



NOVEMBER, 2023



The

HINDU & EXPRESS NOTES

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1st November 2023

Ethics, parliamentary conduct and the Indian MP-The Hindu Editorial

Polity

Key takeaways:

- Ethics Committee Investigation:** Mahua Moitra, a West Bengal MP, is under investigation by the Lok Sabha Ethics Committee for accepting money to promote a businessman's interests through her parliamentary questions.
- Expulsion for Misconduct:** MPs accepting money for their parliamentary work may face expulsion from the Lok Sabha, a consequence seen in prior cases from 1951 and 2005.



| Clear your doubts now.



3. Role of the Ethics Committee: Established in 2000, the Lok Sabha Ethics Committee deals with complaints about MPs' unethical conduct, using the undefined term "unethical conduct" for guidance.

4. Unethical Conduct Cases: The Ethics Committee has previously examined cases involving MPs engaging in unethical behavior, such as taking companions on parliamentary tours and misusing privileges.

5. Moitra's Case: If Moitra's case involves illegal gratification, it falls under a breach of privilege, not an ethics issue. Criminal investigations are typically handled by government agencies, and expulsion pertains to parliamentary conduct, not criminal charges.

6. Unique Investigative Procedures: Parliament employs its distinct investigative methods, differing from those of the judiciary. Parliamentary committees, consisting of MPs, assess evidence, hear oral testimonies, and make findings based on a preponderance of probabilities, bypassing the rules of the Evidence Act. These committees aim to protect Parliament's honor and dignity.

Mains easy language:

In the recent case involving Mahua Moitra, a Member of Parliament from West Bengal, the Lok Sabha Ethics Committee is investigating allegations that she accepted money to promote a businessman's interests through her parliamentary questions. If proven, this could lead to her expulsion from the Lok Sabha. Such cases of MPs taking money for their parliamentary work are not new, as we've seen in previous instances from 1951 and 2005 where MPs were expelled for similar actions.

The Lok Sabha Ethics Committee, established in 2000, is responsible for addressing complaints about MPs' unethical conduct. However, the term "unethical conduct" remains undefined, allowing the committee to decide on a case-by-case basis.

Past cases reviewed by the Ethics Committee involve actions like taking companions on parliamentary tours and misusing parliamentary privileges. While the committee handles these cases, Moitra's situation might be different, as it could involve a breach of privilege, leading to a separate criminal investigation by government agencies.

Parliament employs its own investigative methods, distinct from those of the judiciary. Parliamentary committees, comprised of MPs, evaluate evidence, hear oral testimonies, and make findings based on a preponderance of probabilities, without adhering to the rules of the Evidence Act. Their goal is to protect the honor and dignity of Parliament and its members. So, in Moitra's case, the final verdict will depend on whether her actions are deemed a breach of privilege or a matter of ethical conduct.

Stocktaking climate finance — a case of circles in red ink-The Hindu editorial

Environment

Key takeaways:

1. Climate Finance Significance: Climate finance is crucial for global climate negotiations, especially at COP 28 in Dubai. It's the financial support from developed countries to help developing nations address climate challenges.

2. \$100 Billion Goal: Developed nations must meet their \$100 billion yearly climate finance commitment, but there's a funding gap.

3. Developed vs. Developing: The debate centers on whether developing countries should do more to combat climate change. They, in turn, demand adequate funding for these efforts.

4. Nationally Determined Contributions (NDCs): NDCs show significant financial needs, especially for transitioning to cleaner energy systems.

5. Burden Sharing Challenge: There's no agreed method for developed countries to fairly share the responsibility of providing financial resources.

6. Mobilization Process: Climate finance is raised through replenishment processes, such as the Global Environment Facility and the Green Climate Fund.

7. Global Common Responsibilities: Unlike past crises where political will and self-interest prompted action, climate finance transfers lack urgency, although they're vital for safeguarding the global atmosphere.

Mains easy language:

The article delves into the critical issue of climate finance and its role in global climate negotiations. At its core, climate finance is the money provided by developed countries to help developing nations tackle climate challenges. This financial support is vital for building trust in global climate discussions, notably as we approach COP 28, a crucial climate conference.

A central point of contention is the commitment made by developed nations to mobilize \$100 billion each year for climate finance. However, there's a significant shortfall in funding, raising questions about whether developed countries are meeting their obligations.





The debate also centers on the responsibilities of both developed and developing nations. While there's a call for developing countries to intensify their climate action efforts, they argue that they need substantial financial assistance to transition to cleaner, more sustainable practices.

Nationally Determined Contributions (NDCs), which outline each country's climate plans, highlight the substantial financial needs, especially for shifting from traditional energy systems to cleaner alternatives.

There's a challenge in fairly sharing the responsibility among developed countries to provide financial resources. A standardized method for distribution is lacking.

Climate finance is typically raised through replenishment processes, managed by organizations like the Global Environment Facility and the Green Climate Fund. These processes determine how much developed countries contribute to support climate initiatives in developing nations.

Unlike past global crises, where urgency and self-interest prompted swift action, the issue of climate finance seems to lack the same sense of urgency, despite being crucial for safeguarding a global common resource—the Earth's atmosphere.

The silent annexation of West Bank-The Hindu Editorial

International relations

Key takeaways:

- 1. Israeli Occupation:** The article highlights the challenges faced by Palestinians living in the West Bank under Israeli occupation, including stringent border controls and harsh treatment by Israeli authorities.
- 2. Silent Annexation:** The author expresses concerns about the annexation of the West Bank, which is receiving less international attention compared to other conflicts in the region.
- 3. Violence and Evacuations:** The West Bank has experienced violence, arrests, and evacuations in cities and refugee camps, leading to the displacement of Palestinian communities.
- 4. Israeli Settlements:** Israeli settlers, some with extremist views, are residing in illegal settlements in the West Bank, further complicating the situation.
- 5. State-Sponsored Violence:** Questions are raised about the legitimacy of state-sponsored violence in Israeli settlements and the sources of funding for such activities.
- 6. Political Complexities:** The article discusses the political complexities in the region, including the role of Hamas, the Palestinian Authority, and smaller militant groups.
- 7. Two-State Solution:** The feasibility of a two-state solution is questioned, and the need for immediate action and international involvement is emphasized.
- 8. Call for a Referendum:** The author suggests that Israeli Jews, Israeli Arabs, Gazan Palestinians, and West Bank Palestinians should have a say in choosing their future through a referendum.

Mains easy language:

The article discusses the difficult situation in the West Bank, where Palestinian residents face daily challenges due to Israeli occupation. The author shares their personal experience of crossing into the West Bank from Jordan, describing long queues and harsh treatment by Israeli authorities. They express concern about the silent annexation of the West Bank, which is receiving less attention than other conflicts in the region.

The West Bank has seen violence, arrests, and evacuations in cities and refugee camps, leading to the displacement of Palestinian communities. Israeli settlers, some with extremist views, live in illegal settlements, further complicating the situation. The article also raises questions about state-sponsored violence in these settlements and the sources of funding.

The political situation is complex, with tensions between Hamas, the Palestinian Authority, and smaller militant groups. The feasibility of a two-state solution is questioned, and the need for immediate international involvement is stressed. The author suggests a referendum involving Israeli Jews, Israeli Arabs, Gazan Palestinians, and West Bank Palestinians to decide their own future.

In essence, the article sheds light on the challenges faced by Palestinians in the West Bank, the complex political landscape, and the need for international action to address the ongoing issues.





The stance of the Maldives President-elect on India-The Hindu text and context

International relations

Key takeaways

- 1. President-elect's Anti-Indian Stance:** Mohamed Muizzu, the Maldivian President-elect, is committed to removing Indian troops from the Maldives while upholding the nation's sovereignty.
- 2. Indian Military Presence:** The Maldives currently hosts 75 Indian military personnel who operate Domier aircraft and helicopters gifted by India.
- 3. Historical Tensions with India:** Muizzu's opposition to Indian military presence is rooted in past strained relations with India, particularly during President Yameen's term.
- 4. Prioritizing Maldivian Interests and Chinese Relations:** Muizzu emphasizes a pro-Maldives approach and opposes foreign military presence, despite acknowledging the benefits of Chinese assistance.
- 5. Political and Media Influence:** International media framing the elections as an India-China test has shaped Muizzu's repeated pledge to remove Indian troops.
- 6. Economic and Geopolitical Challenges with Colombo Security Conclave Involvement:** In addition to addressing Indian military presence, Muizzu faces substantial economic challenges, including managing mounting external debt. The Maldives' membership in the 'Colombo Security Conclave' strengthens collective security efforts in the Indian Ocean region, with India and China being crucial lenders and partners.

Mains easy language:

President-elect Mohamed Muizzu of the Maldives, who won the 2023 presidential election, has a strong stance against Indian military presence in the country. He wants to remove the 75 Indian troops who operate helicopters and aircraft gifted by India. This situation has roots in past tensions with India during the term of former President Yameen, who had strained relations with India and even insisted on returning Indian gift helicopters.

Muizzu claims to prioritize the interests of the Maldives, asserting a "pro-Maldives" approach. He opposes the presence of foreign military, although he highlights the benefits of Chinese assistance. Interestingly, this stance is largely influenced by international media framing the elections as a test of India-China relations, more than other domestic issues.

While President-elect Muizzu is resolute about removing Indian troops, he also faces substantial economic challenges. The Maldives is grappling with mounting external debt, and addressing this issue may require cooperation from both India and China, its primary lenders. India, in particular, has become the Maldives' primary security and economic partner, investing significantly in the nation's development. The Maldives' membership in the 'Colombo Security Conclave' strengthens collective security efforts in the Indian Ocean region, making it a complex geopolitical situation for the new president.

A Gaganyaan for the seas: inside India's 'Deep Ocean Mission' -The Hindu Science

Science and Tech New Tech

Key takeaways:

- 1. Deep Ocean Mission (DOM):** India's Ambitious Initiative DOM, approved in 2021 with a budget of ₹4,077 crore over five years, aims to explore and harness the ocean's depths through six pillars, covering deep-sea mining, climate change advisory services, biodiversity preservation, mineral exploration, energy and freshwater extraction, and the establishment of an advanced Marine Station.
- 2. DOM's Six Pillars:** These six pillars encompass various ocean-related areas, aligning with India's 'New India 2030' vision. They include deep-sea mining, climate change projections, deep-sea biodiversity preservation, mineral exploration, energy and freshwater extraction, and nurturing ocean biology.
- 3. Matsya 6000:** India's Flagship Submersible Matsya6000, designed to reach 6,000 meters in the central Indian Ocean, is equipped for observations, sample collection, and experimentation. It combines features of ROVs and AUVs, playing a pivotal role in DOM.
- 4. Targeted Depth of 6,000 Meters:** India's strategic choice to target 6,000 meters enables sustainable resource extraction, covering depths from 3,000 to 5,500 meters. This aligns with India's Exclusive Economic Zone and the central Indian Ocean.
- 5. Challenges of Deep Ocean Exploration:** Deep ocean exploration presents unique challenges, including high pressure, equipment adaptation, soft ocean beds, and limited visibility. Overcoming these hurdles is essential for success.



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6.Role of National Institutes and Academia: Collaboration between MoES institutes and academia is key for DOM's success. It involves close monitoring by expert councils and committees.

7.Vision for Sustainable Resource Extraction: DOM is committed to the sustainable extraction of deep-sea resources, aligning with the 'Atmanirbhar Bharat' vision for responsible resource utilization.

8.India's Emerging Role in Global Exploration :With Matsya6000, India aspires to join established nations in deep-ocean exploration. This positions India as an emerging player in global resource utilization and exploration.

Mains easy language:

India's Deep Ocean Mission (DOM) is a significant venture aimed at exploring and harnessing the ocean's hidden treasures. Approved in 2021 with a budget of ₹4,077 crore, it has six key pillars, covering a wide spectrum of ocean-related activities. These pillars include deep-sea mining, where India plans to extract valuable resources such as polymetallic nodules containing metals like copper and cobalt. The program also focuses on addressing climate change through ocean observations and models. It's a way to understand and predict future climate changes.

Moreover, DOM is dedicated to preserving the deep-sea biodiversity, exploring the ocean's depths to identify potential mineral sites, and harnessing energy and freshwater resources from the ocean. It also involves setting up an advanced Marine Station for Ocean Biology to nurture talent and promote opportunities in ocean biology and blue biotechnology.

One key highlight is Matsya6000, India's flagship deep-ocean submersible designed to dive to depths of 6,000 meters in the central Indian Ocean. This submersible will play a pivotal role in exploring and conducting experiments in the deep sea.

India's commitment to sustainable resource extraction and its strategic choice of targeting 6,000 meters in depth make this mission a vital step towards securing valuable resources while contributing to global deep-ocean exploration.

In the Pegasus battle, the fight for surveillance reform-The Hindu text and context

Science and technology

Key takeaways:

1.Pegasus Spyware in India:Pegasus spyware, developed by NSO Group, has been used in India against prominent figures, including cabinet Ministers, Opposition leaders, journalists, judges, and human rights defenders.

2.Inadequate Government Response:The Indian government, including the executive and specialized agencies, has not taken sufficient action in response to Pegasus disclosures.

3.Lack of Accountability:The lack of accountability in India contrasts with international responses in countries like Israel, France, and the United States.

4.Growing Surveillance Industry:India's "surveillance-for-hire" industry is on the rise, with companies offering their services for spying on designated targets.

5.Inadequate Surveillance Laws:Current Indian laws, such as the Information Technology Act and Indian Telegraph Act, do not provide adequate oversight or regulation of modern surveillance technologies like Pegasus.

6.Impact on Democracy:Pegasus and other surveillance practices have contributed to a downgrade in India's democratic status, highlighting the urgent need for comprehensive surveillance reform to protect citizens' rights.

Mains easy language:

The use of the Pegasus spyware in India has raised concerns about the erosion of privacy and democratic ideals in the country. The spyware, created by the NSO Group, has been used to target important individuals, including government officials, journalists, judges, and human rights defenders. This breach of privacy has been ongoing for some time, and despite revelations, the Indian government's response has been inadequate.

Government agencies, like CERT-IN, which deal with cybersecurity threats, have largely remained silent on the issue. The executive branch, responsible for addressing these concerns, has not taken significant action to protect citizens' privacy. The legislature, which should hold the executive accountable, has also failed to do so. When members of the IT Committee sought to question officials about Pegasus, they abstained, preventing any progress on the matter.

With no satisfactory response from the government or legislative bodies, the victims turned to the judiciary for help. However, even the judiciary's efforts have been delayed and inconclusive, leaving victims in limbo.

The lack of accountability, compared to international responses in countries like Israel, France, and the United States, is concerning. Additionally, the growing "surveillance-for-hire" industry in India poses a significant threat to citizens' privacy and rights. To address





these issues, an overhaul of India's surveillance laws is urgently needed to protect citizens from indiscriminate monitoring and safeguard democratic ideals. Without reform, the right to privacy in India is at risk of becoming obsolete, with serious implications for the nation's democracy.

The reason for falling fertility levels-The Hindu text and context

Sociology

Key takeaways:

1.Global Fertility Decline: Fertility levels have declined worldwide, especially in developed Asian countries, despite improved living standards, challenging the conventional belief that rising living costs are the primary cause.

2.Evolutionary Mismatch: The falling fertility rates can be attributed to an evolutionary mismatch, where traits that once enhanced survival have become counterproductive in modern society.

3.Social Status Evolution: Human evolution favored the pursuit of social status as it improved access to resources, mates, and reproductive success.

4.Shift in Social Status Dynamics: In ancient egalitarian societies, status was determined by contributions rather than resource accumulation, reducing the cost of status-seeking behavior.

5.Modern Society Challenges: Modern societies emphasize status through resource hoarding, leading to intense competition among a larger population with significant wealth disparities.

6.East Asian Societies: East Asian countries, with low fertility rates, prioritize education, career, and wealth as status markers, resulting in an over-investment in status-seeking and underinvestment in reproduction. This pursuit of social status raises the perceived cost of child-rearing, ultimately compromising reproductive choices.

Mains easy language:

In recent years, fertility rates have been dropping globally, even in places where people are better off financially. While it's easy to blame this trend on the rising cost of living, researchers suggest a more complex reason: something called "evolutionary mismatch." This means that traits that once helped us survive and thrive in the past are now working against us in the modern world.

Throughout human history, seeking social status was a key survival strategy. It gave us access to more resources, better chances of finding a mate, and raising healthy children. In the past, it was often about contributing to the group, not accumulating wealth, to gain status. But times have changed.

In today's world, it's often about how much stuff we have – money, property, degrees, and job titles. The competition is not just among a small group of people, but across a vast population with extreme wealth disparities. This shift can lead to a peculiar paradox, particularly in East Asian societies. While people may have plenty of resources, they choose to delay or even skip having children to compete for higher social status.

This pursuit of status leads to higher perceived costs of raising children, like investing in unnecessary degrees and expensive schools. It becomes a never-ending "rat race," and the unintended consequence is a decline in fertility rates. So, in a nutshell, it's not just the cost of living but a shift in our social status values that's causing fewer people to have kids.

In the interest of all-Indian Express Editorial

International Relations

Key takeaways:

UN Resolution for Ceasefire: The United Nations has adopted a resolution calling for a ceasefire in Gaza, with the aim of releasing hostages and delivering aid.

