Tensions:

- Relations between Brazil and Israel have deteriorated, especially after Brazil's President Lula da Silva's critical remarks about Israel.
- Israel declared Lula "persona non grata," leading to diplomatic tensions, including Brazil recalling its ambassador.

India's Position:

- India has historically voted against Israel's occupation policies but has been cautious in its public comments during the current conflict.
- India's ties with Israel, particularly in defense and labor cooperation, complicate its stance, alongside expectations from the Arab world.

Global South Unity:

- The hearings at the ICJ reflect a unified voice from the Global South demanding accountability for Israel's actions against Palestinians.

India's diplomatic challenge lies in balancing its relations with Israel and aligning with the Global South's critical stance on Israel's policies.

Easy Explanation:

Imagine a courtroom drama unfolding on the global stage, with a historic and complex conflict at its heart. This is happening at the International Court of Justice (ICJ) in The Hague, where the world is watching as nations debate Israel's actions in Palestinian territories. It's like a legal battle that's not just about laws and territories but also about deep-rooted historical conflicts, human rights, and international relations.

At the center of this drama are two main issues: the lands that Israel has taken over the years and how it treats the people living there. Countries from the Global South, like Brazil and South Africa, are challenging Israel, saying its actions are wrong and against international law. Meanwhile, powerful Western countries are more supportive of Israel, especially in light of recent violent conflicts with Hamas, a group that controls Gaza.

Adding spice to the mix is a fallout between Brazil and Israel, turning the legal debate into a diplomatic tussle. Brazil's Leader made some harsh comments about Israel, leading to a tit-for-tat response, showing how this legal issue also has deep political undertones.

Then there's India, walking a tightrope. On one hand, it has historically supported the Palestinian cause, aligning with many countries from the Global South. On the other, it shares a close bond with Israel, especially in defense and business. So, India is playing it safe, trying not to upset its diverse set of friends.

This ICJ hearing is more than just a legal proceeding; it's a reflection of the world's divided views on a longstanding issue. It highlights how global politics, historical conflicts, and the quest for justice are intertwined, making it a complex puzzle for countries to navigate.

26th February 2024

[Why has Assam decided to repeal its Muslim Marriage Act?-Indian Express Explained](#)





Key takeaways

1. Purpose of the Act: The 1935 Act requires compulsory registration of Muslim marriages and divorces in Assam, aligning with Muslim personal law. It allows state-licensed individuals to register these events.

2. Reasons for Repeal:

- **Child Marriage Issue:** The Act is seen as facilitating child marriages by allowing marriage registration below legal age.
- **Outdated and Informal:** Considered obsolete and lacking proper compliance mechanisms.
- **Misuse and UCC Plans:** Concerns over misuse by registrars and alignment with upcoming Uniform Civil Code.

3. Concerns Over Repeal:

- **Rise in Unregistered Marriages:** Fears that the repeal may lead to an increase in unregistered marriages.
- **Complexity for the Poor and Illiterate:** Replacing it with the Special Marriage Act might complicate the process for disadvantaged groups.
- **Amendment vs. Repeal:** Some argue for amending rather than repealing the Act to address specific issues.

4. Context of Child Marriage Crackdown: The repeal is part of Assam's broader initiative against child marriages, aiming to eradicate them by 2026.

5. Implications: The decision impacts the Muslim community's marriage and divorce registration process and reflects Assam's approach towards uniform civil laws and handling of community-specific personal laws.

Mains easy language

The Assam government has decided to repeal the Assam Muslim Marriage and Divorce Registration Act of 1935, an 89-year-old law mandating compulsory registration of Muslim marriages and divorces in the state. This move is part of a broader initiative to combat child marriages and align with the state's plans to introduce a Uniform Civil Code (UCC). The Act is seen as facilitating child marriages by allowing marriage registration for individuals below the legal age of 18 for females and 21 for males. Critics, however, argue that the repeal might increase unregistered marriages, particularly affecting the poor and illiterate due to the complexities of the alternative Special Marriage Act. The decision comes amidst Assam's aggressive crackdown against child marriages, with an aim to eradicate them by 2026. The repeal reflects a significant shift in Assam's approach to managing community-specific personal laws and underscores the government's commitment to uniform civil legislation, potentially setting a precedent for other states in India.

CHANGES IN ELECTRICITY RULES: BOOST TO ROOFTOP SOLAR POWER-Indian Express Explained

Economy

Key takeaways

- 1. Simplified Rooftop Solar Installation:** The amendments ease the process for installing rooftop solar projects by reducing the need for a technical feasibility report. For solar PV systems up to 10 kW, no feasibility study is required, streamlining the installation process.
- 2. Choice in Residential Connections:** Residents in housing societies now have the option to choose between individual connections or a single point connection through a democratic voting process. This empowers consumers and provides flexibility in managing electricity connections.
- 3. Expedited Connection Processes:** The timeline for obtaining new electricity connections or modifying existing ones has been significantly reduced, making the process swifter and more efficient, especially in urban and rural areas.



| Clear your doubts now.



- 4. Provision for EV Charging Points:** The amendments mandate DISCOMs to provide separate connections for electric vehicle charging points upon consumer request, encouraging the adoption of electric vehicles.
- 5. Subsidy for Solar Panel Installation:** In alignment with the PM SuryaGhar: Muft Bijli Yojana, the amendments support the government's initiative to provide subsidies for households installing solar panels, aiming to enhance renewable energy usage and reduce electricity costs nationwide.

Mains easy language

The recent amendments to the Electricity (Rights of Consumers) Rules, 2020 by the Ministry of Power in India mark a significant step towards enhancing rooftop solar power and improving electricity connectivity in residential societies. These changes are aimed at boosting India's shift towards renewable energy and increasing consumer autonomy in energy decisions.

Key to these amendments is the simplification of installing rooftop solar projects. The requirement for a technical feasibility report for solar PV systems up to 10 kW has been relaxed, expected to expedite the installation process considerably. This aligns with the government's push for increased use of renewable energy sources.

Additionally, the amendments offer more flexibility for residential societies in choosing their electricity connections. Residents can now opt between individual connections or a single collective point, decided democratically through a voting process. This ensures that residents' preferences are respected in managing their electricity supplies.

The timeline for obtaining new electricity connections or modifying existing ones has been significantly reduced, benefiting both urban and rural residents. Moreover, the amendments encourage electric vehicle adoption by mandating separate connections for EV charging points on consumer request.

Complementing these regulatory changes is the government's subsidy scheme for solar panel installations under the PM SuryaGhar: Muft Bijli Yojana, aimed at reducing electricity costs and promoting sustainable energy practices across India. These initiatives collectively highlight the government's commitment to an environmentally responsible and energy-efficient future.

[Consumption survey:5 questions-Indian Express Explained](#)

Economy

Key takeaways

- 1. Reduced Food Expenditure:** Over two decades, spending on food in India has significantly decreased in both rural and urban areas, indicating higher disposable income for other needs.
- 2. Change in Food Habits:** Expenditure on cereals has dropped sharply, while spending on higher nutritional items like eggs, fish, meat, and vegetables has increased, especially in rural areas.
- 3. Inflation Basket Update Needed:** The current Consumer Price Index (CPI) basket, last revised in 2012, doesn't accurately reflect contemporary consumption patterns, suggesting the need for an update.
- 4. Inequality in Benefit Distribution:** The survey reveals that the poorest 5% of the population receives fewer benefits from social welfare programs compared to wealthier groups, highlighting inequality in government benefit distribution.
- 5. Regional Disparities in Living Standards:** Certain states like Bihar, MP, Rajasthan, UP, and Odisha show lower living standards, with per capita consumption spending below the national average, indicating regional economic disparities.

Mains easy language

Over the past two decades, India has witnessed a remarkable shift in its consumption patterns, as revealed by the recent Consumption Survey. The proportion of household expenditure on food has significantly decreased in both rural and urban areas, indicating an increase in



| Clear your doubts now.



disposable income for other necessities and luxuries. This reduction in food spending suggests a diversification in consumer preferences and an overall improvement in economic conditions.

Notably, there has been a distinct change in dietary habits. Households, especially in rural regions, are now spending less on staples like cereals and more on nutritionally rich food items such as eggs, fish, meat, and vegetables. This shift towards a more varied and nutritious diet reflects rising income levels and greater awareness of healthy eating.

However, the survey also uncovers disparities in the distribution of welfare benefits. The poorest 5% of the population receive significantly fewer benefits from social programs compared to wealthier segments, highlighting an inequality in the allocation of government assistance.

Additionally, the survey points to regional economic disparities, with certain states like Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Odisha exhibiting lower standards of living compared to the national average. This regional variation in economic well-being underscores the need for targeted policy interventions to address these imbalances and ensure inclusive growth across all sections of society.

[I-T action against Cong: what rules say about political parties, tax, ITR-Indian Express Explained](#)

Polity

Key takeaways

- 1. Exemption Under Specific Conditions:** Political parties in India, including the Congress party, are exempt from income tax if they meet certain conditions set by the Income Tax Act, 1961, such as proper accounting and limits on cash donations.
- 2. Mandatory ITR Filing:** Political parties are required to file income tax returns if their income, before exemptions, exceeds the taxable threshold, as per Section 139 (4B) of the Income Tax Act.
- 3. Congress Party's Tax Dispute:** The Congress party faces a tax demand of Rs 210 crore for the financial year 2018-2019, with the Income Tax Department withdrawing Rs 65 crore from its accounts. The party argues this action is unjustified, based on a small portion of cash donations.
- 4. Allegation of Political Targeting:** The Congress party alleges that the tax action is a case of political targeting by the government, terming it "economic terrorism".
- 5. Case Under Tribunal Review:** The dispute over the tax demand is currently pending with the Income Tax Appellate Tribunal (ITAT), highlighting the ongoing legal process in this matter.