Israel's Priority: Historically, Israel's main concern has been the return of its nationals held captive, but it now appears to prioritize the elimination of Hamas over all else.

Israel's Refusal for Ceasefire: Israel is reluctant to agree to a ceasefire due to concerns that Hamas could use it to regroup and launch more attacks.

Global South's Perspective: Many nations in the Global South condemn Hamas's actions but also acknowledge the broader context of the conflict, including Gaza's long-standing issues.

International Community's Dilemma: The international community frequently discusses a two-state solution, but the reality on the ground makes it nearly impossible to implement.



| Clear your doubts now.



Potential Solutions: The article suggests a UN peacekeeping force to monitor the Israeli-Gaza border, but it acknowledges Israel's displeasure with the United Nations.

Long-term Uncertainty: Achieving a two-state solution is challenging, given the existing Israeli settlements in the West Bank and the current Israeli government's stance.

Mains in Easy Language

The article is talking about the conflict in the Middle East, particularly in a place called Gaza. The United Nations, which is like a big group of countries, has said that there should be a stop to the fighting in Gaza, so that people who were captured can be released, and aid like food and medicine can be given to the people there. This shows that many countries around the world are worried about the fighting in Gaza.

The article also mentions that in the past, Israel, one of the countries involved, was mostly concerned about getting back their people who were captured or the bodies of their soldiers and civilians. But now, it seems like their main goal is to get rid of a group called Hamas, even if it means there's no stopping the fighting. This change in focus is raising questions about what Israel really wants to achieve in this conflict.

The article also talks about the idea of having two separate countries in that area, one for Israelis and one for Palestinians. But because of many Israeli settlements in the Palestinian area, it's becoming very difficult to make this happen. So, the article suggests that a group of countries should send peacekeepers to watch over the border between Israel and Gaza to keep things calm. However, Israel is not very happy with this idea. It's a complicated situation, and the article discusses these challenges and what might happen in the future.

Where Alan Turing started it- Indian Express Editorial

Science and Technology

Key takeaways:

1. **London AI Summit:** The London Summit on the safe use of Artificial Intelligence, convened by British Prime Minister Rishi Sunak, gathers world leaders and technology company executives to discuss the global governance of AI.
2. **Global AI Governance:** The summit reflects a growing international focus on the governance of AI technology due to both its potential benefits and inherent dangers.
3. **Britain's Leadership Ambitions:** Rishi Sunak aims to establish Britain as a leader in global AI governance. He envisions Britain becoming a "technology superpower" and a hub for AI safety regulation.
4. **Historical Significance:** Bletchley Park, where the summit is held, has historical significance as it was the birthplace of AI research by Alan Turing during World War II.
5. **Global AI Governance Efforts:** Other countries and international organizations, including the United States, the European Union, China, and the United Nations, are also taking steps to address the challenges of governing AI.
6. **Challenges and Divisions:** The summit addresses concerns and divisions over AI regulation, including the balance between safety and innovation, defining "frontier AI," and the role of governments in AI development.

Mains in Easy Language:

The article discusses the London Summit on Artificial Intelligence (AI) safety and governance, emphasizing its significance in the context of global efforts to manage the potential benefits and risks associated with AI technology.

Rishi Sunak, the British Prime Minister, is leading this initiative to establish Britain as a leader in AI safety regulation, aiming to make the country a "technology superpower." The summit draws attention to Bletchley Park's historical role in AI research, with Alan Turing's work during World War II being a crucial foundation.

This event comes in the wake of various global actions, such as the United States' executive order on AI safety, the European Union's discussion on AI regulation, and China's call for increased cooperation in global AI governance. The United Nations has also established an advisory body to examine AI's potential impact on climate action and global development goals.

The article highlights the challenges and divisions in AI governance, including the balance between safety and innovation, the definition of "frontier AI," and the role of governments in AI development. It underscores the importance of setting international standards for AI safety and outlines the pivotal role that India needs to play in shaping AI governance as a significant contributor to AI development on the global stage. This article offers a broader perspective on the global discourse on AI regulation and its implications for India.





Maratha quota: what govt is doing now, what courts have said earlier- Indian Express Explained

Polity

Key takeaways:

1. **Maratha Quota Protests:** Protests over the Maratha quota intensify in Maharashtra, as the Maratha community comprises nearly 33% of the state's population, seeking reservation benefits.
2. **Government Panel:** The state government has formed a panel of three former High Court judges to provide legal advice in the ongoing Supreme Court battle over the Maratha reservation issue.
3. **Committee on Kunbi Certificates:** To address the protests, the state established a five-member committee to study the procedure for granting Kunbi (OBC) certificates to Marathas based on historical documents, including those from the Nizam period.
4. **Reservations History:** In 2018, the Maharashtra government proposed a 16% reservation for Marathas in education and government jobs. In 2019, the Bombay High Court upheld the constitutional validity of the Maratha quota but reduced it to 12% in education and 13% in jobs.
5. **High Court's Ruling Basis:** The Bombay High Court relied heavily on the findings of the Maharashtra State Backward Class Commission (MSBCC), which surveyed Maratha families, highlighting their social, economic, and educational backwardness.
6. **Supreme Court Overturns Quota:** In May 2021, the Supreme Court struck down the Maratha quota, citing that it exceeded the 50% reservation cap set in a 1992 judgment. The court argued that Marathas were not an "extraordinary circumstance" warranting a quota.

Mains in Easy Language:

This article delves into the ongoing Maratha quota protests and the legal developments surrounding the reservation issue in Maharashtra. The Maratha community, comprising a significant portion of the state's population, has been seeking reservation benefits for some time, leading to protests and legal challenges.

In response to the protests, the state government has set up a panel of former High Court judges to provide legal guidance in the Supreme Court case related to the Maratha quota. Additionally, a committee has been formed to study the process of granting Kunbi (OBC) certificates to Marathas based on historical documents.

The article provides insights into the historical background of the Maratha reservation, including the Bombay High Court's ruling in 2019, which upheld the constitutional validity of the Maratha quota but reduced its percentages. It also outlines the basis for the High Court's decision, which relied on the findings of the Maharashtra State Backward Class Commission.

Ultimately, the Supreme Court overturned the Maratha quota, as it exceeded the 50% reservation cap, challenging the designation of Marathas as an "extraordinary circumstance" for reservation. This article sheds light on the legal and social dimensions of the Maratha reservation issue in Maharashtra, a topic of significant relevance in India's reservation policy discourse.

What a 'normal' monsoon hides- Indian Express Explained

Geography

Key takeaways:

1. **Erratic Monsoon:** The 2023 monsoon season in India ended with 94% overall rainfall, the eighth consecutive year of broadly normal rainfall. However, district-level variability is significant.
2. **Daily Rainfall:** Normal daily rainfall was extremely rare during the monsoon. Over 60% of daily district-wise rainfall showed deficits of over 60% or no rain at all.
3. **Extreme Rainfall Events:** The season saw the second-largest number of extreme rainfall events in the past five years, compensating for dry periods.
4. **Regional Disparities:** While some regions received over 100% of expected rainfall, others barely reached 80%. Southern India also faced large deficits.
5. **Climate Change and Uncertainty:** Climate change contributes to unpredictable monsoon patterns, but other factors like El Nino play a role.
6. **Coping Mechanisms:** To manage unpredictable monsoons, better preparedness, disaster management, and climate-resilient infrastructure are essential. Adapting to climate change is crucial for resilience.

Mains in Easy Language:



| Clear your doubts now.



The article discusses the recently concluded 2023 monsoon season in India, highlighting the challenges posed by the erratic behavior of monsoon rainfall. While overall rainfall has remained in the normal range for the past eight years, a closer look reveals significant variations in daily and regional rainfall patterns.

At the district level, normal daily rainfall was found to be a rare occurrence, with over 60% of daily rainfall data showing deficits of over 60% or no rain at all. The monsoon season witnessed a substantial number of extreme rainfall events, compensating for dry periods and creating an illusion of normalcy.

Regional disparities in rainfall were also notable, with the eastern and northeastern regions consistently receiving below-normal rainfall. Climate change is often blamed for the increasing unpredictability in monsoon rainfall, but it is not the sole factor, as other influences like El Nino and cyclical weather events play a role.

To address the challenges posed by erratic monsoon patterns, the article suggests the need for better preparedness, disaster management, and strengthened climate resilience in infrastructure. As climate change continues to introduce greater uncertainty in weather events, adapting to these changes becomes crucial for sustainable development and resilience in the face of unpredictable weather patterns.

2nd November 2023

Impacting a woman's freedom to reproductive choices-The Hindu editorial

Sociology

Key takeaways:

- 1. Reproductive Choice Restriction:** The Supreme Court limits a woman's pregnancy termination rights to 24 weeks, except in cases of severe foetal abnormalities or life-threatening situations.
- 2. Overlooked Questions:** The judgment fails to address critical issues about the foetus's moral status, legal standing, and constitutional rights, favoring foetal rights over a woman's.
- 3. X's Case Conflict:** A woman, X, seeks termination due to post-partum depression and financial constraints, leading to conflicting judicial decisions and concerns about foetal viability.
- 4. Privacy and Dignity Contradiction:** The ruling contradicts prior court decisions emphasizing women's autonomy in making reproductive choices and their rights to privacy and dignity.
- 5. MTP Act as Enabler:** The judgment overlooks the potential for the Medical Termination of Pregnancy (MTP) Act to enable fundamental rights and the court's ability to issue directions beyond the Act.
- 6. Foetal Constitutional Rights:** The ruling implicitly suggests foetuses have constitutional rights, opposing established abortion jurisprudence and the Constitution's lack of recognizing foetal personhood. This challenges women's reproductive choices under Articles 14 and 21 of the Constitution.

Mains easy language:

The recent Supreme Court ruling in India has limited a woman's right to choose to terminate a pregnancy. The Court decided that pregnancies exceeding 24 weeks can only be terminated if the foetus has substantial abnormalities or if the woman's life is at risk. This ruling raises concerns as it seems to prioritize the rights of the foetus over those of the pregnant woman, particularly her privacy and dignity.

The Court's decision has faced criticism for not addressing critical questions about the foetus's status and constitutional rights. It also failed to explore whether the Medical Termination of Pregnancy (MTP) Act should be considered an enabling legislation to protect fundamental rights, leaving women with limited options when the Act's provisions fall short.

The case of a 27-year-old woman, known as X, who wanted to terminate her pregnancy due to post-partum depression and financial struggles, created conflicts among the judges and doubts about the foetus's viability.

This ruling contradicts the Court's previous stance on a woman's autonomy over her body and mind, emphasizing the right to make reproductive choices. The judgment seems to suggest that foetuses have constitutional rights, which goes against established abortion jurisprudence and the Constitution's lack of recognizing foetal personhood.

In summary, this ruling has sparked a debate on the balance between a woman's right to choose and the rights of the foetus, leaving questions about the interpretation of reproductive rights and the MTP Act's role in safeguarding them.



| Clear your doubts now.



Virtues of planning-The Hindu editorial

Polity

Key takeaways:

- 1.Vision India@2047 Roadmap:**Prime Minister Narendra Modi's plan to make India a developed nation with a \$30 trillion economy by 2047.
- 2.Emphasis on Governance Reforms:**The plan highlights the critical role of governance reforms in sustaining India's economic growth.
- 3.Shift to Enabling Government:**A key aspect is transitioning the government's role from a micro-manager to an enabler for businesses.
- 4.Avoiding Middle-Income Trap:**The plan's focus on preventing India from falling into a middle-income trap by shifting the economy and addressing income inequality.
- 5.Adaptive Planning and Flexibility:**The importance of regularly revisiting and adjusting the plan to accommodate changing global trends and unforeseen events.
- 6.High Growth Rate Target:**The plan sets a laudable goal of achieving a 9% growth rate between 2030 and 2047, but also emphasizes the need to be open to alternative scenarios and course adjustments when needed.

Mains easy language:

The "Vision India@2047" plan, set to be unveiled in early 2024 by Prime Minister Narendra Modi, is a detailed roadmap to transform India into a developed nation with a whopping \$30 trillion economy by 2047, marking India's 100 years of independence. This plan has been in the works for nearly two years and involves a lot of brainstorming by government officials across various ministries. It's a grand vision for the future.

One of the main ideas behind this plan is the importance of governance reforms. Over the years, India's growth has largely been due to reforms and liberalization, and this plan underscores the need to continue those reforms for sustained growth. It's also about making the government more of an enabler rather than a micromanager, to create a business-friendly environment.

Preventing a middle-income trap is a big concern. The plan wants to shift the focus of the economy from agriculture to manufacturing and address income inequality. It also emphasizes adaptability, recognizing that the plan should be flexible enough to adjust to changing global trends and unexpected events.

While it aims for a remarkable 9% growth rate between 2030 and 2047, it also acknowledges the need to change course if necessary. It's a comprehensive roadmap for India's future, and it's important that it's followed by future governments.

AI and the issue of human-centricity in copyright law-The Hindu editorial

science tech new tech

Key takeaways:

- 1. Changing Regulatory Attitudes:**The Biden administration's Executive Order on AI regulation signals a shift in global attitudes towards ensuring safe and secure AI usage.
- 2. Copyright Challenges with AI:**AI technology, like ChatGPT and Midjourney, has raised significant questions related to copyright and ownership of creative works.
- 3. US District Court Ruling:**The US District Court's decision in Stephen Thaler vs Shira Perlmutter highlights the importance of human authorship for copyright protection in the context of AI-generated works.
- 4. US Copyright Office's Position:**The US Copyright Office's stance aligns with the court's verdict, asserting that copyright protection applies only to content produced by human creativity.
- 5. Contrasting Approach in India:**India has taken a different approach, registering AI-generated works as co-authored without requiring human authorship.
- 6. Cautious Consideration Needed:** Policymakers and courts, particularly in India, should adopt a cautious approach to avoid diluting the human-centric nature of copyright law when dealing with AI-generated content.

Mains easy language:



| Clear your doubts now.



In the world of AI, there's a growing concern about how to regulate this powerful technology to ensure it's safe and trustworthy. The Biden administration's recent Executive Order on AI reflects this changing attitude. AI tools like ChatGPT and Midjourney have made it easier for people with little creative skill to produce amazing content, but this has also raised questions about copyright and ownership. For example, is it okay to use copyrighted materials like texts and images as training data for AI? And who owns the copyright for the output created by AI – the machine or the person who owns it?

A recent US court case, *Stephen Thaler vs Shira Perlmutter*, delved into this matter. The court concluded that copyright protection depends on human creativity, and AI alone can't be considered a creator. This aligns with the stance of the US Copyright Office, which says copyright only covers content created by humans.

In India, things are different. The Indian Copyright Office has registered AI-generated works with AI systems as co-authors, sidestepping the human authorship requirement. This approach has caused controversy, and it's unclear how it will be resolved.

In light of these developments, it's crucial for policymakers and courts to be cautious when applying copyright laws to AI-created content, as machines don't respond to incentives like humans do. The balance between human-centric copyright laws and AI innovation is a delicate one that requires thoughtful consideration.

Reconciliation over retribution-The Hindu editorial

Polity

Key takeaways:

- 1. Revenge's Destructive Cycle:** Revenge is portrayed as a destructive force that can perpetuate an unending cycle of violence, making it an unsuitable solution for conflicts.
- 2. Importance of Restraint:** Human capacity for restraint is essential in maintaining social order, upheld by laws and treaties to prevent disorder and conflicts.
- 3. Gandhi's Non-Violent Approach:** Mahatma Gandhi's non-violent approach is cited as an effective means to resolve conflicts without leaving lasting scars between communities.
- 4. Unity and Cooperation for Lasting Solutions:** Collaboration and unity are highlighted as more sustainable solutions, in contrast to divisive actions that can lead to long-term problems.
- 5. Roles of Governments and Judicial Systems:** Governments should strive to find consensual solutions to minimize conflict, while the judicial system must appropriately punish offenders.
- 6. The Vicious Nature of Retaliation:** Retaliation often results in perceived ruthlessness and disproportionate response, emphasizing the unsustainability of violent encounters and the need for civilized alternatives.
- 7. The Importance of Equanimity and Dialogue:** Effective administrators and empathetic individuals should prioritize equanimity and restraint, opting for dialogue as the reasonable path forward in a civilized world to prevent further conflict.

Mains easy language:

The article discusses the idea that reconciliation is more effective than seeking revenge when dealing with conflicts. It points out that revenge, though tempting, often leads to a never-ending cycle of violence, which is not a practical solution. The author emphasizes that human society relies on restraint to maintain order and prevent chaos, and laws and treaties play a crucial role in this.

Mahatma Gandhi's approach of non-violence is highlighted as a successful way to resolve conflicts without causing lasting wounds between communities. The article also underscores the importance of unity and cooperation in finding lasting solutions. It argues that governments should seek consensual solutions to minimize conflicts, rather than resorting to retribution.

The article condemns violence and disproportionate responses by authorities, as they can lead to further unrest and animosity. It stresses that encounters staged by law enforcement, even when popular, are not sustainable for a civilized society. Instead, the author advocates for due process and a focus on addressing grievances at their root to prevent terror.