Mains easy language

The Income Tax Department's recent action against the Congress party, involving a tax demand and fund withdrawal, highlights the complexities surrounding the taxation of political parties in India. Political parties, including Congress, are generally exempt from income tax under the Income Tax Act, 1961, provided they meet certain conditions like maintaining proper accounts and limiting cash donations.

The Congress party's current dispute involves a tax demand of Rs 210 crore for the financial year 2018-2019, with the department withdrawing Rs 65 crore from its accounts. The party contends that this move is unjustified, based mainly on a minor portion of cash donations, and has termed it "economic terrorism," alleging political targeting by the government.

The case, currently under review by the Income Tax Appellate Tribunal (ITAT), brings into focus the mandatory requirement for political parties to file income tax returns if their income exceeds the non-taxable limit before exemptions. This scenario underscores the need for political parties to adhere strictly to financial regulations and the importance of perceived impartiality in governmental actions, especially in matters involving significant political entities.



| Clear your doubts now.



At the high table-The Hindu Editorial

International relations

Key takeaways

1. **India's Global Role:** External Affairs Minister S. Jaishankar emphasized India's role as a "bridging power," advocating for multi-vector policies and global friendship.
2. **Global Governance and Connectivity:** Discussions included global governance, the need for UN Security Council reform, and connectivity projects like the India-Middle East-Europe Economic Corridor.
3. **India's Aspirations for Leadership:** The conference underscored India's ambition for a prominent role in global decision-making, following its successful hosting of the G-20 summit.
4. **Regional Focus and Outreach:** While there was significant participation from Central and Eastern Europe, enhancing India's diplomatic reach, other regions were underrepresented.
5. **Imbalance in Discussions:** The focus on global conflicts, particularly regarding Ukraine and China, lacked balance due to the absence of representatives from Russia and China and limited participation from other key regions.
6. **Exclusions in Conversations:** Certain internal debates within India and global issues, such as the Israeli war in Gaza, were omitted, leading to a narrow view of challenges in the global discourse.

Mains easy language

The ninth Raisina Dialogue, India's prime foreign policy conference, showcased India's growing role in global affairs but also revealed shortcomings in the diversity of its foreign policy discourse. The conference, marked by External Affairs Minister S. Jaishankar's vision of India as a "bridging power" and a "Vishwamitra," focused on global governance, connectivity projects, and India's aspirations on the world stage. Discussions at the event emphasized India's potential role in international decision-making, building on its G-20 summit success. Despite its high ambitions, the Dialogue faced criticism for its lack of balance and diversity. The event's heavy European participation turned the spotlight primarily onto the Russian-Ukrainian conflict and China's assertiveness, with notable absences of representatives from Russia, China, Southeast Asia, Latin America, and most of South Asia. This skewed representation led to a constrained perspective on global issues. Additionally, internal debates within India, particularly regarding democratic freedoms, were avoided, and the exclusion of non-governmental civil society organizations narrowed the scope of democratic challenges discussed.

The absence of discussions on issues like the Israeli war in Gaza further highlighted the event's limited scope. These gaps underscore the need for more inclusive and comprehensive dialogues at platforms like the Raisina, to truly reflect the multifaceted nature of global foreign policy challenges.

Why were surrogacy rules modified?-The Hindu Text and Context

Science

Key takeaways

1. **Allowance for Donor Gametes:** The modified rules now permit married couples to use donor eggs or sperm for surrogacy. This reverses a previous ban imposed in March 2023 and offers significant relief to couples facing medical difficulties in conceiving.
2. **Conditions for Married Couples:** Under the new amendment, married couples can use donor gametes if one partner is medically unable to contribute their gametes. However, the child must have at least one gamete from the intending parents, restricting couples where both partners have medical issues from opting for surrogacy.



| Clear your doubts now.



- 3. Supreme Court's Intervention:** The amendment of 2023 was challenged in the Supreme Court by a woman suffering from Mayer-Rokitansky-Kuster-Hauser Syndrome, who couldn't produce eggs. The court stayed the operation of the law, deeming it contrary to the Surrogacy Act, 2021, which allows for gestational surrogacy under certain medical conditions.
- 4. Exclusion of Single Women:** Despite these modifications, the rules still exclude single women (widows or divorcees) from using donor gametes. They must use their eggs and donor sperms, which has raised questions of discrimination and equality in courts.
- 5. Challenges to Restrictions:** The restrictions on surrogacy for single women have been challenged in the Delhi High Court, arguing that they violate fundamental rights. The case highlights the ongoing debate about access to surrogacy for single persons, live-in couples, and LGBTQ individuals.

Mains easy language

The recent modifications to the Surrogacy (Regulation) Rules, 2022, by the Union government represent a significant shift in the approach to surrogacy in India. These changes were primarily driven by the need to accommodate medical complications that couples might face when trying to conceive. The key revision allows married couples to use donor eggs or sperm for surrogacy, a move that reverses the March 2023 amendment which had banned such practices. This modification provides crucial relief for couples with medical issues that prevent them from using their gametes.

The Supreme Court played a pivotal role in prompting these changes. The 2023 amendment was challenged in the court by a woman suffering from Mayer-Rokitansky-Kuster-Hauser Syndrome, who was unable to produce her eggs. The Supreme Court's stay on the law's operation highlighted its inconsistency with the objective of the Surrogacy Act, 2021, which recognizes gestational surrogacy under specific medical conditions.

However, the regulatory changes exclude single women, such as widows or divorcees, stipulating that they must use their eggs and donor sperm for surrogacy. This exclusion has sparked legal challenges and debates over discrimination, particularly as it pertains to unmarried women and their reproductive rights. The ongoing legal challenges question the association of marital status with eligibility for surrogacy, pointing to potential violations of fundamental rights under the Indian Constitution.

These developments underscore the complexity of surrogacy regulations in India, balancing medical needs, ethical considerations, and rights of different groups in society. The discussion continues to evolve, reflecting changing societal norms and the need for inclusive reproductive policies.

[Can the IMEC address the Red Sea crisis?-The Hindu Text and Context](#)

International relations

Key takeaways

- 1. Strategic Importance of the Red Sea:** The Red Sea's critical role in global trade is due to the Bab el-Mandab Strait, a major transit point for cargo and oil. Approximately 12% of international trade passes through this route, making it vital for global supply chains.
- 2. Impact on India's Trade:** India's trade with European and North African countries, constituting 24% of its exports and 14% of its imports, largely depends on the Red Sea route. The crisis has led to a drop in Indian shipments, with exporters holding back about 25% of cargo due to increased risks and costs.
- 3. China's Alternative Route:** In response to the crisis, China is promoting its China-Europe freight trains under the Belt and Road Initiative as an alternate route, impacting global supply chain dynamics.



| Clear your doubts now.



- 4. Challenges for the IMEC:** The India-Middle East-Europe Economic Corridor (IMEC), proposed during the G-20 summit in 2023, faces hurdles. These include geopolitical tensions, notably the Israel-Palestine conflict, and the strategic vulnerability of the Strait of Hormuz. The corridor's dependence on this strait, with Iran's proximity, raises concerns about potential disruptions.
- 5. Making IMEC Viable:** To realize the IMEC's potential, several steps are necessary. An empirical study to assess its economic benefits is crucial, as the corridor promises to reduce journey time and transit costs significantly. A robust financial framework to attract investments and a comprehensive multi-nation operational framework are essential for its success.

Mains easy language

The ongoing Red Sea crisis has underscored the fragility of global supply chains and the strategic importance of alternative trade routes. The Red Sea route, vital due to the Bab el-Mandab Strait, is a critical juncture for global trade, with a significant portion of international merchandise and oil transit. The crisis has compelled major carriers to reroute shipments, leading to increased freight and insurance costs, prolonged voyage times, and product shortages. These developments have directly impacted global trade, including that of India.

For India, the Red Sea route is particularly crucial, handling almost 24% of its exports and 14% of its imports, primarily to European and North African countries. The crisis has led to a noticeable decrease in Indian shipments, as exporters hold back cargo due to the heightened risks and costs involved. This scenario has significant economic implications for India, given its reliance on this trade route.

In response, alternative routes are being considered. China is promoting its China-Europe freight trains, part of the Belt and Road Initiative, as a viable alternative. Meanwhile, the India-Middle East-Europe Economic Corridor (IMEC), proposed during the G-20 summit in 2023, is seen as another potential solution. However, the IMEC faces its own set of challenges, including geopolitical tensions in the region and the strategic vulnerability of the Strait of Hormuz. To make the IMEC a viable alternative, a comprehensive approach involving empirical economic assessments, a robust financial framework, and a coordinated multi-nation operational plan is essential.

The Red Sea crisis highlights the need for diversified and resilient trade routes. For countries like India, developing and investing in alternative corridors like the IMEC could be crucial in mitigating the risks associated with reliance on a single trade route.

Why has Google paused Gemini's ability to generate AI images of people?-The Hindu Text and Context

Science and technology

Key takeaways

- 1. Inaccurate Historical Images:** Gemini was generating historically inaccurate images, often subverting gender and racial stereotypes. For example, it produced images of people of color when prompted for pictures of the "Founding Fathers of America" or "the Pope," leading to concerns about the AI's biases.
- 2. Refusal to Generate Specific Ethnicities:** Users noted that Gemini refused to generate images specifying a certain ethnicity, like "a white family," but did not have the same issue with other ethnicities. This inconsistency raised questions about the AI's programming and potential biases.
- 3. Backlash in India:** In India, Gemini faced backlash for a response suggesting Prime Minister Narendra Modi had implemented policies some experts characterized as fascist. This comment led to criticism from Indian government officials, who argued it violated Indian IT laws and criminal codes.
- 4. Tech Community's Reaction:** The tech community, including industry leaders and Google employees, expressed concerns. Criticisms ranged from the AI reflecting Google's corporate culture to fears of advancing a particular agenda.
- 5. Google's Response:** In response to these issues, Google temporarily disabled Gemini's image generation feature. The company is working on fixing the issue and improving the AI to better understand historical contexts and reduce biases.