In conclusion, the article emphasizes that maintaining equanimity, exercising restraint, and promoting dialogue are the keys to resolving conflicts and achieving lasting peace in a civilized world.

Understanding the U.S.Israel relations-The Hindu text and context

International relations

Key takeaways:



| Clear your doubts now.



- 1. Historical Foundation:** U.S.-Israel relations have deep historical roots dating back to President Woodrow Wilson's endorsement of a "Jewish Commonwealth" in Palestine, leading to the U.S. being the first to recognize Israel in 1948.
- 2. Paradigm Shift in 1967:** The 1967 Six-Day War marked a turning point, with the U.S. viewing Israel as a vital ally in countering Soviet influence in the Middle East.
- 3. Current Special Relationship:** The U.S. provides substantial financial, military, and political support to Israel, making it an exceptional ally. Israel receives significant aid and is a vital trading partner.
- 4. Tensions and Disagreements:** Over the years, U.S. presidents and Israeli prime ministers have clashed on various issues, but the special relationship has endured.
- 5. Strategic Value:** Israel's strategic importance in a volatile region has been a driving force in the U.S.'s unwavering support. It served as a bulwark against Soviet expansion during the Cold War.
- 6. Influence of Public Opinion and Lobbying:** Strong support for Israel in Congress, American public opinion, and powerful lobbying groups like AIPAC have played a pivotal role in shaping U.S. policy towards Israel.
- 7. Institutional Consensus:** Regardless of the party or president in power, there remains a consistent institutional consensus in the U.S. regarding its relationship with Israel.

Mains easy language:

The relationship between the United States and Israel runs deep. It started long before Israel was officially established in 1948. The U.S. supported the idea of a Jewish homeland in Palestine as early as 1919 when President Woodrow Wilson endorsed the concept. In 1948, the U.S. was the very first country to recognize Israel as a nation.

However, the turning point in their relationship came in 1967 during the Six-Day War. Israel's impressive victory over neighboring Arab nations without major U.S. assistance changed how Washington saw Israel. With the U.S. entrenched in the Vietnam War, Israel's stability and ability to check Soviet influence in the Middle East became highly valued.

Today, Israel is one of the United States' closest allies. The U.S. provides substantial financial, military, and political support to Israel. Israel is also the largest recipient of U.S. aid, and they engage in significant trade and defense partnerships. Despite occasional differences and disagreements between leaders of both nations, the relationship remains strong.

The enduring support for Israel is due to various factors. Israel's strategic importance in a volatile region plays a key role. Additionally, the influence of public opinion, electoral politics, and powerful pro-Israel lobbying groups, like AIPAC, shape U.S. policy. This combination of strategic value, domestic politics, lobbying, and a long history of support creates an enduring bond between the U.S. and Israel, regardless of which party or president is in power.

Palestinian writers and their encounters with life under occupation-The Hindu text and context

International relations

Key takeaways:

- 1. Documentation of Conflict:** Palestinian writers in the occupied territories document their experiences of dispossession, exile, and restriction as a response to the ongoing conflict and violence.
- 2. Adania Shibli's Novel:** The article mentions Adania Shibli's novel, "Minor Detail," which is based on a true story from 1949, shortly after the Nakba, in which Israeli soldiers captured, raped, and killed a Palestinian Bedouin woman. The novel explores this incident in chilling detail.
- 3. Search for Truth:** The novel's second part follows a woman in Ramallah who becomes obsessed with this atrocity and tries to unearth more information. She faces challenges in her quest for knowledge and must navigate the restrictions and borders imposed on Palestinians.
- 4. Literature in the Conflict:** The article raises the question of the role of literature in the Israeli-Palestinian conflict and mentions various works by Palestinian writers that document their experiences and memories.
- 5. Ongoing Conflict:** Nathan Thrall's book, "The Only Language They Understand," provides a backdrop to the ongoing conflict in the region and suggests that the enemy will be persuaded only by force, which raises concerns about the endurance of the conflict.
- 6. Fragmentary Existence:** The article also highlights the uncertain and fragmentary nature of life in the region, with the short story and memoir formats being preferred forms of literary expression.





7. Poignant Relevance: With recent events in Gaza, the article suggests that the question of whether Palestine/Israel will ever mean more to their people than just a place of conflict remains relevant.

Mains easy language:

This article delves into the lives of Palestinian writers living in an occupied territory, highlighting their struggles and resilience in the face of ongoing conflict. These writers use their craft to document the harsh realities of dispossession, exile, and restrictions they experience daily.

The article spotlights Adania Shibli's novel, "Minor Detail," which is based on a true, chilling story from 1949 when an Israeli soldier captured, raped, and killed a Palestinian Bedouin woman. The novel unfolds in two parts: first, it narrates the incident through the eyes of an Israeli officer, and second, it follows a woman from Ramallah who becomes obsessed with the story. Her journey to unearth more information takes her through difficulties, navigating borders and restrictions.

The article also raises questions about the role of literature in such a deeply entrenched conflict and cites other works by Palestinian writers that explore their experiences and memories. Nathan Thrall's book provides context to the ongoing Israeli-Palestinian conflict, emphasizing the potential need for force to persuade the enemy.

Ultimately, the article underscores the writers' determination to tell their stories and the enduring relevance of their work, especially in the wake of recent events in Gaza. It paints a poignant picture of their struggle to find meaning and a sense of home in a region plagued by conflict.

Haemoglobin isn't used only in blood, scientists discover-The Hindu Science

Science tech

Key takeaways:

1.Expanded Role of Haemoglobin: Traditional beliefs about haemoglobin being exclusive to red blood cells are challenged by the discovery that chondrocytes, responsible for cartilage, also produce and depend on haemoglobin for survival.

2.Discovery of 'Hedy': Haemoglobin-containing structures known as 'haemoglobin bodies' or 'Hedy' were found within cartilage cells, a surprising revelation in the field of biology.

3.Essential for Chondrocyte Survival: The absence of haemoglobin in chondrocytes leads to cell death, highlighting the crucial role of 'Hedy' in their survival.

4.Haemoglobin's Oxygen Management: Similar to its function in red blood cells, haemoglobin in chondrocytes helps manage oxygen levels and prevent hypoxic stress, ensuring the cells' well-being.

5.Interdisciplinary Connection: The discovery bridges the gap between haematology and skeletal biology, revealing that these fields are more interconnected than previously believed.

6.Potential Implications for Joint Diseases: The presence of functional haemoglobin in cartilage raises questions about its involvement in various joint diseases and bone deformities.

7.Future Research Opportunities: Researchers see exciting possibilities in understanding the role of haemoglobin in the fate of stem cells within the growth plate and hope to reinterpret the mechanisms underlying joint diseases based on this discovery.

Mains easy language:

In a groundbreaking revelation, scientists in China have uncovered a surprising role for haemoglobin, the molecule responsible for carrying oxygen in our blood. Until now, it was widely believed that haemoglobin was solely used by red blood cells to transport oxygen throughout the body. However, this new study has shaken that notion. It turns out that chondrocytes, the cells responsible for creating cartilage, also produce and rely on haemoglobin for their survival.

These cartilage cells were found to contain haemoglobin in intriguing structures called 'haemoglobin bodies' or 'Hedy.' The importance of Hedy became evident when scientists discovered that when the gene responsible for haemoglobin production was removed, the chondrocytes experienced cell death, underscoring the critical role of haemoglobin in their survival.

Haemoglobin in these cartilage cells serves a similar purpose as in red blood cells. It helps manage oxygen levels, preventing a condition called hypoxic stress, which is caused by low oxygen. When there's sufficient haemoglobin, it ensures that chondrocytes receive the oxygen they need to thrive. This unexpected revelation not only sheds light on the interconnectedness of blood and bone biology but also opens up new avenues for understanding joint diseases and bone deformities.

In the future, this discovery could lead to further investigations into how haemoglobin affects the fate of stem cells within the growth plate, potentially offering insights into the mechanisms underlying joint diseases and bone-related conditions.





Dino-killing asteroid kicked up mountains of dust-The Hindu Science

Environment

Key takeaways:

- 1. Mass Extinction Trigger:** The asteroid impact on Mexico's Yucatan Peninsula 66 million years ago caused a global calamity, erasing 75% of the world's species and ending the age of dinosaurs.
- 2. Dust's Crucial Role:** Dust from the impact site, totaling 2,000 billion tonnes, played a significant role in driving extinctions by blocking photosynthesis and darkening the skies for up to two years.
- 3. Dust vs. Other Factors:** While prior research focused on sulfur and soot, this study highlighted that the dust played a larger role in the extinction event.
- 4. Impact on Climate:** The impact led to a severe drop in surface temperatures, creating an "impact winter" that disrupted ecosystems and caused a chain reaction of extinctions.
- 5. Long-lasting Effects:** The dust remained in the atmosphere for 15 years, contributing to a prolonged period of darkness and environmental upheaval, affecting life on Earth for an extended period.

Mains easy language:

66 million years ago, a catastrophic event unfolded when an asteroid slammed into Mexico's Yucatan Peninsula. This devastating impact caused a global disaster that wiped out three-quarters of the Earth's species, including the dinosaurs. The immediate consequences were massive wildfires, earthquakes, shockwaves, and colossal waves in the oceans. However, the most critical blow may have come from the aftermath, where the skies darkened due to debris and temperatures plunged, triggering a climate catastrophe.

Recent research sheds light on the crucial role played by the dust resulting from the pulverized rock ejected into the atmosphere by the impact. This dust, measuring 2,000 billion tonnes, exceeded the weight of Mt. Everest. Simulations reveal that this fine-grained dust could block sunlight and choke photosynthesis for up to two years, remaining in the atmosphere for 15 years.

While previous studies emphasized sulfur and soot as extinction factors, this research underscores the dust's significance. Silicate particles from the shattered rock formed a global cloud layer. The Earth experienced a drastic 15-degree Celsius temperature drop, leading to an "impact winter." This, in turn, caused primary productivity to collapse, resulting in a chain reaction of extinctions from plants to herbivores and carnivores, affecting marine ecosystems as well.

In summary, dust from the asteroid impact played a crucial role in the mass extinction event, causing long-lasting darkness, plummeting temperatures, and the demise of numerous species on Earth.

A TAX TREATY PROBLEM- Indian Express Editorial

Economy

Key takeaways:

- 1. Flexible Tax Treaties:** Tax treaties can change to adapt to evolving laws and economic circumstances.
- 2. Pre-1995 Treaty Terms:** India's earlier treaties extended benefits to OECD members like France, the Netherlands, and Switzerland, raising questions as the OECD expanded.
- 3. Special Terms for New OECD Members:** India negotiated unique withholding tax terms for countries like Colombia, Lithuania, and Slovenia when they joined the OECD.
- 4. Changing Taxation Rules:** In 2020, India altered its dividend taxation, impacting existing treaties and requiring investors to withhold taxes on Indian dividends.
- 5. Unilateral Decrees:** France, the Netherlands, and Switzerland issued retroactive lower tax rate decrees when new countries joined the OECD, leading to disputes.
- 6. Legal Disputes:** The Delhi High Court initially supported extending treaty benefits without notification, but the Supreme Court later ruled that MFN provisions require notification.
- 7. Treaty Reviews Needed:** Periodic review of tax treaties is essential to adapt to changing economic conditions and prevent abuse of treaty provisions.

Mains in Easy Language

The article delves into the dynamic nature of tax treaties, emphasizing their ability to adapt to evolving economic conditions and legal changes. It discusses India's past tax agreements with countries such as France, the Netherlands, and Switzerland, which



| Clear your doubts now.



initially extended benefits based on OECD membership. However, with the expansion of the OECD, challenges arose in interpreting and applying these benefits, highlighting the necessity for treaty flexibility.

Furthermore, the article explores how India negotiated distinct withholding tax terms for new OECD members like Colombia, Lithuania, and Slovenia. This became particularly significant when India revamped its dividend taxation rules in 2020, affecting the applicability of existing treaties and necessitating investors to withhold taxes on dividends in India. The resulting disputes, as well as retroactive decrees from certain countries, have contributed to uncertainties in the tax landscape.

In addition, the article touches upon the legal disputes regarding the extension of treaty benefits without official notification. Initially, the Delhi High Court supported such extensions, but a later Supreme Court ruling mandated notification for invoking the most favored nation (MFN) provision. It underscores the need for regular reviews of tax treaties to ensure they remain relevant to changing economic realities and for the implementation of anti-abuse measures to prevent exploitation of treaty provisions. These measures are essential for upholding the fairness and currency of international tax agreements.

A weak defence - Indian Express Editorial

International Relations

Key takeaways:

1. **Spyware Concerns:** The article addresses concerns about spyware attacks on Indian political figures and their potential impact on personal privacy and democratic processes.
2. **Investigation Scrutiny:** It questions the credibility of the government's investigation into the spyware allegations, citing limited scope and potential bias.
3. **Apple's Notifications:** Apple's specific threat notifications to Opposition leaders are highlighted, emphasizing their basis in threat intelligence.
4. **Supreme Court Proceedings:** The article scrutinizes the government's references to a "proper investigation" and the Supreme Court's committee of inquiry on spyware attacks, underscoring the need for transparency.
5. **Privacy Protection:** The importance of protecting personal privacy and democratic processes is emphasized, with loyalty urged to be directed toward the Constitution.
6. **Rhetoric vs. Accountability:** The article contrasts rhetorical flourishes with the call for accountability based on reason and evidence.
7. **Transparency Demand:** A demand for a more transparent and impartial investigation is made to address the serious concerns raised by the spyware allegations.

Mains in Easy Language

This article delves into the recent allegations of spyware attacks on Indian political figures, particularly those in the Opposition. The Minister for Telecom and Electronics and IT, Ashwini Vaishnaw, ordered an investigation into these allegations, but the article questions the credibility of this probe. It highlights concerns about the investigation's limited scope, potential bias, and the Minister's public statements, raising doubts about its thoroughness and transparency.

The article also focuses on the notifications sent by Apple to Opposition leaders, which are specific threat alerts, not general advisories. It underscores that these alerts are based on threat intelligence signals and should not be dismissed as false alarms. The piece highlights the need for a transparent and impartial inquiry into the allegations to address the serious concerns raised about personal privacy and democratic processes.

Moreover, the article scrutinizes the references made to a "proper investigation" and the Supreme Court's committee of inquiry on spyware attacks. It emphasizes the call for accountability and transparency, urging loyalty to be directed towards the Constitution rather than the government's rhetoric. The article highlights the demand for a thorough and unbiased investigation to address the significant concerns related to the spyware allegations and protect democratic values.

India's own CAR-T cell therapy-Indian Express Explained

Science tech health

Key takeaways:

1. **CAR-T Cell Therapy:** CAR-T therapy is a groundbreaking approach that transforms T-cells into cancer-fighting cells, offering a potential cure for certain cancers like leukemia and lymphomas.
2. **Long-Term Benefits:** Unlike traditional chemotherapy, CAR-T therapy is designed to provide a lifelong benefit to patients, offering a one-time treatment that can be transformative.



| Clear your doubts now.



3.NexCAR19: India's own CAR-T therapy, NexCAR19, targets cancer cells with the CD19 protein and is developed by ImmunoACT, an incubated company at IIT Bombay.

4.Patient Eligibility: NexCAR19 therapy is available for patients with B-cell lymphomas who did not respond to standard treatments, leading to cancer relapse.

5.Unique Qualities: Indian CAR-T therapy has shown lower drug-related toxicities and minimal neurotoxicity and Cytokine Release Syndrome (CRS), making it distinctive in terms of safety.

6.Availability in India: Hospitals like Tata Memorial, Nanavati, Fortis, Jaslok, and others are in the process of offering CAR-T therapy, with a timeline contingent on government approvals.

7.Cost and Insurance: Initial pricing for CAR-T therapy is estimated at Rs 30-40 lakh, with a goal to reduce it to Rs 10-20 lakh in the future. The extent of insurance coverage will be clarified through discussions with insurers and the government.

Mains easy language:

India's groundbreaking CAR-T cell therapy, known as NexCAR19, has received market authorization from the Central Drugs Standard Control Organisation (CDSCO). This therapy, developed by ImmunoACT, a company incubated at IIT Bombay, represents a major advancement in cancer treatment. CAR-T therapy involves modifying T-cells (special white blood cells) to become powerful cancer fighters. Once these enhanced cells are reintroduced into the patient's body, they target and destroy cancer cells, offering a potential cure for diseases like leukemia and lymphomas.

Unlike traditional chemotherapy, which may only extend a patient's life for a short time, CAR-T therapy is designed to provide lifelong benefits with a one-time treatment. It is particularly beneficial for patients who haven't responded to standard treatments. The therapy starts with a doctor's prescription, followed by a blood donation at a transfusion center. The patient's blood is then genetically modified, and the modified T-cells are reinfused, with recovery typically occurring within two weeks.

NexCAR19 is specifically designed to treat B-cell lymphomas that did not respond to conventional treatments. Notably, this therapy has shown unique qualities in reducing drug-related side effects, such as neurotoxicity and Cytokine Release Syndrome (CRS), making it a promising option for cancer patients. While the therapy is on its way to being available in multiple hospitals across India, its initial cost is estimated at Rs 30-40 lakh, with the goal of making it more affordable in the future and exploring insurance coverage options to increase accessibility.

In Tripura-Bangladesh railway link, new opportunities and old connect-Indian Express Explained

Economics

Key takeaways:

1.Enhancing Connectivity: The Agartala-Akhaura railway project inaugurated by Indian Prime Minister Narendra Modi and Bangladesh counterpart Sheikh Hasina is set to significantly improve connectivity between Northeast India and Bangladesh.

2.Reduced Travel Time: This railway link will drastically reduce travel time between Agartala and Kolkata, making the journey more efficient, cutting it down from 31 hours to just 10 hours.

3.Cross-Border Progress: The project spans both India and Bangladesh, with immigration checks at Nischintapur on the Indian-Bangladesh border, marking an important cross-border milestone.

4.Potential Expansion: The project's success opens the door for future extensions, with plans for full-fledged train services between Agartala-Akhaura and Agartala-Chittagong, and potential inclusion of Dhaka and Kolkata in the future.

5.Funding Sources: India fully funds the project, with the Ministry for Development of North East Region supporting the Indian side and the Ministry of External Affairs providing aid for the Bangladesh side.

6.Historical and Emotional Significance: The project holds both practical and emotional importance, as it serves as a gateway for tourism in Tripura and strengthens the historical ties between the two countries, particularly during the 1971 Indo-Pakistan war.

Mains easy language:

The Agartala-Akhaura railway link, inaugurated virtually by Indian Prime Minister Narendra Modi and Bangladesh's Prime Minister Sheikh Hasina, is set to bring significant improvements in connectivity and relations between the two nations. This project will drastically cut travel time between Agartala and Kolkata from 31 hours to just 10 hours, making it much more convenient for people and goods to move between these regions.



| Clear your doubts now.



The railway line spans both India and Bangladesh, with immigration checks at the Indian-Bangladesh border, fostering cross-border interactions. Successful trial runs for goods trains have taken place, with plans to launch passenger services in the near future. Moreover, there are ambitious plans to extend this railway link to Chittagong and potentially connect Dhaka and Kolkata in the future.

India has fully funded this project, allocating resources from the Ministry for Development of North East Region for the Indian side and the Ministry of External Affairs for the Bangladesh side. The project faced challenges and delays due to land acquisition issues and the COVID-19 pandemic, but it's now a significant milestone in boosting connectivity and trade in the region.

Aside from its practical significance, the project has emotional importance, given Tripura's historical role in supporting East Pakistani refugees during the 1971 Indo-Pakistan war. This railway link symbolizes closer ties and cooperation between India and Bangladesh, making it a crucial development for both countries.

3rd November 2023

Holding Each Other Up- Indian Express Editorial

Economy

Key takeaways:

1. **Community-Led Movements:** Successful initiatives, such as Amul, underline the significance of community involvement in achieving goals.
2. **Innovation Ecosystem:** India's climb in the Global Innovation Index (GII) from 81 to 40 is attributed to both public and private sector commitments in promoting innovation and entrepreneurship.
3. **Atal Tinkering Labs (ATLs):** ATLs aim to cultivate young innovators by encouraging curiosity and creativity among students.
4. **Cluster-Based Collaboration:** ATL Sarthi initiative in Karnataka, Andhra Pradesh, and Jammu and Kashmir demonstrates the benefits of cluster-based collaboration, which improves school performance.
5. **Ownership and Community Participation:** Schools need to embrace community participation and shared responsibility to ensure efficient infrastructure.
6. **Lessons for Success:** The success of Green and White Revolutions in India showcases the importance of community ownership in initiatives.

Mains in Easy Language:

This article underscores the vital role of community participation and shared responsibility in achieving success in various initiatives. It draws parallels between the triumph of community-led movements like Amul and the need for similar patterns in building an innovation ecosystem in India.

India's significant rise in the Global Innovation Index (GII) from 81 to 40 is attributed to the combined efforts of the public and private sectors in promoting innovation and entrepreneurship. Atal Tinkering Labs (ATLs), established in schools, aim to nurture young innovators by fostering curiosity and creativity among students.

The article highlights the ATL Sarthi initiative in Karnataka, Andhra Pradesh, and Jammu and Kashmir as an example of the benefits of cluster-based collaboration. By working together in clusters, schools can improve their performance, with more than 90% of schools demonstrating high teacher and student attendance, and over 85% showing improved performance.

To ensure efficient infrastructure in ATLs, there is a need for a mindset shift among schools. They must take ownership of the infrastructure provided to them, embracing community participation and shared responsibility. The article concludes that community ownership is a crucial element for the success of initiatives, much like the Green and White Revolutions, and is vital for India's growth and progress in the age of innovation.

Clearing the dust, lifting the haze- Indian Express Editorial

Environment

Key takeaways:

1. **Mumbai's Air Quality Decline:** Mumbai's air quality has worsened due to factors like weather conditions and emissions, with construction activities being a major contributor.
2. **Surge in Construction:** Construction activities in BMC area increased by 68% since 2022 and 142% since 2021, leading to higher dust emissions.



| Clear your doubts now.



3. **PM10 Pollution:** Dust emissions from construction processes contribute to higher PM10 levels, impacting air quality.
4. **Health Concerns:** Construction-related emissions pose health risks, especially for vulnerable populations.
5. **Opportunity for Mitigation:** Managing construction dust provides an opportunity to reduce air pollution in Mumbai.
6. **Transition to Cleaner Practices:** The transition involves mapping pollutant sources, creating emission inventories, and enforcing guidelines for builders.
7. **Innovation and Stakeholder Engagement:** Promoting innovative technologies, sensitizing stakeholders, and gradual implementation are essential for a successful transition to cleaner construction practices.

Mains in Easy Language:

Mumbai's air quality has worsened in recent weeks due to weather conditions and various emissions sources, with a significant contribution from construction activities. This construction boom, evidenced by a 68% increase in BMC area construction since 2022 and a staggering 142% rise compared to 2021, has led to higher levels of PM10 particles, which are detrimental to air quality. The emission of dust particles from construction, including demolition, excavation, and transportation, poses a serious health threat, particularly to vulnerable groups such as children, the elderly, and individuals with respiratory conditions.

Despite the challenges, the situation presents an opportunity for Mumbai to transition toward cleaner construction practices that prioritize reducing air pollution. This involves mapping pollutant sources, creating comprehensive emission inventories, enforcing guidelines for builders and contractors, and engaging all stakeholders within the construction ecosystem. Sensitizing these stakeholders to new practices and technologies is crucial. While certain innovative solutions for capturing construction-related dust emissions are underutilized, the BMC can promote their adoption and foster market-ready technologies.

This transition should be gradual, with the focus on identifying solutions and building strategies in the first year, followed by stricter enforcement in the subsequent years. Mumbai's construction sector, a substantial contributor to the city's GDP, can lead in mitigating air pollution while supporting economic growth. A clean construction transition that emphasizes environmental considerations can pave the way for sustainable development in Indian cities.

Why global pact on AI matters-Indian Express Explained

Science and technology

Key takeaways:

1. **Global Collaboration:** 28 countries, including the US and China, join forces to address risks from advanced AI, emphasizing international cooperation.
2. **Defining Frontier AI:** "Frontier AI" presents risks in cybersecurity and misuse, highlighting the need to address these issues collectively.
3. **US Presidential Action:** President Biden's executive order mandates safety testing sharing to ensure AI systems' trustworthiness.
4. **Varied Regulation Approaches:** Different countries have diverse AI regulation strategies, from the EU's AI Act to the UK's innovation-friendly approach.
5. **Tech Leaders' Concerns:** Prominent figures like Elon Musk express concerns about rapid AI progress and advocate for responsible development.
6. **India's Shift:** India moves towards ethical AI frameworks, seeking tailored regulations and a domestic regulatory authority.
7. **International Oversight:** Efforts to create an international AI regulatory body, aligning with Sam Altman's recommendations, are gaining traction.

Mains easy language::

The recent AI Summit brought together 28 major countries, including the US, China, and the EU, to deal with the potential risks posed by advanced AI, often called "frontier AI." This gathering underscores the need for international cooperation in addressing the challenges associated with cutting-edge AI.

"Frontier AI" refers to AI models that are highly advanced and capable of doing remarkable things but also hold the potential for misuse, particularly in areas like cybersecurity and biotechnology. The Bletchley Park Declaration acknowledged the substantial risks in this regard and stressed the importance of addressing them collectively.

In the US, President Biden issued an executive order to enhance AI safety, which mandates that AI companies share the results of their safety tests with the federal government before releasing new AI products. This move is crucial for ensuring that AI systems are safe and trustworthy.





Different countries are taking varied approaches to regulate AI, ranging from the EU's strict AI Act to the UK's more innovation-friendly stance. India, too, is evolving its perspective, advocating for ethical AI frameworks and risk-based regulations.

Prominent tech leaders, like Elon Musk, have expressed concerns about the rapid development of AI and its potential threats, calling for responsible AI development and oversight.

Overall, this global effort signals a collective commitment to ensuring that AI benefits humanity and avoids causing harm, addressing the challenges that advanced AI presents while fostering innovation and safety.

UNESCO names Kozhikode 'city of literature': What this tag means-Indian Express Explained

Key takeaways:

1. **Kozhikode Joins UNESCO's Creative Cities Network:**Kozhikode, Kerala, has joined UNESCO's Creative Cities Network, alongside Gwalior. Kozhikode represents literature, Gwalior represents music, acknowledging their cultural contributions.
2. **UNESCO's Creative Cities Network:**Established in 2004, it unites cities focusing on creativity for urban development. With 350 cities worldwide, it leverages cultural potential to address global challenges like climate change and inequality.
3. **Indian Cities in the Network:**India has Varanasi (music), Srinagar (crafts and folk arts), and Chennai (music) in the network, showcasing India's cultural diversity.
4. **Kozhikode's Literary Heritage:**Kozhikode, a literary hub in North Kerala, has a rich tradition with notable authors like S K Pottekkatt and Vaikom Muhammad Basheer.
5. **CCCN's Objectives:**The network promotes creativity in urban development and collaboration, aligning with the UN's sustainable development agenda.
6. **Action and Collaboration:**Member cities share knowledge and experiences through exchanges, research, and evaluations to harness creativity.
7. **Annual Conference of Network Cities:**Mayors and stakeholders from network cities gather to strengthen global ties and share practical information.
8. **Membership Requirements:**Member cities must submit a Membership Monitoring Report every four years, demonstrating their commitment to the network's mission.

Mains easy language:

In a significant recognition, Kozhikode, a city in Kerala, has become a part of UNESCO's Creative Cities Network, which also welcomed Gwalior among its 55 new members. Kozhikode was chosen for its contributions to literature, while Gwalior was recognized for its musical heritage.

The UNESCO Creative Cities Network was created to foster cooperation among cities that see creativity as vital for their development. It has grown to include 350 cities across more than 100 countries. The network emphasizes using the power of culture to address global issues like climate change, inequality, and urbanization.

India has several cities in this network, including Varanasi for music, Srinagar for crafts and folk arts, and Chennai for its musical traditions. These cities celebrate and showcase India's diverse cultural heritage on a global stage.

Kozhikode, known for its literary legacy and being the birthplace of the first Malayalam novel, takes pride in its rich cultural history with celebrated authors and contributions to film and theater. The network offers opportunities for urban development through creativity and collaboration, with an annual conference to facilitate sharing of best practices.

In this network, cities are required to report on their progress every four years, showing their commitment to the network's mission and goals for the sustainable development of their communities.

sentence in higher courts using international and Indian legal frameworks.

5. Diplomatic and Economic Ties with Qatar:India has strong diplomatic, economic, and defense ties with Qatar. These connections will be leveraged to seek a resolution, with the support of the influential Indian community in Qatar.

6. Navigating Geopolitical Sensitivities:One of the major challenges in this case is the allegation of spying for Israel, which needs to be handled carefully within the context of regional geopolitical complexities and sensitivities.

Mains easy language:

In a shocking development, eight Indian Navy veterans have been sentenced to death in Qatar on charges of espionage. These individuals had been working for a defense services provider, Dahra Global, overseeing the induction of Italian submarines in Qatar. The exact nature of the charges against them remains undisclosed by Qatari authorities.





India is now actively responding to this situation, exploring three key options. Firstly, they are pursuing a legal battle, challenging the death sentence in higher courts using both international and Indian legal frameworks. Secondly, families of the accused have submitted a mercy plea to the Emir of Qatar, as he is known for granting pardons during certain religious occasions. India is supporting this effort. Lastly, diplomatic and political efforts are underway to resolve the case. India has strong diplomatic, economic, and defense ties with Qatar, and these connections will be used to seek a resolution, with support from the influential Indian community in Qatar.

However, one significant challenge is the allegation of spying for Israel, which must be carefully navigated given the region's complex geopolitical dynamics. This case has raised concerns within India, as Qatar rarely issues death sentences, and the government is working diligently to address this grave situation.

The revenge of Old West Asia- The Hindu Editorial

International Relations

1. **Denial and Responsibility:** Golda Meir's historic denial of Palestinian nationhood and President Herzog's recent comments assigning collective responsibility to Gazans demonstrate the shift in Israel's stance from non-recognition to viewing Palestinians collectively as adversaries.
2. **Occupation and Hostilities:** Israel's ongoing military occupation since the 1967 war and its control over Palestinian territories are central themes, with recent escalations of violence reinforcing the entrenched conflict.
3. **Peace Process Challenges:** The article suggests that Palestinian radicalism, exemplified by the rise of Hamas, was fueled by the stagnation of peace efforts and the occupation, rather than being the original cause of the conflict.

Navy veterans sentenced to death in Qatar:options before India-Indian Express Explained

International relations

Key takeaways:

1. **Eight Indian Navy Veterans Sentenced to Death in Qatar:** Eight former Indian Navy personnel working in Qatar have been sentenced to death on espionage charges, raising concerns within India and highlighting the severity of the situation.
2. **The Accused and the Charges:** The individuals worked for Dahra Global, a defense services provider overseeing the induction of Italian submarines in Qatar. The exact charges against them have not been disclosed by Qatari authorities.
3. **India's Response and Three Options:** India is exploring three main options to address the situation: legal avenues, a mercy petition to the Emir of Qatar, and political and diplomatic efforts to resolve the case.
4. **The Legal Battle:** The case is currently in the 'Court of First Instance,' and India plans to challenge the death
5. **Regional Dynamics and Iran's Role:** Iran's backing of Palestinian groups is significant but portrayed as opportunistic, leveraging the unresolved Israeli-Palestinian issues rather than being the primary instigator of the conflict.
6. **Unresolved Palestinian Question:** Despite improved relations with some Arab nations, Israel's security strategy and regional dominance have not resolved the fundamental issues with Palestine, with the recent violence underlining that the core of the conflict remains unaddressed.

Mains in Easy language

Golda Meir, a former leader of Israel, once said that Palestinians didn't exist as a separate group of people. Now, Israel's President suggests that everyone in Gaza is to blame for the trouble there. This shows how Israel's view has changed over time, from not recognizing Palestinians to seeing them as opponents.

Israel has controlled Palestinian lands since the 1960s, and despite pulling out of Gaza in 2005, they still have a lot of power over it. Recently, there's been a lot of fighting, with Hamas attacking Israel, and Israel hitting back hard in Gaza, causing many deaths.

The article talks about how peace talks in the past didn't work out and this actually made groups like Hamas stronger because people were frustrated with the lack of progress. It also says that while Iran supports Hamas and doesn't like Israel, Iran's role in the fight is more about taking advantage of the situation rather than starting the problem.

Lastly, even though Israel is now friends with some of its Arab neighbors, peace is still hard to find because the main issue – the fight with the Palestinians – hasn't been fixed. The recent violence shows that this old problem is still causing a lot of trouble in the area.





Slowing Momentum- The Hindu Editorial

Economy

Key takeaways:

1. **Economic Momentum Slows:** Recent data indicates a slowdown in India's economic growth. The average increase in production for eight core industries slowed down to 8.1% in September, a notable decrease from 12.5% in August.
2. **Sectoral Growth Variations:** Most sectors experienced a reduced pace of growth, except for the fertilizer industry, which saw an increase due to the upcoming rabi cropping season. Adverse weather conditions in September, including heavy rains, contributed to the slowdown, particularly affecting the cement, electricity, and steel industries.
3. **Sequential Contraction:** Comparing month-to-month data, there was an actual decrease in production across all eight sectors, with an overall drop of 4.8% from August. Coal production was a relative positive, with only a slight year-on-year growth reduction and a minimal sequential contraction.
4. **Manufacturing Sector Concerns:** The PMI for October reflected the manufacturing sector's growth hitting an eight-month low due to falling demand, especially for consumer goods. New orders increased at the slowest rate in a year, and job creation in manufacturing was at its lowest since April.
5. **Inflation and Business Confidence:** Input costs for manufacturers are rising, but with demand being uncertain, companies are not fully passing these costs to consumers. Business confidence is declining, influenced by concerns over future inflation and its impact on demand and production.
6. **Agricultural Output and Rural Incomes:** The agricultural sector, typically a buffer for the economy, may not provide relief this time. With projected lower kharif crop output, rural incomes could be adversely affected.
7. **Policy Challenges:** Policymakers in India face the dual challenges of encouraging growth while also managing persistent inflation, tasks made more urgent by the recent downturn in economic indicators.