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6. Comparisons with Other AI Tools: Gemini is not the only AI tool facing such challenges. Microsoft's Designer tool and OpenAI's Sora have also had to adjust to prevent misuse, such as generating deepfake pornographic images or spreading misinformation.

Mains easy language

Google's recent decision to pause the image generation feature of its Gemini AI tool underscores the complexities and challenges in developing ethical and accurate generative AI systems. The tool faced criticism for producing historically inaccurate images, particularly those that subverted racial and gender stereotypes. This was evident when Gemini generated images of people of color for prompts like the "Founding Fathers of America," raising concerns about the AI's biases and its programming.

In India, Gemini's response to a query regarding Prime Minister Narendra Modi sparked controversy, leading to accusations of the tool violating Indian IT laws and criminal codes. The AI's statement about Modi being accused of implementing policies characterized as fascist by some experts resulted in significant backlash from the Indian government.

The tech community's reaction to these developments has been mixed. While some criticized the AI for reflecting Google's corporate culture and potentially advancing a particular agenda, others expressed concerns about a culture of fear and censorship within the company.

In response, Google has temporarily disabled Gemini's image generation capability, acknowledging the need for further tuning to handle historical contexts and cultural nuances more sensitively. This move highlights the ongoing challenges in developing AI systems that are globally inclusive and historically accurate, as well as the need for continuous refinement based on user feedback and ethical considerations.

The issues faced by Gemini are not unique in the realm of generative AI. Other tools, such as Microsoft's Designer and OpenAI's Sora, have also had to make adjustments to prevent misuse and ensure responsible deployment. These instances emphasize the importance of responsible AI development and the potential risks associated with powerful generative technologies.

27th February 2024

[New railway stretch in Jammu & Kashmir-Indian Express Explained](#)

Economy

Key takeaways

1. Engineering Feats and Innovations

- **Tunnels and Bridges:** The Banihal-Sangaldan section showcases major engineering with the majority of its route through tunnels, including India's longest at 12.77 km, and features 16 bridges.
- **Safety Measures:** Equipped with escape tunnels for emergencies, emphasizing passenger safety in challenging terrains.
- **Cost and Construction:** Built at a cost of Rs 15,863 crore, highlighting the significant investment in regional connectivity.

2. Significance and Impact

- **Enhanced Connectivity:** Provides a crucial alternative route to the valley, especially important during obstructions on National Highway-44.
- **Economic and Tourism Boost:** Opens up remote areas for tourism and economic activities, promising a boost in regional development.
- **Historical Context:** Continues the long-term vision for rail connectivity in the region, dating back to pre-independence proposals.

3. Challenges Overcome

- **Geological and Seismic Challenges:** Overcame significant geological challenges through the innovative Himalayan Tunneling Method, ensuring stability and safety.



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4. Benefits for the Valley

- **Reduced Travel Time:** Significantly cuts travel time between Srinagar and Jammu, offering a fast and reliable transport alternative.
- **Economic Advantages:** Facilitates cheaper and faster transport of goods, benefiting the local economy and producers.
- **Future Developments:** The establishment of cargo terminals will enhance the logistical capabilities of the region, promising economic growth.

Mains easy language

The inauguration of the Banihal-Sangaldan railway section by Prime Minister Narendra Modi is a landmark event for Jammu and Kashmir, enhancing connectivity and fostering economic growth. This section, part of the broader rail link connecting Baramulla to Udhampur, is notable for its engineering achievements, including traversing through India's longest tunnel and incorporating advanced safety measures. It represents a significant investment, indicating a strong commitment to developing the region's infrastructure.

The project not only provides a reliable alternative to road travel, especially crucial during natural obstructions but also opens up new avenues for tourism and economic activities in previously inaccessible areas. It continues the historical efforts to integrate the region more closely with the rest of the country, overcoming challenges posed by difficult terrain and seismic activity through innovative engineering solutions.

The railway promises to significantly reduce travel times, lower transportation costs for goods, and boost the local economy by facilitating easier access to markets. With plans for further logistical enhancements, this rail line is set to play a pivotal role in the socio-economic development of Jammu and Kashmir, symbolizing a step towards greater progress and integration.

[WHY MAHARASHTRA IS EXEMPTING SOME PRIVATE SCHOOLS FROM RTE QUOTA-Indian Express Explained](#)

Polity

Key takeaways

1. **Amendment to RTE Act in Maharashtra:** Maharashtra has passed an amendment exempting certain private schools from the obligation to reserve 25% of their seats for children from disadvantaged groups and weaker sections if a government or aided school is located within a 1 km radius.
2. **Rationale for the Amendment:** The amendment aims to address the declining enrollment in government schools and the financial burden on private schools arising from delayed reimbursements for RTE quota admissions by the state.
3. **Impact on Private and Government Schools:** This rule is expected to reduce the number of RTE admissions in private schools and potentially increase enrollment in government and aided schools.
4. **Criticism and Concerns:** Critics argue that the amendment could undermine educational equality by limiting access to quality education for disadvantaged children, thereby exacerbating educational segregation.
5. **Comparison with Other States:** Maharashtra's approach aligns with similar exemptions provided by Karnataka and Kerala, indicating a trend among states to adjust RTE implementation to address local educational and financial challenges.

Mains easy language

Maharashtra has introduced an amendment to the Right Of Children To Free And Compulsory Education Act, 2009 (RTE Act), allowing some private schools to bypass the obligation of reserving 25% of seats for children from disadvantaged groups and weaker sections. This exemption applies to private unaided schools located within a 1 km radius of government or aided schools, aiming to redirect students to these institutions instead. The rationale behind this amendment includes addressing the decline in enrollment in government schools and the financial strain on private schools due to delayed or insufficient reimbursements by the state for RTE quota admissions. While this move



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has been welcomed by private school associations, it has faced criticism for potentially undermining efforts to ensure equal educational opportunities for all children. Critics argue that the amendment could exacerbate educational inequality, moving away from the RTE Act's goal of integrating children from various backgrounds into the education system.

[Gyanvapi case: Why HC called govt order restraining puja in cellar illegal'-Indian Express Explained](#)

Polity

Key takeaways

1. **Allahabad High Court's Decision:** The Allahabad High Court allowed Hindus to continue offering worship in the southern cellar of the Gyanvapi mosque, overturning a 1993 government order that had stopped these practices.
2. **Challenge to the 1993 Government Order:** The order to stop puja in 'Vyasji ka tehkhana' by the Uttar Pradesh government under Mulayam Singh Yadav was contested, leading to the recent court ruling favoring the continuation of religious worship.
3. **Varanasi District Court's Role:** The case reached the Allahabad High Court following a Varanasi district court's decision that allowed worship in the cellar, which was challenged by the mosque's management committee.
4. **Mosque Committee's Argument:** The mosque's management committee argued that the entire mosque, including the cellar, was Hanafi Muslim Waqf property, based on a 1937 ruling, and that the 1991 Places of Worship Act should lock the religious character of the site as it was in 1947.
5. **Vyas Family's Claim and Court's Analysis:** The Vyas family, claiming ownership and uninterrupted worship until 1993, argued that the mosque never had possession over the cellar. The High Court's interim order favored the Vyas family, stating the state's action since 1993 was a continuous wrong being perpetuated, allowing the resumption of religious practices in the cellar.

Mains easy language

The Allahabad High Court ruled in favor of allowing Hindus to continue worship in the southern cellar of the Gyanvapi mosque, known as 'Vyasji ka tehkhana', overturning a government order from 1993 that had stopped these practices. This decision came after the Varanasi district court's order, which was challenged by the mosque's management committee. The court's ruling was based on the argument that the state's restriction on religious worship in the cellar was a continuous wrong. The mosque committee had argued that the mosque was a Hanafi Muslim Waqf property, including the cellar, based on a 1937 ruling. However, the Vyas family, claiming ownership since 1551 and uninterrupted worship until 1993, contested this, stating the mosque never had possession over the cellar. The High Court's interim order was based on a prima facie analysis, acknowledging the Vyas family's long-term possession and deeming the state's restriction as perpetuating a continuous wrong.

[Fast food education-Indian Express Editorial](#)

Sociology

Key takeaways

1. **Rote Learning's Shortcomings:** Emphasizes the failure of memorization-focused education to foster critical thinking and creativity, crucial for personal and societal development.
2. **Commercialization of Education:** Illustrates the problem of treating education primarily as a means to generate profit, with Byju's downfall serving as a case study of prioritizing financial gains over educational integrity and societal value.
3. **"Fast-Food" Educational Approach:** Critiques the prevailing education model for its emphasis on quick, superficial learning aimed at passing exams, likening it to fast food - quick, easy, but ultimately unsatisfying and unhealthy for long-term intellectual growth.



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- 4. Emotional and Social Implications:** Highlights the emotional stress and societal pressures associated with a narrow focus on traditional academic success, marginalizing diverse talents and career aspirations.
- 5. Technocratic vs. Holistic Education:** Differentiates between narrowly focused technocratic education and broader, more adaptable learning, arguing that the former limits individuals' ability to navigate changes and solve complex problems.
- 6. Undermining Human Capacities:** Warns that the current educational emphasis on formulaic, test-centric learning neglects the development of critical life skills, such as social interaction and creativity, producing individuals who are less prepared for the complexities of adult life.