Mains, in easy language

India's economy isn't doing as well as before. Factories and important industries like cement and steel are making less stuff than they were a few months back. Even farmers are expected to earn less because they're probably going to grow less crops this time. People aren't buying as much, and companies aren't hiring a lot of new workers. Everything is also getting more expensive to make, but companies can't charge higher prices because people might not be able to afford them. So, the government has to figure out how to get things moving again without making prices go up too much.

Biosphere reserves are evolving as pockets of hope- The Hindu Editorial

Environment and ecology

Key takeaways:

1. **Eco-Tourism Impact:** As we head towards tourist season, people flock to natural retreats, often increasing the use of single-use plastics. Coastal areas, which host 80% of tourism, are particularly affected by the litter of plastic bottles, potentially spoiling the pristine environments.
2. **Sustainable Initiatives:** In the Island of Principe, efforts like providing schoolchildren with stainless steel bottles are underway to combat the use of single-use plastics. UNESCO biosphere reserves globally act as conservation champions, striving to balance biodiversity protection with human coexistence.
3. **World Biosphere Reserve Day:** Annually on November 3, this day promotes the importance of biosphere reserves. These reserves are structured in zones, from strictly protected areas to regions where sustainable economic activities are practiced.
4. Global Network UNESCO, along with other UN agencies, oversees a network of 748 biosphere reserves in 134 countries, influencing the lives of over 250 million people. These reserves are crucial for biodiversity, sustainable development, and climate change mitigation.
5. **Local Conservation Efforts:** Initiatives like the Sundarban and Gulf of Mannar Biosphere Reserves in India show local communities actively participating in conservation, from mangrove management to ecotourism and recycling projects for road construction.
6. **UNESCO Meetings :** The UNESCO Man and the Biosphere (MAB) programme promotes sustainable development. The recent SACAM meeting in Chennai emphasized regional collaboration on environmental practices, exemplifying a commitment to 'Ridge to Reef' conservation.



| Clear your doubts now.



7. **Challenges and Opportunities:** While biosphere reserves are havens for ecosystems and crucial for the planet's future, they face threats from human activities like deforestation and mining. Efforts to preserve these areas are more important than ever in the face of urbanization and population growth.

Mains, in easy language

When vacation time rolls around, we often gravitate toward serene natural spots for a break. Yet, ironically, our retreats can lead to an increase in litter, particularly with single-use plastics like water bottles, which can spoil the pristine locations we seek to enjoy.

On Principe Island in Africa, there's an initiative where school kids are using metal water bottles instead of disposable ones to help keep the environment clean. This is part of a broader effort to establish areas where nature is well-protected and people live in balance with their surroundings. These efforts are supported by UNESCO and are known as biosphere reserves.

November 3 is a day dedicated to raising awareness about these reserves, highlighting their role in preserving natural habitats and fostering environmentally friendly living and working spaces for local communities. These reserves are vital as they not only safeguard biodiversity but also play a key role in climate change mitigation by absorbing carbon dioxide.

Globally, there are numerous biosphere reserves that contribute significantly to environmental health and offer models for sustainable living. In India, for instance, local communities are actively involved in managing natural resources and have found innovative ways to promote conservation and ecotourism.

There's a continuous exchange of knowledge and collaboration to improve the management of these areas. This is particularly evident in gatherings like the one UNESCO held in Chennai, India, which brought together experts and policymakers to discuss sustainable environmental practices.

Despite the crucial role of these biosphere reserves, they face many challenges such as deforestation and pollution due to increasing urbanization and population growth. These issues are the main focus during discussions in conferences and meetings aimed at enhancing the protection and sustainable management of these vital ecosystems.

In summary, biosphere reserves are critical for the planet's future, serving as examples of how human activity can coexist with nature. As we face global challenges like climate change and biodiversity loss, the importance of protecting these reserves becomes ever more significant.

Is the United Nations toothless in ending wars? -The Hindu Text and context

International relations

Key takeaways:

- 1. UN's Declining Effectiveness in Conflict Resolution:** The article highlights the diminishing capacity of the United Nations in effectively addressing and resolving conflicts, particularly in the cases of the Israel-Hamas and Russia-Ukraine conflicts.
- 2. Power Dynamics and the UN's Origins:** It underscores the importance of the UN's creation after World War II by major powers, focusing on the permanent members of the UN Security Council (UNSC).
- 3. Changing Power Dynamics Over Time:** The article emphasizes the shift in global power dynamics over the years and how this can erode the legitimacy of the UN in addressing contemporary conflicts.
- 4. The Myth of the Liberal International Order:** It challenges the notion of a liberal international order and describes how the world saw a unipolar moment led by the United States following the Cold War, which eventually faded away due to various factors.
- 5. Complex Nature of Conflicts:** The article highlights the intricate nature of conflicts, such as the Israel-Hamas situation, influenced by domestic politics, limited sympathy for the Palestinian cause, and external factors.
- 6. India's Role and Limitations:** It discusses India's role as the chair of the G20 but suggests that even though India is a confident country with diplomatic efforts, it may have limitations in mediating complex international conflicts.

Mains easy language:

The article examines the United Nations' declining ability to bring an end to conflicts, with a specific focus on the Israel-Hamas and Russia-Ukraine disputes. It suggests that the UN, established after World War II, is struggling to maintain its effectiveness in the face of changing global power dynamics. While the UN was founded by influential nations, like the permanent members of the UN Security Council, the article highlights that the key to the UN's success is the convergence of these major powers and the provision of global public goods. However, these criteria are challenged as global power structures shift.





The article argues that the UN's influence has waned since the end of the Cold War, with the major powers, particularly the permanent members of the UNSC, often unable to agree on meaningful actions due to differences among them. It questions the notion of a liberal international order, pointing out that it was more of a Western-led order during the Cold War and that the world has since entered a multipolar phase without a new order in place.

In terms of solutions, the article suggests that domestic politics, a lack of international sympathy for the Palestinian cause, and ongoing issues in the US all contribute to the complexity of resolving conflicts like the Israel-Hamas situation. Additionally, while India currently chairs the G20, the article indicates that it may have limitations in playing a mediating role due to the complex and high-level nature of these conflicts.

Understanding worker productivity-The Hindu text and context

Economics

Key takeaways:

1. **Understanding Worker Productivity:** Infosys founder N.R. Narayana Murthy advised young Indians to work 70 hours a week to fast track the country's development and pointed out India's low worker productivity.
2. **Worker Productivity vs. Labour Productivity:** Worker productivity involves mental activities, while labor productivity pertains to manual tasks. It's measured as the output value per unit of labor cost, with worker income often used as a proxy for productivity.
3. **Productivity and Working Hours:** Mr. Murthy's claim that longer working hours increase productivity is questionable. Skills and human capital, not just longer hours, enhance productivity. Reducing working hours can increase worker well-being while maintaining economic output.
4. **Complex Relationship Between Productivity and Growth:** Improving productivity can affect economic growth, but the link is complex. Growing prosperity may not benefit workers, as income inequality in India has widened significantly.
5. **India's Worker Productivity:** Using income as a proxy for productivity is misleading. Indians work hard but earn low wages, contradicting Murthy's statement, which could favor labor reforms at the workers' expense.
6. **Informal Labor and Productivity:** Rising informal employment complicates productivity measurements. Even in formal sectors, labor standards often suffer due to cost-cutting, which can lead to worker exploitation.
7. **Inappropriate Comparisons with Japan and Germany:** Comparing India's economy to Japan and Germany is misleading. These countries differ in labor force, technology, culture, and politics. India's unique context requires distinct development strategies, with a focus on social investments and domestic consumption for sustainable growth.

Mains easy language:

Infosys founder N.R. Narayana Murthy's call for young Indians to work longer hours to boost the country's development has raised questions about the relationship between worker productivity and economic growth. Worker productivity involves mental activities, while labor productivity is linked to manual tasks. Murthy's idea that working longer hours increases productivity may not hold true in all cases. Productivity is not just about hours worked; skills and human capital also play a crucial role.

While improved productivity can positively impact economic growth, the connection between the two is complex. Economic growth doesn't always lead to improved living conditions for workers, as income inequality in India has grown.

Using income as a proxy for productivity can be misleading, and India's workers are known for their hard work despite low wages. Comparing India's economy to countries like Japan and Germany is not entirely appropriate, given the differences in labor force, technology, culture, and politics. India's unique circumstances require specific development approaches that focus on social investments and domestic consumption for sustainable and inclusive growth. Murthy's call may not accurately reflect the complexities of worker productivity and its impact on the economy.

Low on salt: turning the spotlight on kidney donors-The Hindu Science

Science

Key takeaways:

1. **Donor Evaluation and Care:** Kidney donors undergo careful evaluation to ensure their health, considering factors like age and medical conditions. After donation, they require lifelong follow-up and monitoring of kidney function.
2. **Salt's Impact on Kidney Health:** Salt restriction is vital for overall health, reducing blood pressure, strokes, and kidney failure. The WHO recommends limiting salt intake to 5 grams per day.





3.Importance of Proteinuria: Proteinuria, a marker for kidney disease, helps detect issues early. Medications can reduce protein loss and slow kidney damage, emphasizing the need for regular testing.

4.Early Detection of Chronic Kidney Disease (CKD): Identifying CKD early is crucial to reduce the burden on healthcare systems. Proteinuria and blood creatinine are common markers, and controlling blood pressure is key to kidney health.

5.Salt Reduction for Public Health: Many adults worldwide have undiagnosed or poorly controlled high blood pressure. Educating people about salt intake and implementing interventions, such as salt substitutes, can positively impact public health.

6.Kidney Donors and Salt Monitoring: Kidney donors need to be educated about salt intake and closely monitored to ensure their long-term kidney health. Salt reduction measures are especially critical for this group.

Mains easy language:

This article discusses the importance of kidney donors' care and the impact of salt intake on their long-term health. Kidney donors go through a thorough evaluation before donating to ensure they are healthy, considering factors like age and underlying medical conditions. After donating, they require lifelong follow-up care to monitor their remaining kidney's health. The remaining kidney initially compensates for the loss, but its function decreases temporarily.

The article highlights the critical role of salt in overall health and its impact on kidney function. The World Health Organization recommends limiting daily salt intake to 5 grams, which includes salt in natural foods, cooking, and hidden sources like preserved or packaged foods. While more research is needed on the specific impact of salt on kidney donors, salt restriction is crucial for reducing high blood pressure, strokes, and kidney failure.

The article emphasizes the importance of early detection of chronic kidney disease (CKD) using markers like proteinuria and blood creatinine. Kidney donors need to be educated about salt intake and closely monitored to ensure their long-term kidney health. The public, in general, should be made aware of the significance of salt reduction for overall health. Implementing salt reduction measures, like using salt substitutes, can have a positive impact on public health, particularly for those with high blood pressure. In conclusion, kidney donors' well-being and salt intake awareness are essential for their long-term health and overall public health.

'Most young people have seen ads for e-cigarettes'-The Hindu Science

Science

Key takeaways:

- 1. Widespread Exposure to E-cigarette Advertising:** Despite advertising restrictions, a substantial 85% of young people in Australia, China, India, and the UK have been exposed to e-cigarette advertising through various media channels.
- 2. Impact of Media Exposure on E-cigarette Use:** The number of media types through which young individuals were exposed to e-cigarette advertising was significantly associated with their likelihood of using e-cigarettes.
- 3. Social Media and Retailer Advertising as Primary Exposure Locations:** Social media and advertising around vape shops and other retailers emerged as key locations for e-cigarette advertising exposure, demanding immediate attention.
- 4. Differing Regulatory Frameworks:** The World Health Organization (WHO) recommends a complete ban on e-cigarette advertising, promotion, and sponsorship, but regulations vary among the four countries studied.
- 5. Urgent Need for Attention and Awareness:** The findings underscore the urgency of addressing the impact of e-cigarette advertising on young people's usage and highlight the importance of raising awareness about this issue.

Mains easy language:

In a study spanning Australia, China, India, and the UK, it was found that despite strict rules on e-cigarette advertising, a striking 85% of young people have encountered e-cigarette ads through various media. What's even more concerning is that the more exposure they had to these ads, the more likely they were to use e-cigarettes. The study indicated a significant connection between the number of media channels showcasing these advertisements and increased e-cigarette usage among young individuals.

The study pinpointed social media and ads in vape shops and stores as the primary sources of exposure. This suggests a need for immediate attention to regulate and restrict such advertising in these locations. However, the regulations concerning e-cigarette advertising differ from one country to another, adding a layer of complexity to the issue. For instance, India has some of the strictest regulations, banning nicotine and non-nicotine e-cigarettes as well as all related advertising.

This research serves as a stark reminder of the challenges posed by e-cigarette advertising, especially on impressionable young minds. It underscores the urgency of addressing this issue and the importance of raising awareness to protect the health and well-being of the younger generation.





04th November 2023

A narrative of 'roti, kapada aur makaan' under the NDA-The Hindu Editorial

Economics

Key takeaways:

1. **Growing Deprivation of Food and Shelter:** Deprivation of food and shelter increased significantly in India from 2018 to 2021. The poorest sections of society were hit the hardest, with 48% lacking money for food and 44.3% unable to afford shelter in 2021.
2. **Lack of Inclusive Income Growth:** Despite economic growth claims, income improvements didn't reach the poorest. Emphasis on infrastructure projects, neglect of agriculture and small enterprises, and weakened social safety nets widened income disparities.
3. **Caste-Linked Deprivation:** Caste played a role in deprivation. OBCs and SCs suffered higher food and shelter deprivation in 2018. OBCs slightly improved by 2021, while Unreserved saw an increase. Similar patterns emerged for shelter.
4. **Age as a Factor:** People aged 25-45 faced the highest food and shelter deprivation in 2021 due to low wages.
5. **Rural-Urban Disparities:** Most food and shelter deprivation was in rural areas (over 80%). A rise in urban deprivation was observed, potentially due to rural-urban migration post-COVID-19.
6. **Challenges in Government Policies:** Protectionist policies, labor market incentives, politically driven projects, and neglect of employment and social safety nets contributed to deprivation. High trust in the government worsened the situation.

Mains easy language:

This article dives into the struggles many people in India face when it comes to having enough food and a place to live. It looks at the years from 2018 to 2021, during the National Democratic Alliance (NDA) regime, to see if things got better or worse.

First, it shows that more people, especially the poorest, couldn't afford food and shelter as the years went by. In 2018, about 40% didn't have enough money for food, and 34.7% lacked money for a home. In 2021, these numbers jumped to 48% for food and 44.3% for shelter.

Income growth in the country didn't help the poorest much. The government was more focused on big projects like airports and highways, and it forgot about smaller businesses and farming, where many people work. Also, social safety nets to help the poor were getting weaker.

The article also talks about how your social status and age could make a big difference. Some groups, like the OBCs and SCs, had more trouble affording food and shelter. Young people between 25 and 45 years old struggled the most, probably because they didn't make much money.

Lastly, it explains that rural areas had it tougher than urban ones when it came to food and shelter. More people in the countryside were deprived, and that problem could increase because of people moving from rural areas to cities looking for better jobs.

The government's policies and some unusual choices made things worse. The article says that the government's trust and big projects made the problem of not having enough food and shelter even bigger. Also, changes in policies like job incentives and location of projects didn't help the situation.

The IITs are overcommitted, in crisis-The Hindu Editorial

Sociology

Key takeaways:

1. **Prestigious IITs Facing Challenges:** The Indian Institutes of Technology (IITs), known for their excellence in high tech fields, are currently grappling with significant challenges.
2. **Overseas Expansion Uncertainty:** Some IITs are venturing into foreign campuses, such as IIT-Madras in Zanzibar and IIT Delhi in Abu Dhabi, with unclear motivations and investments.
3. **Issues with Domestic Expansion:** Expansion of the IIT system after 2015 resulted in the creation of new institutions in less desirable locations, struggling to meet the high standards of the original IITs.
4. **Faculty Recruitment Challenges:** Attracting top professors is increasingly difficult due to low salaries and competition from the private sector, contributing to a faculty shortage.
5. **Severe Academic Shortage:** In 2021, out of the sanctioned faculty positions, over 4,000 were vacant, highlighting a severe shortage of academics in the IIT system.



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6. **Concerns about Quality and Prestige:**The overexpansion of the IIT system, both domestically and through overseas branch campuses, is raising concerns about the overall quality and prestige of these institutions.

Mains easy language:

The Indian Institutes of Technology (IITs), renowned for their excellence in high-tech education, are facing some serious challenges. While they have been expanding, both within India and overseas, it's not entirely clear why they're doing so. Some IITs have opened campuses in other countries, such as Zanzibar and Abu Dhabi, but the reasons and investments behind these moves are a bit of a mystery.

The problem began when the government expanded the IIT system, creating new IITs in less desirable locations after 2015. These new institutions have struggled to meet the high standards set by the original IITs. One significant issue is attracting top professors, as the salaries are not competitive compared to international standards, and many are reluctant to return to India due to these disparities.