Mains easy language

The article delves into the pitfalls of the current education system, epitomized by the rise and fall of Byju's, an edtech giant. It uses a metaphorical story from Kashinath Singh's "Kashi Ka Assi" to illustrate the futility of rote learning and the misplaced faith in quick-fix educational solutions. This cautionary tale serves as a backdrop to critique the commercialization of education, where companies like Byju's commodify learning, reducing it to a profit-making endeavor at the expense of genuine educational values. The narrative underscores the broader societal obsession with technocratic approaches to education, which prioritize exam success over holistic learning and critical thinking. It warns against the dangers of a system that not only marginalizes alternative career paths but also fails to prepare individuals for real-world challenges. The piece calls for a reevaluation of educational priorities, emphasizing the need for a system that fosters creativity, adaptability, and a broader understanding of success beyond the narrow confines of examination results.

[Will 'colour molecules' make quantum computers accessible?-The Hindu Science](#)

Science and technology

Key Takeaways

- 1. Challenge with Current Qubits:** Traditional qubits need very low temperatures, limiting quantum computers' practicality and increasing costs due to the need to maintain delicate quantum states like superposition.
- 2. Towards Commercial Viability:** High maintenance costs hinder the commercial viability of quantum computers. Researchers are seeking room temperature technologies to make quantum computing more accessible and affordable.
- 3. Metal-Organic Frameworks (MOFs) Potential:** A study has shown MOFs, with metal atoms linked by organic molecules, can function as qubits at room temperature, using processes like singlet fission to engage in quantum behaviors.
- 4. Role of 'Colour Molecules':** Chromophores in MOFs can absorb light and reach excited states, enabling long-lived quantum state superpositions at room temperature, crucial for their use as qubits without cooling.
- 5. Importance of Room-Temperature Qubits:** Achieving qubit coherence at room temperature is a significant advancement, potentially expanding research in quantum computing and overcoming a major commercialization barrier.
- 6. Research Directions:** Further exploration is needed to demonstrate quantum gate operations, assemble multiple qubits, and ensure their controllability at room temperature, determining the practicality of MOFs in quantum computing.

Mains easy language

Quantum computing is on the brink of a significant breakthrough with the development of qubits that operate at room temperature, a feat that could dramatically reduce costs and enhance accessibility. Traditional quantum computing requires qubits to function in extremely low temperatures to maintain their quantum states, a condition that adds complexity and expense. However, recent research has introduced a novel approach using metal-organic frameworks (MOFs) with embedded chromophores, enabling qubits to maintain their quantum states through singlet fission at room temperature. This innovation marks a substantial shift from conventional methods, potentially making



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quantum computers more commercially viable and widely accessible. The ability to operate at room temperature simplifies the quantum computing infrastructure, reducing the reliance on expensive cooling systems. Although this development is promising, it is the beginning of a journey. Further research is needed to understand how to control these qubits effectively and integrate them into functioning quantum computers. If successful, room-temperature qubits could revolutionize the field of quantum computing, making it a more practical option for a broader range of applications and research endeavors.

Scientists have unravelled anatomy that allows baleen whales to sing-The Hindu Science

Science

Key takeaways

1. **Anatomical Adaptation for Sound Production:** Baleen whales use a specially adapted larynx for underwater vocalization, featuring a novel structure of fat and muscle within the larynx, unlike toothed whales that use a different mechanism in their nasal passages.
2. **Critical Communication Tool:** The ability to produce sounds is essential for baleen whales to communicate, navigate, and mate in the dark, vast oceans. These sounds play a vital role in their survival and social interactions.
3. **Long-standing Mystery Solved:** Scientists have been curious since the 1970s about how baleen whales produce their wide range of sounds. This research provides a clear understanding of the mechanism behind their "singing."
4. **Universal Sound Production Principles:** Despite the unique anatomical adaptations of baleen whales, the underlying physics of sound production—air interacting with tissue to create vibration—follows the same principles observed in other mammals.
5. **Research Methodology:** The study involved laboratory experiments on the larynxes of deceased whales and the development of a 3D computer model to simulate sound production, offering insights into the physical process of sound generation in these massive marine mammals.
6. **Evolutionary Insight:** The findings highlight the diverse evolutionary strategies mammals have developed for sound production, emphasizing the unique yet fundamentally similar ways in which life has adapted to communicate through sound.

Mains easy language

The enigmatic "singing" of baleen whales, such as the humpback, which resonates across vast oceanic distances, has long captivated scientists and the public alike. Recent research has unveiled the anatomical secrets behind this phenomenon, revealing that baleen whales, including giants like the blue whale, produce their distinctive sounds using a specially adapted larynx. This adaptation consists of a unique structure within the larynx, made of fat and muscle, which facilitates underwater vocalization. Unlike toothed whales, which utilize a mechanism in their nasal passages to create sound, baleen whales rely on their larynx, much like humans do.

The discovery sheds light on a question that has intrigued scientists since the 1970s: exactly how do baleen whales produce their wide range of vocal sounds? This communication method is critical for their survival, aiding in navigation, mating, and social interaction in the often dark and murky ocean depths. Researchers from the University of Southern Denmark and the University of Vienna conducted laboratory experiments and developed a 3D computer model to understand the function of the whale larynx. They found that the whale's arytenoids, stiff structures within the larynx, press against the laryngeal cushion, causing it to vibrate during exhalation and produce sound. This discovery not only highlights the unique evolutionary path of baleen whales but also underscores the universal principles of sound production across different mammalian species.

What is Bitcoin halving and what does it mean for the crypto community?-The Hindu Text and Context

Science and technology

Key takeaways



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1. What is Bitcoin Halving?

- **Definition:** The halving refers to the reduction by 50% of the rewards given to Bitcoin miners for processing transactions, which is programmed to occur after every 210,000 blocks are mined. This mechanism is built into the Bitcoin protocol to control the supply of new bitcoins, ensuring that the total supply caps at 21 million.
- **Purpose:** It aims to mimic the deflationary aspect of precious metals like gold, by reducing the rate at which new bitcoins are created, thereby increasing scarcity over time.

2. Impact on the Crypto Community

- **Increased Scarcity and Potential Price Impact:** The reduction in mining rewards makes new bitcoins more scarce, potentially driving up the price if demand remains steady or increases.
- **Energy Consumption Concerns:** Bitcoin mining is energy-intensive, requiring vast amounts of electricity to power the complex computational tasks needed to mine blocks. While the halving reduces the rate of new bitcoin creation, the overall energy consumption remains a concern due to the competitive nature of mining and the continuous need to process transactions.

3. Significance of the Event

- **Market Speculation:** Leading up to and following a halving event, there is often significant speculation about how the reduced supply of new bitcoins will affect the market. Many anticipate price increases, leading to varied investment strategies.
- **Increased Public and Investor Interest:** Just as the Olympics captivate global attention every four years, the Bitcoin halving draws increased attention from both the public and investors, highlighting the growing mainstream interest in cryptocurrency.

4. Impact on Investors and the Market

- **Varied Investor Reactions:** The halving can lead to diverse strategies among investors, ranging from those betting on a price increase to others preparing for potential volatility by shorting Bitcoin.
- **Market Predictability and Volatility:** Although some anticipate that the halving will lead to price increases based on historical patterns, the cryptocurrency market is notoriously volatile and influenced by many factors beyond the halving, making predictions uncertain.

5. Future Directions Post-Halving

- **Uncertain Market Movements:** The exact impact of the halving on the crypto market is difficult to predict due to a myriad of influencing factors including regulatory changes, market sentiment, and global economic conditions.
- **Continued Energy Consumption Discussion:** The energy-intensive nature of Bitcoin mining will remain a topic of discussion and concern, especially as the community looks for ways to balance ecological concerns with the growth and security of the blockchain.

Mains easy language

The Bitcoin halving is a crucial event in the cryptocurrency ecosystem, occurring approximately every four years, which reduces the reward for mining Bitcoin transactions by half. This process is designed to control the supply of Bitcoin, mimicking the scarcity of precious metals and thereby potentially increasing its value over time. The anticipation and aftermath of a halving event can lead to significant speculation and investment shifts within the crypto community, affecting Bitcoin's price and market dynamics. However, the process also underscores concerns about the environmental impact of Bitcoin mining, given its heavy electricity consumption. Despite these challenges, the halving event garners widespread attention from both the public and investors, akin to the excitement surrounding global sporting events like the Olympics, highlighting the growing mainstream interest in cryptocurrency. The future direction of the Bitcoin market post-halving remains uncertain, influenced by various factors including market sentiment, regulatory changes, and global economic conditions.





What is the latest row between Trump and NATO?-The Hindu Text and Context

International Relations

Key takeaways

1. **Trump's Threat:** Donald Trump has threatened to withdraw U.S. support from NATO if European allies do not increase their defense spending, suggesting a laissez-faire approach towards Russia's actions.
2. **NATO's Response:** NATO Secretary General Jens Stoltenberg emphasized that undermining the principle of collective defense jeopardizes the security of all members, including the U.S., and highlighted NATO's superior capabilities over Russia.
3. **Ongoing Issue:** Trump's criticism of NATO allies for insufficient defense spending echoes his presidency's stance, pressing for greater financial contributions from members.
4. **Impact of U.S. Withdrawal:** A potential withdrawal of U.S. support under Trump could significantly weaken NATO, given the U.S.'s pivotal role in the alliance's defense capabilities and funding.
5. **European Defense Commitment:** European members are committing to higher defense spending, with nations like Germany and Finland promising increased military expenditures, aiming for more autonomous European defense.
6. **Strategic Implications:** The dispute stresses the importance of NATO's unity and the critical impact of U.S. support, highlighting challenges in achieving equitable burden-sharing and strategic coherence in facing threats.

Mains easy language

The recent conflict between former U.S. President Donald Trump and NATO stems from Trump's threat to pull U.S. support if European allies don't increase their defense spending. Trump's remarks, hinting at a nonchalant attitude towards potential Russian aggression, were rebuked by NATO Secretary General Jens Stoltenberg, emphasizing that any suggestion of allies not defending each other weakens the security of all, including the U.S. This isn't Trump's first critique of NATO's spending; his presidency was marked by demands for allies to contribute more towards defense. Despite NATO members meeting the direct funding requirements for operations, disparities in indirect funding contributions persist, with the U.S. being a major financier. Stoltenberg defended NATO's capabilities, citing a report that showcased NATO's superior military strength over Russia. However, Trump's potential re-election and subsequent withdrawal of U.S. support could critically impact NATO's collective defense and long-term military capabilities, emphasizing the alliance's reliance on U.S. contributions.

28th February 2024

Human space flight mission: a status check-Indian Express Explained

Science and technology

Key takeaways

The Gaganyaan mission is India's big plan to send its own people into space.

1. **Who's Going:** Four Indian Air Force officers are getting ready for this space adventure. They're practicing hard, both in India and in Russia, to get ready for their trip.
2. **What's Happening:** Before sending people, India will first send a spaceship without anyone inside by the end of 2024 to make sure everything works fine. Then, the big trip will happen, taking three people up into space about 400 km above Earth for three days.
3. **The Space Bus:** They'll be riding on the LVM3 rocket, a very strong and safe "space bus" made just for this trip. It has special safety stuff to take care of the astronauts, like an escape system in case something goes wrong at the start.



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4. **Help from Friends:** India is getting help from space experts in Russia and the USA to make sure the astronauts are super prepared. This shows that other countries think India's space mission is a big deal.
5. **Why It's Cool:** This mission is a huge deal for India. It shows the world that India can send its own people into space, just like the big space countries. It's a proud moment that will be remembered and will inspire lots of people in India and everywhere.

Mains easy language

India is stepping into the space adventure big time with its Gaganyaan mission, planning to send its own astronauts, called "Gaganauts," into space. Four brave Indian Air Force officers are gearing up for this historic journey. They've been training really hard, both in India and Russia, learning all they need to know about surviving and working in space. Before the astronauts take off, India will do a test flight without anyone on board by the end of 2024 to make sure everything's A-OK. The main event will see three astronauts orbiting Earth, 400 km up in the sky, for three days, which is pretty cool.

They'll ride the LVM3 rocket, a super strong and safe ride specially made for them. It's like a space bus with special safety features to keep them safe. India's not doing this alone; they're getting help from space experts in Russia and the USA, which is pretty awesome. This mission is a big deal—it's like saying, "Hey world, we're in the space club too!" It's a proud moment for India, showing off its space smarts and inspiring lots of people everywhere.

WHAT IS GOOGLE'S AI GENIE THAT CAN TURN IMAGES INTO VIDEOS-Indian Express Explained

Science and technology

Key takeaways

1. **Innovative AI Model:** Google's DeepMind has developed "Genie," a generative AI model that can create interactive video games from simple text or image inputs.
2. **No Prior Training Needed:** Unlike traditional game development that relies on predefined mechanics, Genie can generate playable worlds without prior knowledge of game mechanics, trained on a variety of internet videos.
3. **Diverse Playable Worlds:** It can produce action-controllable environments from synthetic images, photographs, and sketches, showcasing its versatility.
4. **Autonomous Learning:** Genie learns and replicates game controls solely from unlabeled internet videos, a significant advancement in AI technology.
5. **Simplifies Game Creation:** This technology simplifies the process of creating immersive and interactive environments, making it accessible to a broader audience without requiring complex coding or design skills.
6. **Towards General AI:** Genie represents a step towards the development of general AI agents, capable of perceiving and interacting with their surroundings autonomously, potentially revolutionizing the gaming industry and beyond.

Mains easy language

Google's DeepMind introduced "Genie," an innovative generative AI (GenAI) model, capable of creating interactive video games from just a text or image prompt. This breakthrough technology can generate playable worlds, including action-controllable environments from images, photographs, and sketches, without needing prior training on game mechanics. Genie's training on a wide range of internet-sourced videos allows it to produce diverse, interactive environments. Its unique feature is learning and replicating game controls from unlabeled videos, eliminating the need for detailed programming or game design knowledge. This opens up new possibilities for creating virtual worlds, significantly simplifying the process. Genie marks a significant step towards general AI agents capable of autonomously interacting with their environments. This advancement could revolutionize the gaming industry and virtual interaction by making the creation of immersive, interactive environments more accessible to everyone, fostering innovation and broadening the scope of digital exploration.



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Religious internationalism-Indian Express Editorial

International relations

Key takeaways

1. **Trump's Appeal:** Donald Trump has intensified outreach to America's Christian nationalists, promising to protect Christian values and prioritize them in American political life.
2. **Global Trend:** The movement is part of a broader rise in Christian nationalism across the Western world, sharing goals like opposing immigration and promoting traditional values, which could align with the BJP's policies in India.
3. **Impact on India:** The rise of Christian nationalism in the West could intersect with Prime Minister Narendra Modi's governance, potentially shifting India's traditional international alliances towards new coalitions based on conservative and nationalist ideologies.
4. **International Alliances:** The movement could facilitate new international possibilities for collaborations between the BJP and conservative parties in the West, diverging from India's historical alliances with leftist and center-left forces in Europe.
5. **Potential Shifts:** As Christian nationalism challenges liberal hegemony in the West, it may open avenues for the BJP and the Modi government to forge relationships with Western conservative movements, marking a significant transformation in global political alliances.

Mains easy language

The rise of Christian nationalism in the United States, especially under the banner of Donald Trump's promise to "make America pray again," signals a potent political force with implications extending beyond American borders. Trump's alignment with Christian nationalist values, which includes ending the separation of Church and state and opposing LGBTQ and abortion rights, echoes a wider global trend. This trend sees similar nationalist movements gaining traction in Europe, advocating for traditional values and opposing immigration.

This international wave of Christian nationalism could significantly impact India's global political stance, particularly under Narendra Modi's leadership. Traditionally, India's international alliances have leaned towards leftist and centre-left ideologies. However, the growing influence of Christian nationalists in the West presents an opportunity for the BJP to forge new international coalitions based on conservative and nationalist ideologies.

The potential for collaboration between the BJP and Western conservative movements marks a departure from India's historical alliances. It highlights a shift towards engaging with global nativist movements, suggesting a reconfiguration of international relations that emphasizes shared conservative values over traditional ideological alignments. This evolving landscape could redefine India's position on the global stage, aligning it with emerging conservative forces in the West.

COSTS OF A BARRIER-Indian Express Editorial

Economy

Key takeaways

India's recent shift towards higher tariffs, diverging from its decades-long trend of tariff reduction, has significant implications for its trade policy, industrial competitiveness, and consumer welfare:

1. **Tariff Increase:** Since 2014, India has increased tariffs on around 3,200 items, raising the average rate to approximately 18%, making it one of the countries with the highest tariffs globally.
2. **Impact on Trade and Industry:** High tariffs disadvantage manufacturers, affect export competitiveness, and increase consumer costs. They also risk losing competitive advantages in critical sectors like electronics and pharmaceuticals due to targeted restrictions on Chinese imports.



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3. **Government Reconsideration:** Internal discussions within the government and feedback from industry groups have prompted a reevaluation of the tariff strategy, as evidenced by recent reductions in duties on mobile phone components.
4. **Trade Agreements:** The government is actively pursuing trade agreements, signing partnerships with the UAE and Australia, and negotiating with other countries, including the UK, to enhance economic cooperation and trade opportunities.
5. **Balancing Act:** India's policy adjustments reflect an ongoing effort to balance the goal of self-reliance with the realities of global trade and the need to remain competitive in international markets.

Mains easy language

India's recent policy shift towards increasing tariffs has marked a significant reversal from its previous trajectory towards lower tariffs since the 1990s. This move, aimed at fostering self-reliance, has positioned India among the highest tariff-imposing nations globally, impacting its trade competitiveness and consumer prices. The government's focus on atmanirbharta and the post-Galwan clash targeting of Chinese imports have raised concerns about domestic output and competitive advantage loss in crucial sectors like electronics and pharmaceuticals. The internal debate within the government and industry feedback has led to a reconsideration of this approach, notably with the recent reduction in import duties for mobile phone components. Furthermore, India's active pursuit of trade agreements, such as those signed with the UAE and Australia, indicates a nuanced strategy to balance protectionism with global trade integration. This evolving stance suggests an acknowledgment of the need for a more globally competitive and open economic policy framework.

[Stop the dithering and encourage green elections in India-The Hindu Editorial](#)

Polity

Key takeaways

The push for "green elections" in India reflects an urgent need to integrate sustainable practices within the electoral process to address the climate crisis.

1. **Election Commission's Initiative:** The Election Commission of India (ECI) has recognized the environmental impact of elections and is advocating for the reduction of non-biodegradable materials in campaign materials.
2. **Global Examples:** Countries like Sri Lanka and Estonia have successfully conducted environmentally-conscious elections, setting examples through carbon-sensitive campaigns and digital voting systems.
3. **Environmental Footprint:** Traditional election campaigns, with their reliance on paper, plastics, and energy-intensive rallies, contribute significantly to environmental degradation.
4. **Technological and Financial Challenges:** Transitioning to eco-friendly elections involves overcoming hurdles such as the need for robust digital infrastructure, the financial cost of sustainable materials, and ensuring equitable access to digital voting technologies.
5. **Legislative and Behavioral Changes:** Encouraging green elections requires legislative action, modification of the ECI's Model Code of Conduct, and a cultural shift towards valuing eco-friendly electoral practices.
6. **Stakeholder Involvement:** The successful transition to green elections necessitates collaboration among political parties, government bodies, civil society, and the media to promote and implement sustainable electoral practices.