This has resulted in a severe shortage of faculty members, with thousands of positions remaining vacant. The IITs are currently facing a crisis in terms of quality and reputation. The expansion, both domestically and abroad, is causing concern about the future of these institutions. Some argue that the focus should be on maintaining quality and addressing internal challenges rather than expanding further. In essence, the IITs, once considered the crown jewels of Indian higher education, are at a crossroads and need to address these pressing issues to retain their prestigious status.

Transparency at Stake-Indian Express Editorial

Polity

Key takeaways:

1. **Electoral Bonds Case Before the Supreme Court:**The Supreme Court is currently considering a case regarding electoral bonds and citizens' right to information about donors and recipients.
2. **Mixed Intentions of Electoral Bonds:**Electoral bonds were introduced in 2017 with the intention of enhancing transparency in political funding, however, concerns have arisen due to the anonymity they provide to donors.
3. **Debate Over Secrecy's Purpose:**here is a debate over whether the anonymity of donors is genuinely for their protection or to conceal potential quid pro quo.
4. **Shifting Stances of Key Institutions:**Institutions like the Reserve Bank of India and the Election Commission initially opposed electoral bonds but later seemed to change their stance, causing confusion.
5. **Changes in the Legal Landscape:**Legal changes were made to allow larger corporate donations and potentially shield foreign funding from scrutiny.
6. **Proposed Solutions for Transparency:**The suggested solution is to disclose the identities of donors and recipients to enhance transparency and Alternatives like public funding for political parties or a National Election Fund are proposed to eliminate secrecy concerns.

Mains easy language:

The article discusses the issue of electoral bonds in India and the need for the Supreme Court to uphold the Right to Information. Electoral bonds were introduced in 2017 with the aim of making political funding more transparent, but they've raised concerns because they allow large donations to be made anonymously. The government argues that donors want secrecy, but it's unclear whether this is to protect them or to hide any potential favors they might receive in return.

The article points out that key institutions like the Reserve Bank of India and the Election Commission initially opposed electoral bonds but later seemed to change their stance, causing confusion. Legal changes were made to allow larger corporate donations and potentially shield foreign funding from scrutiny.

The author suggests a simple solution: the government should reveal the identities of donors and recipients to enhance transparency. This would strengthen citizens' right to know about political funding, a right that has been upheld by the Supreme Court in the past. The Attorney General argues that citizens' right to know is subject to "reasonable restrictions," but the article questions whether keeping potential favors secret is a reasonable restriction.

In conclusion, the article emphasizes the importance of the Supreme Court's role in preserving democracy and transparency in political funding, and it suggests alternatives like public funding for political parties or a National Election Fund to eliminate secrecy concerns.





Higher for Longer-Indian Express Editorial

Economics

Key takeaways:

1. **High Interest Rates in Developed Countries:** Developed nations, including the US, Euro Zone, and the UK, are maintaining high interest rates to combat persistent inflation.
2. **Strong US Economic Momentum:** The US has seen strong economic performance with robust GDP growth, a tight labor market, and healthy consumer spending, although inflation remains above target.
3. **Pessimistic UK Economic Outlook:** The Bank of England is pessimistic about the UK economy, projecting flat growth in the third quarter and minimal growth in the fourth quarter, with high inflation persisting.
4. **Inflation Challenges in Euro Zone:** The Euro Zone is grappling with high inflation, with the European Central Bank projecting a gradual decline over the coming years and subdued growth.
5. **Impact on Emerging Markets like India:** The tighter monetary policy in developed countries will have consequences for emerging markets like India, affecting capital flows, currency values, and exports. Policymakers in India should prioritize macroeconomic stability amid economic and geopolitical uncertainties.

Mains easy language:

In many developed countries, interest rates are staying high because of ongoing issues with rising prices of goods and services, known as inflation. In the United States, things are going pretty well - the economy is doing great, with strong growth, plenty of jobs, and people spending money. However, prices are still higher than they want them to be. In the United Kingdom, though, the situation is a bit gloomier. The Bank of England expects the economy to barely grow in the coming months, and prices are also high and are expected to remain that way for a while.

In the Euro Zone (a group of European countries that use the Euro currency), they're also dealing with high prices, and growth is expected to be slow. Now, you might wonder why this matters to us in India. Well, these high interest rates in developed countries can affect us. It can make it more challenging for us to get money from these countries, affect the value of our currency, and impact our ability to sell things abroad.

In these uncertain times, Indian policymakers need to work on keeping our economy stable, even with all these global challenges. It's like trying to navigate a boat through rough waters - we need a steady hand to make sure we don't tip over.

A Matter of Greying-Indian Express Editorial

Sociology

Key takeaways:

1. **India's Growing Elderly Population:** India is experiencing a significant increase in its elderly population, and by 2050, they are expected to make up 20.8% of the total population.
2. **Global Aging Trend:** The world's population is rapidly aging due to factors like increased life expectancy, declining fertility rates, and larger cohorts reaching old age, which is not unique to India.
3. **Impact on Healthcare and Economy:** The aging population poses challenges for India's healthcare system and economy, as there will be fewer workers and taxpayers to support the elderly.
4. **Declining Fertility Rates:** Fertility rates are dropping faster in developing countries like India, leading to economic pressures related to aging populations, as they lack the economic resources of developed countries.
5. **Geopolitical Shifts:** Population decline is interconnected with geopolitics, with China's declining population potentially affecting its global economic status and the United States benefiting from sustained immigration.
6. **Future Global Powers:** By the end of the century, India, Nigeria, China, and the US are predicted to become dominant global powers, largely due to their working-age populations and immigration.
7. **Effective Strategies for Population Growth:** Encouraging childbirth through reproductive choice, good healthcare, work-life balance, and support for childcare and maternity leave is more effective than measures like China's suggestion of women staying home to have more children.

Mains easy language:

India is getting older, and it's not alone. The whole world is experiencing a demographic shift, with more elderly people and declining birth rates. By 2050, India is expected to have a substantial elderly population, making up about 20.8% of the total population. This trend is driven by factors like increased life expectancy, lower birth rates, and larger groups of people reaching old age. While some countries experienced these changes gradually, India's shift is happening relatively quickly.



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The aging population presents challenges. There will be fewer people in the workforce and fewer taxpayers to support the elderly, impacting the economy and healthcare systems. Unlike developed countries, India doesn't have the same economic resources to deal with this change.

This global shift is affecting geopolitics as well. China's declining population may affect its status as an economic power, while the United States, with its immigration policies, could maintain its dominant position.

In the future, India, along with Nigeria, China, and the US, is predicted to become a dominant global power, largely due to its working-age population. To address this shift, encouraging childbirth through factors like reproductive choice, good healthcare, work-life balance, and support for childcare is more effective than trying to force women to have more children. Preparing for this demographic change is essential for India's future.

Fixing Mumbai's Air: A Prescription - Indian Express Explained

Environment

Key takeaways:

- 1. Mumbai's Air Quality Concerns:** Mumbai grapples with air quality problems due to a mix of climatic conditions, delayed wind reversal, and construction-generated dust.
- 2. Expert Solutions for Improvement:** Experts propose increasing AQI monitoring stations, implementing sensor-based units for localized data, and integrating AQI monitoring with the administration's command system.
- 3. Independent Commission for Air Quality Management:** An independent commission, inspired by Delhi's success, would address pollution sources beyond geographical borders.
- 4. Academic Involvement for Solutions:** Engaging academic institutions can bring innovative approaches to tackling air quality issues more effectively.
- 5. Tackling Vehicular Pollution:** Emissions-based studies should guide policies to reduce vehicle emissions, with a strong emphasis on rigorous policy implementation.
- 6. Citizen Participation in Pollution Mitigation:** Public awareness campaigns are vital to promote cleaner transportation methods and involve citizens in reporting pollution activities.
- 7. Learning from Successful Cities:** Mumbai can adopt strategies from cities like Delhi and London, including increasing AQI monitoring stations and exploring measures like limiting private vehicle access in well-connected areas.

Mains easy language:

Mumbai's air quality has been on a worrying decline, and two renowned experts, Gufran Beig and Sachchida Nand Tripathi, have shared practical solutions to address this issue. The city faced 66 days of poor Air Quality Index (AQI) readings in just one month, with areas like Sion, Andheri, and Mazagaon experiencing some of the worst air quality. Several factors are contributing to this problem, including unusual climatic conditions and prolonged periods of weak winds, which trap pollutants.

One major issue is the extensive construction work in the city, which has kicked up dust and particles. Refineries, industries, and garbage burning are also adding to the pollution. However, experts believe this problem is temporary and should improve once the construction projects are completed.

To address these air quality concerns, experts recommend several key measures. First, increase the number of AQI monitoring stations in Mumbai to get better data. Implementing sensor-based units for hyperlocal data is crucial. Integrating AQI monitoring into the administration's system will enable swift action against polluters. Additionally, setting up an independent commission for air quality management, much like Delhi's successful model, can help tackle pollution sources that transcend geographical borders.

Mumbai can also learn from other cities like Delhi and London, which have successfully managed their air quality with increased monitoring and urban planning. Lastly, involving academic institutions in research and policymaking and raising public awareness can further contribute to improving air quality in Mumbai.

5th November, 2023

How air pollution impacts economic growth: The evidence in research - Indian Express Explained

Economics



| Clear your doubts now.



Key takeaways:

- 1. Air Pollution's Economic Impact:**Air pollution has a direct and detrimental impact on economic growth, affecting GDP and per capita income levels.
- 2. Factors Contributing to the Impact:**This impact is driven by reduced worker output, decreased consumer participation in service industries, impaired asset productivity, and increased healthcare costs.
- 3. Conventional Wisdom and Policy Response:**Traditional thinking often downplays air pollution as an unavoidable by-product of economic growth, leading to a lack of urgency in policy responses.
- 4. Recent Research Challenges Beliefs:**Recent studies contradict conventional wisdom by highlighting the substantial negative effects of air pollution on GDP and per capita income.
- 5. Vulnerability in High Economic Hubs:**India's economic hubs, such as Delhi NCR, face recurring annual cycles of high pollution, making them particularly susceptible to the economic consequences of air pollution.
- 6. GDP Risk and Macroeconomic Effects:**Research from the Reserve Bank of India suggests that up to 4.5% of India's GDP could be at risk due to climate change issues, including air pollution. Micro-level impacts aggregate to macro-level economic effects.
- 7. Services Sector and Indoor Work Impacted:**Even indoor jobs, such as those in call centers, are affected by air pollution, reducing worker productivity. In India, where the services sector contributes over 50% to GDP, this is a significant concern.

Mains easy language:

Air pollution isn't just bad for our health; it's also taking a toll on our wallets. Several studies have shown that dirty air has a direct and serious impact on our country's economic growth. It affects things like our overall GDP and how much money each person makes.

So, why is this happening? Well, when the air is polluted, people can't work as well, and businesses that rely on people buying things or using services suffer. Plus, pollution makes it harder for machines and equipment to do their jobs. And when people get sick from breathing in polluted air, it leads to more medical bills and less time at work.

What's worse, many people used to think that air pollution was just a side effect of a growing economy and that we couldn't do much about it. But recent research tells us the opposite. It shows that pollution is actually slowing down our economic growth and making life harder for all of us.

This is a big problem for India, especially in places like Delhi and Mumbai, where pollution gets really bad, especially in the winter. The effects on our economy are not small either. It's estimated that by 2030, up to 4.5% of India's GDP could be in danger due to lost working hours caused by climate change and pollution.

So, we need to pay attention to the dirty air around us, not just for our health but also for our wallets. Clean air is not only good for us; it's good for our economy too.

How researchers made new Cancer Therapy Affordable- Indian Express Your health

Key takeaways:

- 1. CAR T-cell Therapy Advancement in India:** CAR T-cell therapy, an advanced treatment for blood cancers that has been largely inaccessible in India due to high costs, is now approved by India's drug regulator following developments by IIT Bombay and Tata Memorial Hospital.
- 2. Affordability and Accessibility:** The cost of the therapy is expected to be significantly lower in India (around Rs 40 lakh) compared to current international costs (between Rs 2 to 4 crore). ImmunoACT, an IIT Bombay startup, aims to make this personalized therapy affordable and more widely available in India.
- 3. Clinical Trial Outcomes:** Encouraging results have been reported from phase I/II trials involving 64 adult patients, showing a high percentage of "cures" for lymphoma and leukemia. Trials are underway to assess the therapy's effectiveness in children.
- 4. Expansion of Treatment Scope:** ImmunoACT plans to extend its technology platform to address other cancers such as multiple myeloma, neuroblastoma, and gastric cancers, and potentially genetic conditions like sickle cell anemia.
- 5. Target Patients:** Currently, the therapy is an option for patients who have not been cured or have relapsed after chemotherapy and stem cell therapy for certain blood cancers.
- 6. Mechanism of the Therapy:** T-cells are collected from the patient, genetically re-engineered to express CARs, and infused back to target and destroy cancer cells with specific antigens such as CD19.
- 7. Operational Partnerships:** ImmunoACT is partnering with major hospital chains in India to facilitate the therapy.





8. **Technology and Process:** The technology uses a redesigned Lentivirus vector for cell modification, with the central lab in Mumbai handling the genetic editing. The process is streamlined to require only a single infusion and a shorter "vein-to-vein" time of about 18 days.
9. **Cost Reduction Strategies:** The team has reduced costs by minimizing side effects that lead to expensive care and by owning the IP rights, which allows for domestic manufacturing. Further cost optimization efforts are ongoing with the goal to reduce processing time and costs even more.
10. **Funding and Support:** There is an initiative to establish a foundation to help make the therapy accessible to those who cannot afford it, potentially using Corporate Social Responsibility (CSR) funds or government funding.
11. **Eligibility and Future Prospects:** Currently, eligibility for the therapy is for patients who have undergone prior treatments without success. However, there is hope for its approval as an earlier treatment option to improve survival chances.

Mains. in Easy Language

Advancement in Cancer Treatment in India: Over the past six years, a revolutionary cancer treatment known as CAR T-cell therapy has shown promise in curing terminal blood cancers. Historically expensive and largely available only in Western countries, this therapy has been out of reach for many in India due to costs ranging between Rs 2 to 4 crore.

Breakthrough by IIT Bombay and Tata Memorial Hospital: The therapy has now been approved by India's drug regulator, following the development by IIT Bombay and Tata Memorial Hospital. The therapy is expected to be offered by major hospital chains in India at the significantly reduced cost of around Rs 40 lakh.

Impact of ImmunoACT's Innovation: The IIT Bombay startup ImmunoACT has been pivotal in making the therapy affordable and accessible in India, aiming to move beyond the niche market. The business officer of ImmunoACT, Shishir Arya, highlighted that the lowered cost will increase accessibility for Indians.

Encouraging Trial Results: Encouraging results from phase I/II trials involving 64 adult patients showed high rates of cure, particularly for those with lymphoma and leukemia, who had not responded to conventional treatments. A trial for children is also underway.

Expansion of Treatment Scope: ImmunoACT plans to broaden its technology's application to include treatments for multiple myeloma, neuroblastoma, gastric cancers, and potentially genetic conditions like sickle cell anemia.

Importance of Personalized Medicine: Personalized medicine becomes crucial for patients who do not respond to traditional therapies like chemotherapy and stem cell therapy, which is the case for nearly 40% of patients with certain blood cancers.

Mechanism of CAR T-cell Therapy: The therapy involves re-engineering a patient's T-cells to produce CARs that target and destroy cancer cells. This is a one-time infusion that shows effects within a month, usually with milder side effects compared to other treatments.

Collaborations and Process: ImmunoACT is collaborating with hospitals to facilitate the therapy. The process involves collecting immune cells from patients and modifying them in a central lab before infusion back into the patient, taking about 18 days.

Cost Reduction Strategies: Cost reduction has been achieved in clinical and manufacturing processes, with fewer side effects leading to lower overall costs, and full manufacturing in India, including development of necessary lentivirus vectors.

Further Cost Optimization Goals: The team is working to reduce costs to Rs 20 lakh and optimize lab processes to handle more samples, which would decrease the treatment time and further cut costs.

Eligibility and Future Prospects: Currently, the therapy is available to patients who have exhausted other treatments for two types of blood cancers. However, there is hope to approve it as an earlier line of treatment to improve the odds of cure.

In summary, the article discusses a significant development in cancer treatment within India, highlighting the potential for broader accessibility and the intention to further reduce costs and expand the therapy's use.

Why did India abstain from the call of truce? The Hindu FAQ

International Relations

Key takeaways:

1. **UNGA Humanitarian Truce Vote:** The UN General Assembly proposed a truce between Hamas and Israel, which was supported by 120 countries. India, along with 44 other nations, chose to abstain, attracting criticism for diverging from its traditional voting behavior.
2. **Reasons for India's Abstention:** India abstained from the resolution due to the lack of a specific condemnation of the terror attacks by Hamas on October 7. India's decision is consistent with its firm anti-terrorism stance.



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3. **Historical Context:** India's UN voting record was initially pro-Palestinian but shifted to a more neutral approach after the 1990s. The trend in recent years shows India increasingly abstaining or opposing resolutions critical of Israel.
4. **Current Vote Implications:** India's abstention may suggest a closer alignment with Israel or a strategic move to maintain neutrality in international disputes. This move was in line with some NATO countries and Quad partners, though it was out of step with the majority of the Global South.
5. **Voting Patterns Shift:** The current abstention marks a distinct shift from India's 2018 pro-Palestinian vote, indicating a change in diplomatic strategy. This reflects India's attempt to navigate complex international relations while avoiding alignment with any particular bloc in an increasingly divided world.