Mains easy language

Amid the pressing climate crisis, the call for "green elections" in India underscores the urgent need to adopt sustainable practices in political campaigning and electoral processes. The Election Commission of India (ECI) has highlighted the environmental hazards posed by non-biodegradable materials used in elections, emphasizing the necessity for eco-friendly alternatives. The concept of green elections involves minimizing the carbon footprint and environmental impact of electoral activities through the use of sustainable materials, digital campaigning, and advanced voting methods. Examples from Kerala, Sri Lanka, and Estonia illustrate successful initiatives towards



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environmentally-conscious elections, ranging from bans on single-use plastics to carbon-sensitive campaigns and digital voting systems. The transition to green elections faces challenges, including technological, financial, and cultural barriers, but offers significant benefits in terms of environmental stewardship and civic engagement. Stakeholder involvement, from political parties to civil society and the media, is crucial in driving the shift towards sustainable electoral practices, setting a global benchmark for democratic processes.

[The global order — a fraying around many edges-The Hindu Editorial](#)

International relations

Key takeaways

The current global order, centered around the United Nations (UN) and established post-World War II, is facing significant challenges and strains due to changing geopolitical dynamics, shifting power balances, and recent global crises.

1. **UN Secretary-General's Pessimism:** António Guterres has expressed concern over the future of the UN, highlighting a lack of unity among Security Council members that undermines its authority.
2. **Need for Reform:** The foundational structure of the UN, designed to manage great power rivalry and prevent global conflicts, is being questioned due to its inability to adapt to the 21st-century geopolitical landscape.
3. **Global Shifts:** The rise of new economic powers and technological advancements call for a reevaluation of the UN's mechanisms, which were originally established based on the balance of power in the mid-20th century.
4. **Recent Global Events:** The COVID-19 pandemic, Russia's invasion of Ukraine, and the conflict in Gaza have exposed the limitations of the UN system, revealing deep fault lines between developed and developing countries.
5. **Alternative Groupings:** The emergence of regional and global groupings like the G-7, G-20, and the Asian Infrastructure Investment Bank (AIIB) suggests a demand for a more flexible and representative international framework, yet these lack the universal values and legal obligations of the UN system.
6. **Challenges of Systemic Change:** Reforming or replacing the current global architecture is a daunting task, underscored by the historical context that significant changes in global systems often follow catastrophic conditions.

Mains easy language

The global order, centered around the United Nations (UN) and established in the aftermath of World War II, is confronting unprecedented challenges. UN Secretary-General António Guterres has voiced concerns over the UN's future, pointing to a significant lack of unity among Security Council members that threatens the organization's authority and effectiveness. This system, designed to manage great power rivalries and prevent global conflicts, is now being tested by the realities of the 21st century, including shifts in power and prosperity, technological advancements, and the rise of new economic powers. Recent global events, such as the COVID-19 pandemic, Russia's invasion of Ukraine, and the conflict in Gaza, have further exposed the limitations and inconsistencies within the UN framework, highlighting deep fault lines between developed and developing nations. The emergence of alternative regional and global groupings suggests a growing demand for a more flexible and representative international framework, yet none offer the universal values and legal obligations underpinning the UN system. The challenge lies in reforming or replacing the current global architecture without resorting to the catastrophic conditions that have historically prompted systemic change, underscoring the need for an inclusive, effective, and adaptable global order.

[Why science needs sustainable funding-The Hindu Text and Context](#)

Science and technology

Key takeaways



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1. **Low R&D Expenditure:** India's current investment in research and development (R&D) is among the lowest globally, at 0.64% of its GDP, a decrease from previous years. This is significantly lower than the spending levels of developed countries, which range between 2% and 4% of their GDPs.
2. **National Goal Unmet:** Despite recognizing the need to increase R&D expenditure to at least 2% of GDP, India has not met this goal, highlighting a gap between policy objectives and actual investment.
3. **Private Sector Contribution:** The private sector in India contributes only 36.4% to the total R&D expenditure, which is less than the average contribution in developed countries, where the private sector accounts for about 70% of R&D spending.
4. **Budget Underutilization:** The Union Ministry of Science and Technology has consistently under-utilized its allocated budget for R&D, pointing to systemic issues in fund management and project implementation.
5. **Need for Increased Investment:** For India to achieve its ambition of becoming a developed country by 2047, it needs to significantly increase its R&D spending, aiming for at least 3% of GDP annually until 2047.
6. **Government and Private Sector Collaboration:** The latest budget indicates a shift towards encouraging more private sector contributions to R&D, suggesting a need for a collaborative approach to funding science sustainably in India.
7. **Capacity Building:** There is a critical need for capacity building within governmental agencies to efficiently manage and utilize R&D funds, which is essential for India's scientific advancement and sustainable development goals.

Mains easy language

India's commitment to sustainable development hinges on significantly enhancing its R&D expenditure, currently one of the world's lowest at 0.64% of GDP. This figure falls short of the desired target of at least 2% to 3% of GDP, necessary for India to transition into a developed nation by 2047. The gap between India's investment and that of developed nations, which spend between 2% and 4% of their GDP on R&D, underscores the urgent need for increased funding. Furthermore, the private sector's contribution in India is markedly low, with only 36.4% of R&D expenditure, compared to the 70% average in economically advanced countries. The consistent underutilization of allocated R&D budgets by governmental agencies, including the Ministry of Science and Technology, signals inefficiencies that must be addressed to ensure sustainable funding. The call for greater investment, both from the government and the private sector, is crucial for India to meet its ambitious developmental goals and support science for sustainable development.

[Why is the Reddit licensing deal important for Google's AI plan?-The Hindu text and context](#)

Science and technology

Key takeaways

The Reddit-Google licensing deal, marking Google's \$60 million annual payment to access Reddit's user-generated content for AI training, is significant for several reasons:

1. **Financial Boost for Reddit:** Ahead of its IPO, Reddit benefits financially from the deal, enhancing its appeal to investors despite its unprofitability.
2. **AI Development for Google:** The agreement provides Google with valuable data to refine its AI models, a crucial step given its previous setbacks with AI technologies.
3. **Trend Towards Ethical Data Acquisition:** This partnership reflects a shift in the tech industry towards securing data through legal and ethical channels amidst growing backlash against unsolicited web scraping.





- 4. Legislative Changes and Compliance:** It aligns with potential regulatory changes that could require AI companies to disclose training data sources and possibly compensate for their use, increasing AI development costs.
- 5. Community Engagement by Reddit:** Reddit's plan to offer IPO shares to its top users as part of the deal is an innovative strategy to maintain platform loyalty and involvement.
- 6. Industry-Wide Implications:** The deal highlights the importance of large, unique datasets for AI training and may set a precedent for future agreements between tech companies and content platforms.

Mains easy language

The Reddit-Google licensing deal, where Google will pay \$60 million annually to access Reddit's user-generated content to train its AI models, is a strategic move for both companies. For Reddit, this deal provides a financial boost and enhances its attractiveness to investors ahead of its planned IPO, despite its current lack of profitability. For Google, this partnership offers a vital opportunity to improve its AI technology by accessing a vast and unique dataset, especially after facing setbacks with its AI initiatives like the inaccuracies of its chatbot Bard and the Gemini project's diversity issues.

This deal reflects a broader industry trend where tech companies are seeking ethical and legal ways to acquire data for AI training amidst growing scrutiny and potential regulations against indiscriminate web scraping for AI purposes. It signifies a shift towards more transparent and compensated use of online content, aligning with potential legislative changes that could mandate disclosure of training data sources and possibly increase the cost of AI model development. Additionally, Reddit's innovative approach to involve its community in the IPO process by offering shares to top contributors highlights a unique strategy to maintain platform engagement and loyalty.

[Newfound 'obelisks' join viruses, viroids as third unusual life form-The Hindu Science](#)

Science

Key takeaways

- 1. New Life Form Discovered:** Researchers have identified "obelisks," a new category of life that joins viruses and viroids, showcasing a simpler yet distinct form of existence.
- 2. Unique Circular RNA Genomes:** Obelisks possess circular RNA genomes, differentiating them from the plain RNA of viroids and the more complex DNA or RNA of viruses, and code for two proteins unlike any known in other life forms.
- 3. Global Presence:** This discovery was made by analyzing RNA sequences from human gut and oral bacteria, revealing that obelisks are present across all seven continents, indicating their widespread distribution.
- 4. Advanced Sequencing Technology:** The identification of obelisks was facilitated by next-generation sequencing (NGS), a powerful genomic analysis technique that allows for the parallel sequencing of DNA and RNA from various organisms.
- 5. Potential Biological Significance:** The discovery of obelisks opens new questions about their mode of replication, transmission, pathogenicity to bacteria, evolutionary origins, and possible roles in human health and disease.
- 6. Blurring Life Boundaries:** Obelisks add to the growing understanding that the distinction between living and non-living entities is increasingly complex and nuanced, expanding our comprehension of life at its most fundamental level.

Mains easy language

The discovery of "obelisks," a new form of life, significantly expands the realm of biological entities straddling the boundary between the living and non-living. Uncovered through the analysis of 5.4 million RNA sequence datasets from human gut bacteria, obelisks join viruses and viroids as unique life forms. Characterized by their circular RNA genomes, obelisks are notable for coding two proteins, unlike any known in other life forms, marking a departure from the simpler RNA strands of viroids that do not code for proteins. This groundbreaking



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discovery, facilitated by advanced next-generation sequencing (NGS) technology, highlights obelisks' widespread presence across all seven continents within human gut and oral bacteria. The existence of obelisks raises intriguing questions about their replication mechanisms, transmission methods, evolutionary origins, and potential implications for human health and disease. Moreover, the identification of obelisks underscores the increasingly blurred lines between living and non-living entities, challenging traditional notions of life and expanding our understanding of biological diversity at the molecular level.

29th February 2024

The importance of creating India's genetic map-Indian Express Explained

Science and technology

Key takeaways:

The Genome India project, a groundbreaking initiative by the Indian government, aims to sequence 10,000 whole genomes to map the genetic diversity of the Indian population. This project is pivotal for several reasons:

1. Understanding Genetic Variations

It highlights the unique genetic makeup of the Indian population, identifying 135 million genetic variants specific to India. This is crucial for personalized medicine and understanding the genetic basis of diseases prevalent in different Indian communities.

2. Disease Vulnerability and Targeted Therapies

The project enables the identification of genetic mutations linked to diseases, paving the way for developing targeted therapies. For example, mutations like MYBPC3 and LAMB3, associated with cardiac arrest and a lethal skin condition, respectively, have been identified among Indians.

3. Customized Medical Treatment

The genetic data can revolutionize personalized medicine, allowing for treatments tailored to an individual's genetic profile. This includes addressing drug resistance and the effectiveness of medical treatments.

4. Advancement in Genetic Research

With rapid technological advancements, the project completed sequencing 10,000 genomes in a matter of months, showcasing the potential for swift progress in genetic research and treatment development.

5. Digital Public Good and Research Enablement

The genetic data, stored as an 8 petabyte dataset, will be accessible as a digital public good, facilitating further research and development of new diagnostics and therapies.

Mains easy language

The Genome India project, initiated by the Indian government, is a pioneering effort to map the genetic diversity of India's vast population by sequencing 10,000 whole genomes. This landmark initiative aims to uncover the unique genetic variations prevalent among the Indian populace, which is critical for developing targeted medical treatments and understanding the genetic basis of various diseases. The project has identified 135 million genetic variants unique to India, emphasizing the need for a customized genetic database to cater to the health needs of its diverse population groups. The significance of this project extends beyond mere data collection; it opens new avenues for personalized medicine, allowing for treatments that are specifically tailored to an individual's genetic makeup. This approach is particularly beneficial for addressing rare genetic diseases and conditions uniquely prevalent in certain communities. Furthermore, the project's achievements underscore the rapid advancements in genomic research, with the sequencing of 10,000 genomes completed in just a few



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months, a feat that marks a significant milestone in the field of genetics. The data, stored as a digital public good, promises to accelerate research and innovation in diagnostics, treatment, and the understanding of genetic diseases, heralding a new era of healthcare in India.

[WHY WE HAVE LEAP YEARS, WHY THEY DON'T ALWAYS COME EVERY 4 YEARS-Indian Express Explained](#)

Geography

Key takeaways

1. **Leap Year Concept:** Leap years have 366 days, adding an extra day to February to account for the Earth's approximately 365.25-day orbit around the Sun. This adjustment keeps our calendar year synchronized with the astronomical year.
2. **Introduction of Leap Years:** The leap year was introduced in the Julian calendar in 46 BC and refined in the Gregorian calendar in 1582 to correct seasonal drift caused by the calendar year being slightly shorter than the solar year.
3. **Reason for Leap Years:** Without leap years, our calendar would lose alignment with Earth's seasons, causing significant drift over time that would affect agriculture, seasons, and various cultural practices.
4. **Gregorian Calendar Reform:** In 1582, the Gregorian calendar reform corrected the cumulative error of the Julian calendar by skipping 10 days and establishing a more accurate system for determining leap years.
5. **Exception Rule:** Not every year divisible by four is a leap year. To maintain accuracy, years ending in 00 must also be divisible by 400 to be considered leap years. Thus, the year 2000 was a leap year, but 1900 was not.

Mains easy language

Leap years, which occur every four years and include an extra day on February 29, are designed to keep our calendar in alignment with the Earth's revolutions around the Sun. The necessity for leap years stems from the fact that the Earth does not orbit the Sun in precisely 365 days but takes about 365.2425 days. Without the adjustment provided by leap years, our calendar would gradually drift out of sync with the seasons.

The concept of leap years was introduced in 46 BC by the Julian calendar, implemented under Julius Caesar, and further refined by the Gregorian calendar, established by Pope Gregory XIII in 1582. This reform was necessary because the extra quarter-day added annually by the Julian system resulted in an excess of days over time, leading to significant seasonal drift.

However, leap years do not occur in a straightforward every-four-year pattern. To correct for overcompensation and to maintain closer alignment with the solar year, the Gregorian calendar stipulates that years divisible by 100 are not leap years unless they can also be divided by 400. Therefore, while the year 2000 was a leap year, 1900 was not. This nuanced rule ensures that our calendar remains as accurate as possible in representing the Earth's journey around the Sun, preventing a gradual shift of seasons over millennia.

[We, the consumers-Indian Express Editorial](#)

Economy

Key takeaways:

1. **Introduction of HCES 2022-23:** After a decade, the Household Consumption Expenditure Survey (HCES) for 2022-23 offers fresh data on Indian households' consumption patterns, but changes in methodology affect comparability with previous rounds.
2. **Methodological Changes:** The survey now includes 405 items (up from 347 in 2011-12) and employs three separate questionnaires for different expenditure categories, aiming to improve response accuracy but complicating historical comparisons.
3. **Survey Design Adjustments:** The HCES made significant adjustments, such as multiple household visits and separate surveys for food, consumables, services, and durable goods, to reduce respondent fatigue and enhance data quality.



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- 4. Challenges in Comparability:** These methodological changes, while improving data collection quality, make it difficult to directly compare the new findings with those from earlier surveys, potentially skewing poverty and consumption pattern analyses.
- 5. Shifts in Consumption Patterns:** Preliminary data suggests a decline in rural-urban consumption inequality and changes in expenditure distribution, with decreased spending on cereals and increased spending on processed foods, healthcare, and non-food items.
- 6. Inter-caste Consumption Patterns:** The survey hints at stagnant inter-caste consumption disparities in rural areas but a slight narrowing in urban areas, indicating subtle shifts in socio-economic dynamics.
- 7. Need for Longitudinal Comparability:** Despite introducing beneficial changes, the HCES missed an opportunity to maintain continuity with past data, underscoring the importance of balancing survey innovation with the ability to track long-term trends.

Mains easy language

The latest Household Consumption Expenditure Survey (HCES) for 2022-23, released after a significant hiatus, provides critical insights into the current consumption patterns of Indian households. However, its revamped methodology, which includes an expanded list of consumption items and a segmented survey approach, poses challenges for direct comparison with earlier rounds. This adaptation aims to enhance data collection accuracy but complicates the analysis of long-term consumption trends and poverty estimates. The survey suggests shifts in consumption patterns, such as a reduced expenditure on cereals and increased spending on processed foods, healthcare, and non-food items. It also indicates a slight decline in rural-urban inequality in consumption expenditure and subtle improvements in inter-caste consumption disparities, especially in urban areas. Despite these valuable insights, the survey's departure from previous methodologies limits its utility in tracking changes over time, underscoring the need for survey designs that balance methodological improvements with the continuity necessary for longitudinal analysis.

The economic case for investing in India's children-The Hindu Editorial

Sociology

Key takeaways:

- 1. Underinvestment in ECCE:** Despite the crucial role of early childhood care and education (ECCE) in human development, it has historically received inadequate attention and funding in India, often overshadowed by other educational and developmental priorities.
- 2. Government Initiatives:** Recent initiatives by the Indian government, including NIPUN Bharat and Poshan Bhi Padhai Bhi, aim to enhance foundational literacy and numeracy through the Anganwadi system, reflecting a growing recognition of the importance of investing in early childhood.
- 3. Budgetary Allocations:** The interim Budget 2024 promises increased funding for upgrading Saksham Anganwadis and providing health services to Anganwadi workers, indicating a positive shift towards supporting ECCE infrastructure and personnel.
- 4. Proven Benefits of ECCE:** Research highlights the significant advantages of early childhood education, such as cognitive and motor skills development, reduction in gender and income gaps, and long-term educational and health outcomes.
- 5. Need for India-specific Research:** While international studies suggest high returns on investment in ECCE, there is a pressing need for systematic, rigorous research in the Indian context to quantify the economic and social benefits of early childhood interventions.
- 6. Strategic Imperative for Development:** Prioritizing ECCE is essential for India's socio-economic development and achieving the goal of becoming a developed nation by 2047, underscoring the need for increased investment and policy focus on early childhood care and education.

Mains easy language



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Investing in early childhood care and education (ECCE) is pivotal for India's socio-economic development, yet it has historically been underfunded and overlooked. Recognizing the foundational role of early childhood in human development, the Indian government has initiated measures like NIPUN Bharat and Poshan Bhi Padhai Bhi to enhance foundational literacy, numeracy, and ECCE quality through the Anganwadi system. The recent budget allocations for upgrading Saksham Anganwadis and enhancing resources for Anganwadi workers signal a commitment to this cause. However, despite these efforts and the proven benefits of ECCE in narrowing gender and income gaps, India's investment in early childhood remains modest compared to other educational and infrastructural allocations. Research underscores the long-term benefits of ECCE, including improved educational attainment, health outcomes, and even reductions in social unrest. Yet, the macroeconomic impact of these investments in the Indian context remains underexplored. Nobel Laureate Heckman's study highlights the significant returns on investment in ECCE, suggesting a need for India-specific research to guide policy and funding decisions. As India aims for developed nation status by 2047, prioritizing ECCE emerges as a strategic imperative. It not only supports women's participation in the workforce but also ensures a thriving future generation. To realize this vision, comprehensive research and increased funding for ECCE are essential, underscoring the economic and societal imperative of investing in India's children from the earliest stages.