Mains, in Easy language

The UN Vote: The United Nations tried to get everyone to agree on a break in the fighting between Hamas and Israel to help civilians. Lots of countries said yes, but India didn't vote at all, which made some people unhappy because India usually votes a certain way in these situations.

Why India Didn't Vote: India didn't want to vote for the break in fighting because the United Nations didn't strongly criticize Hamas for attacking Israel first. India has been hit by terrorism itself, so it's really serious about pointing out who starts the violence.

India's Voting History: In the past, India often supported Palestine in the UN. But over the years, India has started to not take sides as much, sometimes not voting or voting in a way that isn't against Israel.

What India's Latest Choice Means: By not voting this time, India might be showing that it's leaning a bit more toward Israel, or it might just be trying not to pick sides too strongly in global issues. This choice puts India in the company of some big Western countries but not with most of its neighbouring countries and other developing nations.

Big Picture: India's decision to not vote is part of a bigger pattern where it's staying neutral on many international conflicts, maybe to keep good relations with as many countries as possible

6th November 2023

Power vs Humanity-Indian Express Editorial

International relations

Key takeaways:

1. **Electoral Accountability:** Democracy provides a built-in check of electoral accountability, but it only occurs every 4-5 years. In the meantime, leaders have significant power to make decisions, often in the name of national security.
2. **Humanitarian Carnage:** The author expresses deep concern about the recent violence between Israel and Palestine, with a particular focus on the impact on innocent civilians, especially children.
3. **Israeli Leadership:** Benjamin Netanyahu's leadership and his actions, such as the bombing of Gaza, are scrutinized. The author questions whether these actions truly reflect the will of the Israeli population.
4. **Hamas Complexity:** The article also touches on the complex nature of Hamas, where the military wing may act independently of the political wing, potentially causing actions that don't align with the broader Palestinian will.
5. **Self-serving Decisions:** The author provides other examples of leaders making self-serving decisions that lead to adverse humanitarian consequences, including the invasion of Ukraine by Vladimir Putin and the US invasion of Iraq.
6. **The Role of Democracy:** The article acknowledges the importance of democracy as a form of government with built-in checks through elections. However, it also highlights that leaders can use the cloak of national security to pursue self-serving policies between elections.
7. **The Corruption of Power:** The article references Lord Acton's famous quote, "power tends to corrupt, and absolute power corrupts absolutely," and suggests that the longer a leader remains in power, the greater the potential for despotism.
8. **Global Community and Human Principles:** The author emphasizes the need for the global community to strengthen sanctions against breaches of basic human principles, underlining the importance of holding leaders accountable for their actions.

Mains easy language:

In this article, the author dives into the complex relationship between political power and the well-being of ordinary people. They use recent events in the Israel-Palestine conflict to illustrate their point. The author highlights that while democracy allows us to hold leaders accountable through elections, these checks only happen every few years. In the meantime, leaders can make decisions, often in the name of national security, which can have devastating humanitarian consequences.



| Clear your doubts now.



The article specifically criticises the actions of Benjamin Netanyahu, the leader of Israel, questioning whether his decisions truly represent the will of the people. It also discusses the intricate nature of Hamas, explaining that the military wing may act independently, potentially causing actions that don't align with the broader Palestinian population.

The author extends their argument beyond Israel-Palestine, pointing out other instances where leaders made decisions that led to suffering, such as Vladimir Putin's invasion of Ukraine and the U.S. invasion of Iraq. They argue that leaders often use national security as a cloak to hide self-serving policies.

The article concludes by quoting Lord Acton, who famously said, "power tends to corrupt," and raises the question of whether power and humanity can coexist. The author insists on the importance of the global community holding leaders accountable for breaches of basic human principles.

Clear And Present Danger-Indian Express Editorial

Science

Key takeaways:

1. **Global Commitment to Combat Antimicrobial resistance(AMR):** The Delhi Declaration, from India's G20 presidency, aims to strengthen global healthcare and tackle AMR through research, infection control, and stewardship.
2. **Alarming Impact of Bacterial AMR:** A 2021 Lancet report reveals that bacterial AMR caused nearly 5 million global deaths, similar to HIV and malaria. Urgent action is needed to protect public health.
3. **Wide-ranging Threat to Public Health:** Excessive antimicrobial use endangers public health gains and treatment for conditions like cancer and organ transplants. G20 countries are pivotal in addressing this issue.
4. **Global and Local Strategies Required:** To combat AMR, we need regional action plans, international funding, and patent reforms to encourage innovation and affordability.
5. **India's Role in AMR Mitigation:** India's NAP-AMR faces implementation challenges due to leadership and resources. Expanding monitoring networks, government initiatives, and responsible antibiotic use promotion are vital. Collaboration with academia and civil society is essential.
6. **Strengthening Local Efforts and Collaboration:** Countries, like India, must prioritize NAP implementation and expand monitoring networks. Government initiatives and responsible antibiotic use promotion are critical. Involving academia and civil society organizations is key to success in combating AMR.

Mains easy language:

In a nutshell, the article highlights the urgent need to address Antimicrobial Resistance (AMR), which poses a severe threat to public health. The Delhi Declaration, during India's G20 presidency, committed to strengthening global healthcare systems and combating AMR through various measures, such as research, infection control, and antimicrobial stewardship.

The article underscores the startling impact of bacterial AMR, with a 2021 Lancet report revealing nearly 5 million global deaths associated with it, comparable to diseases like HIV and malaria. Regions like Sub-Saharan Africa and South Asia are particularly vulnerable.

Excessive use of antibiotics is driving the rise of AMR, jeopardizing public health achievements and impacting treatments for conditions like cancer and organ transplants. G20 countries, home to a significant portion of the world's population, play a pivotal role in addressing this issue, emphasizing the need for coordinated global and local efforts.

To combat AMR effectively, there's a call for developing regional AMR action plans, securing international funding, and implementing patent reforms to encourage innovation and affordability. India's role in mitigating AMR involves expanding monitoring networks, government initiatives, and promoting responsible antibiotic use while involving academia and civil society for a comprehensive approach.

In conclusion, tackling AMR is crucial, and global and local strategies are necessary to protect public health and ensure the effectiveness of essential medical treatments. India can lead the way in this global effort.

App for mother and child welfare-Indian Express Editorial

Sociology

Key takeaways:

1. **Poshan Tracker's Scale and Impact:**The Poshan Tracker, a mobile nutrition monitoring system from the Indian government, is the world's largest of its kind. It has seen universal adoption by 1.3 million Anganwadi workers across India, offering real-time monitoring for over 50% of children under five in the country.



| Clear your doubts now.



2. **Data and Transparency:**The Poshan Tracker app captures data on Anganwadi infrastructure, beneficiaries, and nutritional outcomes, promoting transparency and accountability. It acts as a real-time feedback tool for frontline workers to address malnutrition early.
3. **Modules and Features:**With modules like beneficiary registration, daily tracking, and growth monitoring, the Poshan Tracker streamlines Anganwadi workers' tasks and enables efficient data transmission.
4. **Accuracy and Timeliness:**Mobile apps like Poshan Tracker can significantly improve accuracy in growth monitoring, reducing errors and offering real-time data transmission, avoiding delays seen in paper-based reporting.
5. **Challenges and Sustainability:**The app faces challenges, such as overburdened Anganwadi workers, requiring ongoing support for user-friendliness and sustainability.
6. **Data as a Tool:**Data from the Poshan Tracker is a means to deliver essential services when malnutrition is detected, aligning with the objectives in the Poshan 2.0 guidelines.

Mains easy language:

The Poshan Tracker is a powerful app introduced by the Indian government to track and improve the delivery of nutrition services to women and children. It's the biggest system of its kind in the world, with 1.3 million Anganwadi workers across India using it to monitor the health of over 50% of children under five. This app collects various data, ensuring transparency and accountability in nutrition services, while also acting as a real-time feedback tool for frontline workers to spot and address malnutrition issues early.

The Poshan Tracker's modules help Anganwadi workers streamline their work, including tasks like beneficiary registration and growth monitoring. Importantly, it significantly boosts accuracy in monitoring children's growth and offers real-time data, eliminating the delays that come with paper-based reporting.

However, there are challenges to consider. Anganwadi workers often have heavy workloads, so it's crucial to ensure the app is user-friendly and continues to receive support for its sustainability.

It's important to remember that data is a tool, not the end goal. The real value comes from using this data to provide essential services when malnutrition is identified. In line with the Poshan 2.0 guidelines, the Poshan Tracker's data has the potential to drive tangible and actionable outcomes for the well-being of women and children at the grassroots level.

India starts process to adopt National Security Strategy:Why this is significant

Internal security

Key takeaways:

1. **India's First National Security Strategy:**India is working on its inaugural National Security Strategy to define its security goals and means of achieving them.
2. **Purpose of a National Security Strategy:**This document outlines traditional and non-traditional threats, introduces accountability, and guides defense and security reforms.
3. **Scope of India's Strategy:**India's strategy will address a wide range of challenges, including economic security, information warfare, and environmental concerns.
4. **Global Comparison:**Many developed countries like the US, UK, Russia, China, and Pakistan already have their National Security Strategies.
5. **Urgency for India:**Rising geopolitical tensions and uncertainties have created a sense of urgency to develop a clear national security strategy in India.
6. **Historical Challenges:**Previous attempts to create a strategy faced political hesitations and accountability concerns, with varying views in the strategic community about why India lacked a national security strategy.

Mains easy language:

India is in the process of creating its first-ever National Security Strategy, a document that will outline the country's security goals and the methods to achieve them. This marks a significant step towards strengthening India's national security. The strategy will cover a wide range of challenges, including traditional ones like military threats and non-traditional ones like economic security, information warfare, and environmental issues.

Many developed countries, including the United States, the United Kingdom, Russia, China, and Pakistan, already have their own National Security Strategies. These documents provide a holistic view of national security, introduce accountability, and guide defense and security reforms. In India, the need for such a strategy has been discussed in the military and strategic community for years, but it hasn't been realized until now.





The urgency to draft a national security strategy has grown due to rising geopolitical tensions and uncertainties. The lack of a clear strategy has been a concern, as it makes it challenging to implement military reforms effectively. Past attempts to create a strategy faced political hesitations and concerns about the accountability it would bring to defense management.

With this new development, India is taking a significant step towards strengthening its national security and addressing a wide range of modern threats and challenges in a more systematic and comprehensive manner.

Revenue rebound-The Hindu Editorial

Economics

Key takeaways:

1. **October GST Collections Surge:** In October, India recorded its second-highest monthly GST collection of ₹1.72 lakh crore, indicating a strong rebound in revenue.
2. **Year-on-Year Growth:** The collections saw a robust year-on-year growth of 13.4%, marking the highest growth rate in 2023 and reversing a recent slowdown in revenue expansion.
3. **Fiscal Resilience:** This revenue boost is expected to provide a cushion for potential fiscal challenges, allowing the government to navigate potential spending or subsidy shocks, both from external and internal factors.
4. **Changing Collection Patterns:** Contrary to historical trends, October's strong collection challenges the usual pattern of April recording the highest GST revenues, suggesting shifts in economic activity.
5. **Factors Behind the Growth:** The growth in October's GST collections is attributed to government actions, such as cracking down on non-compliance, settling disputes, and a potential rebound in domestic demand, particularly for premium goods. An amnesty scheme for unresolved GST demands may further bolster revenue.

Mains easy language::

In October, India saw a significant boost in its Goods and Services Tax (GST) collections, marking the second-highest monthly collection of the year. This is a positive sign for the country's economy, for several reasons. Firstly, the revenue for the month was over ₹1.72 lakh crore, a 13.4% increase from the previous year, which is the highest growth rate in 2023. This growth also marks a turnaround from a recent slowdown in revenue growth during the second quarter of the fiscal year.

The government is hoping that this increase in GST revenue will act as a safety net for potential fiscal challenges. It could help manage unexpected spending needs or subsidies, whether they stem from external factors like fuel or urea prices or internal factors like pre-election promises such as extending free food-grains distribution.

What's interesting is that this strong collection in October challenges the usual pattern of April being the month with the highest GST revenues. It suggests that economic activity is shifting, and the government's measures to enhance tax compliance and settle disputes are working. Moreover, there are indications of a domestic demand recovery, particularly for premium goods, which could sustain through the festive season and further bolster GST revenues. Additionally, a recently introduced amnesty scheme for unsettled GST demands may contribute to the revenue surge. Overall, this increase in GST collections is an encouraging sign for India's economic prospects.

Giving the urban Indian a better life-The Hindu Editorial

Sociology

Key takeaways:

1. **Air Pollution's Alarming Impact:** Air pollution in Indian cities is a critical issue, leading to health problems and reducing life expectancy, with cities like Delhi experiencing a significant loss in life years.
2. **Root Causes of Pollution:** Pollution is primarily caused by factors like excessive urban development, motorized transport, construction activities, and industrial pollution, demanding a change in urban development priorities.
3. **Shift Towards Sustainable Urbanization:** There is a pressing need for a shift in urban development strategies, focusing on ecological and sustainable urbanization instead of real estate development and wider roads.
4. **Promotion of Public Transport:** Prioritizing public transport, pedestrian pathways, bicycle lanes, and regulating construction activities can help mitigate pollution levels and promote healthier urban living.
5. **Community Involvement and Governance:** Empowering residents to actively engage in pollution control measures, coupled with stronger governance and monitoring, can lead to more effective solutions and better air quality.
6. **Equality and Environmental Responsibility:** Recognizing that the marginalized population suffers the most from pollution, it is essential to ensure a better quality of life for all and promote environmental responsibility across society.

Mains easy language::



| Clear your doubts now.



The article discusses the critical issue of air pollution in Indian cities and its impact on the health and well-being of urban residents. It reveals that air pollution is responsible for causing various health problems, including respiratory issues and cardiovascular diseases, and even shortening people's lives. In fact, the report by The Energy Policy Institute at Chicago (EPIC) indicates that 39 out of the 50 most polluted cities in the world are in India.

The root causes of this pollution are primarily linked to the way cities are being developed. The focus on real estate development, expanding roads to accommodate more cars, and unchecked construction activities are major contributors to the problem. The article argues that there needs to be a shift in urban development strategies, with a greater emphasis on ecological and sustainable urbanization.

To combat air pollution, the article suggests promoting public transport, creating safe pathways for pedestrians and cyclists, and regulating construction activities. Community involvement and strong governance are seen as essential to effectively tackle the issue. Furthermore, it is highlighted that pollution disproportionately affects marginalized populations, making it crucial to ensure that all citizens have access to cleaner air and a better quality of life.

Tiding over -The Hindu Editorial

Environment

Key takeaways:

1. **Annual Air Quality Challenge:** Delhi and surrounding states face yearly air quality issues as the monsoon season ends, making it harder to clear pollutants from activities like construction, driving, and burning agricultural residue.
2. **Stalemate in Pollution Control:** Despite numerous studies and efforts to tackle air pollution, it has hit a roadblock. Adverse weather and economic disruptions hinder progress.
3. **Role of Commission for Air Quality Management (CAQM):** CAQM is responsible for addressing air pollution but can only recommend measures without direct enforcement power.
4. **Mixed Air Quality Data:** Delhi's air quality improved from January to October, but November continues to be problematic, with a consistent number of 'severe' air quality days.
5. **November's Pollution Challenges:** November is a critical month for pollution, with challenges like stubble burning, despite a decrease in incidents in recent years.
6. **Comprehensive Action Needed:** To combat November's pollution, a comprehensive approach is essential, including tackling vehicular pollution and construction dust. Stricter measures and increased inconvenience may be necessary, along with better coordination and compliance within the region.

Mains easy language::

In India, each year, Delhi and neighboring states, such as Punjab, Haryana, and Uttar Pradesh, encounter a significant air pollution problem after the monsoon season ends. During this time, pollution from various activities like construction, driving, and burning agricultural residue becomes more prominent. Despite numerous efforts and studies, addressing this crisis has hit a roadblock. Adverse weather conditions and the potential economic disruptions associated with pollution control measures make it challenging to make significant progress.

The Commission for Air Quality Management (CAQM) is responsible for tackling air pollution in Delhi and nearby areas. However, it has limited authority, mostly offering recommendations without the power to enforce actions directly. Recent data indicates improved air quality in Delhi from January to October, but the issue remains consistent in November, which has become a critical month for pollution.

The challenges in November include stubble burning in the surrounding states, despite a decrease in such incidents in recent years. To effectively combat November's pollution, a comprehensive approach is essential, involving measures to reduce stubble burning and address challenges like vehicular pollution and construction dust. This might require stricter measures and more significant inconvenience. It's also crucial for organizations like CAQM to promote better coordination and compliance within the region to effectively combat air pollution.

The Zika genome and insights into the era of emerging outbreaks-The Hindu Science

Science

Key takeaways:

1. **Zika Virus Notoriety:** Zika virus, a mosquito-borne flavivirus, gained worldwide attention during the 2015-2018 outbreak in the Americas, which saw a surge in microcephaly cases in newborns.



| Clear your doubts now.