[India's fight against rare diseases-The Hindu Editorial](#)

Science

Key takeaways:

- 1. Rare Disease Prevalence:** India, with over 450 identified rare diseases, accounts for a significant portion of the global rare disease incidence, affecting approximately 8 to 10 crore Indians, the majority of whom are children.
- 2. Challenges in Treatment and Awareness:** Despite the high incidence, most rare diseases lack effective treatments, and awareness, diagnosis, and drug development for these conditions are significantly lagging in India.
- 3. Policy and Funding Issues:** The National Policy for Rare Diseases (NPRD) introduced in 2021 faces implementation challenges, including undefined disease categories, patient eligibility confusion, and insufficient funding, with the current budget allocation being inadequate for the lifelong management required by many rare diseases.
- 4. Diagnostic and Treatment Accessibility:** The diagnosis of rare diseases takes an average of seven years, with treatments available for less than 50% of identified diseases. Access to approved treatments is limited to a few Centres of Excellence (CoEs), which are unevenly distributed and face funding and coordination issues.
- 5. Governmental Responsibility and Crowdfunding:** The reliance on crowdfunding for treating rare diseases, as suggested by the NPRD, is criticized as unsustainable. There's a call for the government to take more responsibility, including waiving GST on life-saving drugs and incentivizing domestic drug manufacturing.
- 6. Need for Comprehensive Strategy:** Addressing rare diseases in India requires a multi-faceted approach, including defining rare diseases, increasing budgetary allocations, enhancing the number of CoEs, and ensuring equitable and responsible fund utilization, along with leveraging CSR initiatives and public-private partnerships for funding.

Mains easy language

India's struggle with rare diseases is underscored by the tragic death of child actress Suhani Bhatnagar from dermatomyositis, coinciding with Rare Disease Day. The country harbors a significant share of the global rare disease burden, with over 450 identified diseases affecting 8 to 10 crore citizens, predominantly children. Despite this high incidence, awareness, diagnosis, and treatment development for rare diseases are notably inadequate. The National Policy for Rare Diseases (NPRD) 2021 aims to address these challenges, yet faces implementation hurdles, including ambiguous disease definitions and insufficient funding. Current resources are poorly allocated, as evidenced by underused funds across Centres of Excellence (CoEs) and an over-reliance on unsustainable crowdfunding efforts for



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treatment costs. Addressing rare diseases in India demands a robust, multi-faceted strategy that includes defining rare diseases, increasing budget allocations, enhancing drug development incentives, and improving treatment access and affordability. This strategy must also leverage public-private partnerships and CSR initiatives to fill funding gaps, ensuring a comprehensive and sustainable approach to managing rare diseases.

[On irregularities in vertical devolution-The Hindu text and context](#)

Polity

Key takeaways

- 1. State Agitations Highlight Fiscal Federalism Issues:** Recent protests by state governments, notably Kerala and Karnataka, have spotlighted significant challenges in India's fiscal federalism, particularly in the vertical distribution of resources between the Union and States.
- 2. Concerns Over Vertical Devolution:** There's growing unease regarding the Union government's practices of retaining a larger share of proceeds, effectively reducing the divisible pool of resources meant to be shared with States, and not fulfilling the devolution percentages recommended by successive Finance Commissions (FCs).
- 3. Rise of Cesses and Surcharges:** The Union government's introduction of various cesses and surcharges, especially post-GST, has led to a considerable portion of gross tax revenue being excluded from the divisible pool, limiting the funds shared with States.
- 4. Impact on State Finances:** The practice of withholding significant amounts through cesses and surcharges has deprived States of a cumulative total exceeding ₹36.6 lakh crore between 2009-10 and 2023-24, undermining state autonomy and fiscal capabilities.
- 5. Deviation from FC Recommendations:** Despite FCs setting clear devolution percentages for sharing net proceeds with States, the Union government has consistently devolved less than recommended, leading to substantial underdevolution of funds to States.
- 6. Need for Corrective Measures by the 16th FC:** The 16th Finance Commission must address these historical discrepancies in vertical devolution by recommending compensatory measures for States and ensuring transparent estimation and reporting of net proceeds.
- 7. Legislative Actions Required:** To preserve the integrity of fiscal federalism and ensure equitable resource distribution, the Union government must legislate strict limits on the collection of cesses and surcharges and ensure their temporary nature to prevent further dilution of the divisible pool.

Mains easy language

Recent agitations by states like Kerala and Karnataka against fiscal federalism practices in India underscore the need for reform in vertical devolution—the division of resources between the Union and States. These protests highlight two main issues: the Union government's retention of a larger share of proceeds, thus shrinking the divisible pool, and its failure to adhere to Finance Commission (FC) recommendations for sharing net proceeds with States. The practice of introducing new cesses and surcharges has significantly reduced the funds available for states, with a cumulative withholding of over ₹36.6 lakh crore from 2009-10 to 2023-24. This trend not only undermines state autonomy but also deviates from the principles of fiscal federalism by centralizing fiscal power. Furthermore, the Union government has consistently failed to devolve the recommended percentages of net proceeds to States, leading to substantial under devolution. The upcoming 16th FC faces a crucial task in addressing these disparities by recommending compensatory measures and ensuring accurate reporting of net proceeds, while legislative limits on cesses and surcharges are imperative to safeguard the fiscal structure and ensure equitable resource distribution.

[The rocky vista of medicinal cannabis that research is bringing into view-The Hindu Science](#)

Science



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Key takeaways

- 1. Medicinal Potential of Cannabis:** Research into cannabis, particularly cannabinoids like THC and CBD, is expanding, focusing on their potential to treat conditions such as bipolar depression, schizophrenia, substance-use disorders, and chronic pain. This research highlights the complex therapeutic potential of cannabis in medicine.
- 2. Complex Effects on Mental Health:** Cannabis has varied effects on mental health; while it shows promise in certain treatments, it can exacerbate or precipitate psychotic conditions in vulnerable individuals. The risk of cannabis use in youth leading to psychotic symptoms later in life underscores the need for caution.
- 3. Cannabinoid System's Role:** The human cannabinoid system, with receptors spread throughout the central nervous system, modulates functions such as pain, memory, and appetite. Cannabis interacts with this system, illustrating the biological basis for both its therapeutic effects and risks.
- 4. Historical and Cultural Significance:** Cannabis has been cultivated and used by humans for thousands of years, with Michael Pollan's work highlighting its role in forgetting traumatic memories. This historical context enriches the current understanding of cannabis's potential uses.
- 5. Policy and Legislation Challenges:** The increasing decriminalization and legalization of medicinal cannabis worldwide necessitate careful policy-making to protect vulnerable groups, including children, adolescents, and those with mental illnesses, from its potential detrimental effects.
- 6. Need for Targeted Research and Informed Policies:** As interest in medicinal cannabis grows, there's a crucial need for targeted research to fully understand its benefits and risks. This will inform policy decisions that balance the therapeutic potential of cannabis with the need to minimize harm, especially in vulnerable populations.

Mains easy language

The growing interest in cannabis for medical purposes, particularly focusing on compounds like THC and CBD, highlights its potential for treating mental health conditions and chronic pain. However, its effects on mental health are complex, with research indicating both therapeutic potential and risks, particularly exacerbating psychotic conditions in vulnerable individuals. The human cannabinoid system plays a significant role in this interaction, influencing various bodily functions and illustrating the biological underpinnings of cannabis's effects. Historical perspectives enrich our understanding of cannabis's role in human culture, emphasizing its potential in managing traumatic memories. The move towards decriminalization and medicinal legalization worldwide underscores the need for careful policy-making to protect vulnerable groups. Targeted research and informed policies are essential to harness cannabis's therapeutic benefits while minimizing its risks, especially among youth and individuals with pre-existing mental health conditions.

Early bloom of the jacaranda sparks furious climate debate in Mexico-The Hindu Science

Environment

Key takeaways:

- 1. Early Blooming Phenomenon:** Jacaranda trees in Mexico City, traditionally blooming in spring, started flowering unusually early in January, sparking concerns among residents and scientists.
- 2. Climate Change Suspected:** The premature flowering of jacarandas is suspected to be influenced by climate change, with rising temperatures causing an early end to winter.
- 3. Community Alarm:** The early bloom has heightened public awareness and concern over climate change, moving the conversation from abstract environmental issues to visible, local changes.



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4. **Scientific Investigation:** Researchers, led by Dr. Constantino Gonzalez at the National Autonomous University of Mexico, are collecting data and using satellite imagery to study the correlation between the early flowering and climate change.
5. **Ecological Impact:** Jacarandas, though not native to Mexico, play a crucial role in the city's ecosystem by attracting pollinators. Changes in their flowering cycle could potentially impact local wildlife populations.
6. **Public Engagement:** The phenomenon has led to increased public engagement with climate change issues, as evidenced by the spread of alarm and curiosity through social media, highlighting the tangible effects of climate change on urban life.

Mains easy language

The early blooming of jacaranda trees in Mexico City has ignited a debate on climate change, marking a significant shift from their traditional spring flowering to as early as January. This phenomenon has alarmed both residents and scientists, prompting investigations into the extent and causes of this unusual pattern. Rising temperatures, ending the city's winter prematurely, are suspected to be a primary factor. Researchers, led by Dr. Constantino Gonzalez from the National Autonomous University of Mexico, are collecting data and utilizing satellite imagery to study the correlation between climate change and the jacarandas' early flowering. The jacaranda, although not native to Mexico, has become integral to Mexico City's landscape and ecosystem, attracting pollinators like hummingbirds and bees. The community's growing concern reflects a broader awareness of climate change's tangible impacts on urban environments, challenging the perception that its effects are distant or abstract.