2. **Zika Genome Insights:**The Zika virus has an RNA genome with a high mutation potential, allowing for advanced genetic tracking and epidemiological studies.
3. **Lineages and Outbreak Analysis:**Genomic research identified two Zika virus lineages, African and Asian, aiding in the understanding of outbreaks and their characteristics.
4. **Microcephaly Complexities:**Microcephaly in infants born to Zika-infected mothers is a complex issue with various contributing factors, making it challenging to pinpoint a direct cause.
5. **Zika-DENV Interactions:**Co-infections of Zika and dengue (DENV) have been found to affect mosquito-attracting microbes on the skin and increase the risk of severe illness from either virus.
6. **Genomic Insights for Emerging Outbreaks:**Genomic technologies and molecular pathogenesis insights are becoming increasingly crucial in addressing vector-borne diseases and emerging outbreaks due to climate change and global warming.

Mains easy language:

The Zika virus, a mosquito-borne disease, gained worldwide attention during the 2015-2018 outbreak when it was linked to a rise in microcephaly cases in newborns. Researchers have delved into the virus's genetic makeup, which consists of RNA, making it prone to mutations. This genomic exploration has allowed us to track how the virus evolves and spreads, shedding light on its transmission and impact.

Genetic studies have revealed that the Zika virus has two lineages: African and Asian, helping us understand its origins and behavior during outbreaks. However, the relationship between Zika infection and microcephaly (a condition where infants are born with small heads) is complex. While a mutation in one of the virus's proteins was initially thought to be the cause, other factors appear to be at play, making it challenging to pinpoint a direct link.

Interestingly, co-infections of Zika and dengue (DENV) have led to discoveries about the interplay between the two viruses. They influence the skin's microbial environment, which can attract mosquitoes and aid in virus transmission. This knowledge is valuable for developing vaccines against both Zika and dengue.

As climate change drives the spread of vector-borne diseases and alters environmental conditions, our understanding of these viruses at a genetic level is becoming increasingly important. It helps us prepare for and respond to emerging outbreaks and protect public health.

Wolbachia: an unlikely hero-The Hindu Science

Science

Key takeaways:

1. **Wolbachia's Unique Relationship with Insects:** Wolbachia, a bacteria genus, has complex ties with insects and was named after Simeon Burt Wolbach. It plays an unexpected role in combating mosquito-borne diseases.
2. **Wolbachia's Impact on Mosquito Reproduction:** In 1971, researchers discovered that male Culex mosquitoes infected with Wolbachia caused the death of eggs from healthy females. It altered male sperm cells in a unique way, damaging uninfected female eggs.
3. **Reproductive Advantage for Infected Female Mosquitoes:** Infected female mosquitoes gain a reproductive edge as Wolbachia's presence grows, ensuring the viability of their eggs.
4. **Wolbachia's Role in Disease Control:** Beyond mosquito reproduction, Wolbachia limits the replication of chikungunya and yellow fever viruses in infected mosquitoes. Certain strains protect mosquito species from the malaria parasite, offering disease control potential.
5. **Potential for Disease Control Using Wolbachia:** Scientists are researching rapid Wolbachia spread in specific mosquito populations and environments to combat diseases, potentially reducing the global burden of mosquito-borne illnesses.

Mains easy language::

Wolbachia, a peculiar bacteria, has emerged as an unlikely champion in our battle against mosquito-borne diseases. Discovered in 1924 and named after pathologist Simeon Burt Wolbach, this bacterial genus has intricate relationships with various insects, particularly mosquitoes. In a fascinating twist, Wolbachia wields significant power over mosquito reproduction.

Researchers found that when male Culex mosquitoes, infected with Wolbachia, fertilize eggs from uninfected females, the eggs don't survive. Wolbachia alters the sperm cells of these males in a unique way that only it can reverse. This means that uninfected female mosquitoes' eggs are damaged, but infected females can produce viable eggs. Over time, this gives infected female mosquitoes a reproductive advantage as Wolbachia spreads through the population.



| Clear your doubts now.



Wolbachia's significance doesn't stop there. It also affects disease transmission. It can slow down the replication of viruses like chikungunya and yellow fever within infected mosquitoes. Additionally, certain strains of Wolbachia offer strong protection to certain mosquito species against the malaria parasite.

Researchers are actively investigating how to quickly spread the right strain of Wolbachia in specific mosquito populations, under the right environmental conditions. If they succeed, this could be a powerful tool in our ongoing fight against mosquito-borne diseases, potentially reducing the global burden of these illnesses and improving public health.

7th November 2023

The cult of operational superiority, from Israel to India-The Hindu Editorial

International Relations

Key takeaways:

- 1. Collapse of Israel's Security Policy:** Israel's security policy, based on periodic military campaigns to weaken Palestinian groups, has failed. This approach lacked a comprehensive political plan, and the consequences of its collapse are dire.
- 2. Benjamin Netanyahu's Approach:** Former Israeli Prime Minister Benjamin Netanyahu's abandonment of the two-state solution and support for extremist groups like Hamas contributed to the ongoing conflict, emphasizing the dangers of neglecting the political dimensions of a conflict.
- 3. The Pitfall of Operational Superiority:** Over reliance on operational superiority, which focuses on military capabilities while ignoring political roots, can lead to underestimating an adversary's determination and intent. Israel's experience serves as a cautionary example.
- 4. Parallels with India's Strategy:** India's strategy towards Pakistan mirrors Israel's focus on military might over political aspects. While India has advanced military capabilities, it needs a comprehensive long-term strategy that addresses the political dimensions for lasting security and stability.
- 5. The Necessity of Political Processes:** Ignoring political dimensions in conflicts encourages adversaries to persist in their beliefs and actions. Initiating a political process, despite challenges, can reduce tensions and address pressing issues within conflict zones, emphasizing the importance of diplomacy alongside military deterrence for lasting peace.

Mains easy language:

In this article, the collapse of Israel's security policy is discussed. Israel had long relied on military campaigns to weaken Palestinian groups like Hamas, but this approach has now proven to be ineffective. The key problem was that Israel's strategy lacked a comprehensive political plan, which has led to dire consequences.

Former Israeli Prime Minister Benjamin Netanyahu played a significant role in this crisis. He abandoned the idea of a two-state solution and supported extremist groups, which exacerbated the conflict. This highlights the dangers of neglecting the political dimensions of a conflict.

The article also warns against the pitfall of relying too heavily on operational superiority – a focus on military capabilities while ignoring political factors. Israel's experience serves as a cautionary tale, as it underestimated its adversaries' determination and intent.

India's strategy towards Pakistan shares similarities with Israel's approach, prioritizing military might over political aspects. While India has advanced military capabilities, it lacks a comprehensive long-term strategy that addresses the political dimensions of the conflict.

Ultimately, the article emphasizes the importance of political processes in conflict resolution. Ignoring the political dimensions of a conflict can encourage adversaries to persist in their beliefs and actions. Initiating a political process, despite its challenges, can reduce tensions and contribute to lasting peace through diplomacy alongside military deterrence.

A telco double dip attempt that threatens Net neutrality-The Hindu Editorial

Polity

Key takeaways:

- 1. Net Neutrality Threat:** Telecom companies' bid to charge OTT content providers for bandwidth usage threatens net neutrality, a principle central to a fair and open internet.





2. **Flawed Telecom Argument:** Telecoms offer internet access, while consumers pay for data plans. OTT platforms generate demand for internet access by providing desired content and investing in content delivery networks (CDNs).
3. **Distinct Markets:** Internet access and OTT services are separate markets. Consumers choose providers based on factors like bandwidth and reliability, justifying separate cost structures.
4. **Double Charging Risks:** Telecoms charging both consumers and content providers could result in higher costs for subscribers or degraded service quality.
5. **Net Neutrality Principles:** Net neutrality dictates that ISPs must treat all internet traffic equally, preventing discrimination against specific data or content types.
6. **Importance of Net Neutrality:** Upholding net neutrality isn't just about an open internet; it's crucial for innovation, competition, and consumer welfare, especially in countries like India relying on the internet for Digital Public Infrastructure (DPI).

Mains easy language::

In simple terms, this article discusses a concerning issue related to how we access the internet and enjoy online content. Telecom companies are trying to charge services like Netflix and Amazon for using their internet networks. They argue that these services benefit from their infrastructure without paying their fair share. This could lead to higher costs for these online platforms, and they might pass those costs on to us, the consumers.

However, this argument is flawed and could threaten a fundamental principle called "net neutrality." Net neutrality means that internet service providers should treat all internet traffic the same way, without favoring or discriminating against any specific content or service. It's like saying all cars should be allowed on the same roads, regardless of their brand.

The telecom companies are essentially trying to "double-dip" by charging both the content providers and us, the users. This practice could lead to increased costs for everyone, making online entertainment and information less affordable and accessible.

Preserving net neutrality is vital because it ensures fairness and equality on the internet, promotes innovation, and benefits consumers. In countries like India, where the internet is a crucial part of public infrastructure, maintaining net neutrality becomes even more critical for the well-being of the digital world.

States in Court against their Governors-The Hindu Text and Context

Polity

Key takeaways:

1. **States Seek Legal Clarity:**Tamil Nadu, Kerala, and Punjab approach the Supreme Court to establish a defined timeframe for Governors to act on Bills, aiming to bring predictability to governance.
2. **Accusations of Unreasonable Delays:**These states accuse their Governors of significant delays in approving critical Bills, affecting areas like public health, higher education, Lokayukta, and cooperative societies.
3. **State-Specific Grievances:**Tamil Nadu alleges that Governor R.N. Ravi has created a "constitutional deadlock" by not taking action on Bills.Kerala highlights prolonged delays in approving eight proposed laws, hampering legislative progress.Punjab expresses concerns about seven Bills stuck with the Governor since June, threatening administrative disruptions.
4. **Governors' Limited Discretion:**Governors are expected to act on the advice of the Ministry, and the discretion to return Bills lies with the State Cabinet, as per Article 163 and the Shamsher Singh case verdict.
5. **Undefined Timelines for Bill Returns:**The Constitution requires "as soon as possible" Bill returns, with States now seeking a specific time limit for Governor actions to eliminate uncertainty.
6. **Reviewing 1962 Judgment:**Kerala requests a seven-judge Bench to reconsider a 1962 judgment that did not specify time limits for Governors' decisions on Bills, arguing that it doesn't address indefinite delays by Governors.

Mains easy language::

In a significant legal battle, the states of Tamil Nadu, Kerala, and Punjab have approached the Supreme Court seeking clear rules for the timely approval or rejection of legislative Bills by Governors. They argue that Governors have been unreasonably delaying crucial Bills for years, affecting vital sectors like public health, education, Lokayukta, and cooperative societies.

Tamil Nadu accuses Governor R.N. Ravi of creating a "constitutional deadlock" by not taking action on Bills. Kerala points out extended delays in approving eight proposed laws, while Punjab is concerned that seven Bills have been stuck with the Governor since June, threatening administrative disruptions.





The heart of the matter is the discretion of Governors in this process. The Constitution expects Governors to act based on the advice of the State Cabinet, not independently. However, the exact timeline for returning Bills is not clearly defined, leading to ambiguity. States now request the Supreme Court to set a specific timeframe for Governors to approve or return Bills, aiming to bring more certainty to the legislative process.

Furthermore, there's a call to revisit a 1962 judgment that didn't address the issue of indefinite delays by Governors, as it didn't establish specific time limits for their decisions on Bills. The outcome of this legal battle will have significant implications for the relationship between states and Governors, potentially bringing more transparency and predictability to governance.

How the personal data of 815 million Indians got breached-The Hindu Text and Context

Internal security

Key takeaways:

1. **Massive Data Breach in India:** 815 million Indian citizens' personally identifiable information (PII) was breached, including Aadhaar numbers and passport details, and sold on the dark web.
2. **Source of the Data Leak:** The breach is believed to have originated from the Indian Council of Medical Research (ICMR), which experienced numerous cyberattack attempts.
3. **Nature of Personally Identifiable Information (PII):** PII includes information like passport details and Aadhaar numbers, which can identify individuals.
4. **Unclear Data Access Method:** Threat actors selling the data have not disclosed how they obtained it, making it challenging to pinpoint the source of the breach.
5. **Increased Cybersecurity Concerns:** The data breach highlights growing cybersecurity challenges in India, with a rising number of cyberattacks on businesses and government organizations.
6. **Steps to Protect Personal Information:** Users are advised to check if their data was part of the breach, exercise caution with emails from unknown sources, change passwords, implement two-factor authentication, and report suspicious activities to authorities to safeguard their personal information.

Mains easy language:

A massive data breach in India has exposed the personal information of a staggering 815 million citizens. This sensitive data includes Aadhaar numbers (a unique 12-digit identification number issued by the Indian government) and passport details. The breach was discovered on the dark web, where cybercriminals were willing to sell this information for \$80,000.

The source of this data leak is suspected to be the Indian Council of Medical Research (ICMR), which has been targeted by numerous cyberattacks in recent years. It's not clear how these cybercriminals gained access to this data, as they have not revealed their methods.

This breach highlights the urgent need for improved data security in India, as the government has previously denied allegations of biometric data leaks from Aadhaar. Cybersecurity challenges are on the rise, with an increase in cyberattacks on both businesses and government organizations.

To protect personal information, users are advised to check if their data was part of the breach, be cautious about emails from unknown sources, change passwords, implement two-factor authentication, and report any suspicious activities to the authorities. Data security remains a critical concern in an increasingly digitized world, and individuals must take steps to safeguard their personal information.

In the Sikkim flood's wake, a trail of hazards lie in wait-The Hindu Science

Disaster Management

Key takeaways:

1. **South Lhonak Lake GLOF:** A catastrophic glacial lake outburst flood (GLOF) occurred at South Lhonak Lake in Sikkim on October 3, causing extensive damage and casualties.
2. **Trigger Factors:** The GLOF was likely triggered by a combination of factors, including a slope failure and overtopping of the lake due to a landslide on its left bank.
3. **Persistent Hazard:** Although the lake's area reduced after the GLOF, it still poses a significant hazard as it hasn't drained completely, with continuous landslides exacerbating the risk.
4. **Cloudburst Discrepancy:** Initial claims of the GLOF being caused by a cloudburst have been disputed, as weather data suggests that the likelihood of this trigger is low.



| Clear your doubts now.



5. **Downstream Disaster:**The downstream disaster was the result of a chain of events, with significant damage to hydropower projects like Teesta-III, Teesta-V, and Teesta-VI.
6. **Climate Change Impact:**Climate change has accelerated the growth of South Lhonak Lake due to glacier melt, permafrost weakening, and a rapid increase in the lake's size.
7. **Infrastructure and Risk Management:**There is an urgent need for improved glacial lake management and infrastructure planning in the Teesta Basin to mitigate future hazards and protect the region's hydropower projects.

Mains easy language:

The South Lhonak Lake in Sikkim experienced a catastrophic glacial lake outburst flood (GLOF) on October 3, leading to significant devastation and loss of lives. This disaster was likely triggered by a combination of factors, including a slope failure and overtopping of the lake caused by a landslide on its left bank. Despite some reduction in the lake's size following the GLOF, it remains a looming hazard, with ongoing landslides adding to the risk.

Initially, authorities attributed the GLOF to a cloudburst, but weather data suggests this explanation is unlikely. Researchers are now exploring whether earthquakes played a role in the disaster. The downstream consequences of the GLOF included damage to key hydropower projects, such as Teesta-III, Teesta-V, and Teesta-VI.

Climate change has exacerbated the situation, as rapid glacier melt and permafrost weakening contributed to the lake's rapid expansion. This increased the likelihood of GLOFs, making it vital to improve glacial lake management and infrastructure planning in the Teesta Basin to mitigate future risks and safeguard the region's hydropower projects. This incident underscores the importance of understanding the environmental impact of climate change and taking measures to adapt to these evolving challenges.

The earth's interior may hold relics of moon-forming mega impact-The Hindu Science

Geography

Key takeaways:

1. **Mysterious Mantle Blobs:** Seismologists have identified massive continent-sized blobs deep within the Earth's mantle, located beneath Africa and the South Pacific, which may hold clues about a significant cosmic collision.
2. **Moon-Forming Mega Impact:** These blobs are believed to be remnants of a colossal impact event that occurred over 4.46 billion years ago, where a Mars-sized object called Theia collided with the early Earth, leading to the creation of the Moon.
3. **Blob Origins and Composition:** Computer simulations suggest that most of Theia was absorbed into the Earth, forming these deep-seated blobs, while remaining debris formed the Moon. The increased density of the blobs is attributed to their high iron content.
4. **Earth's Deep Secrets:** These blobs, located about 2,900 kilometers beneath the Earth's surface, represent approximately 2% of the Earth's mass and are twice the mass of the Moon, potentially providing concrete evidence of the moon-forming collision on Earth.
5. **Implications for Earth's History:** Investigating the remains of this ancient impact could shed light on the Earth's unique evolutionary path among rocky planets in our solar system and help unravel the mystery of why Earth is the only confirmed habitable planet.

Mains easy language:

Seismologists have made a fascinating discovery deep within the Earth's mantle: enormous, continent-sized blobs located under Africa and the South Pacific. These blobs are thought to be remnants of a colossal event that took place more than 4.46 billion years ago. During this ancient event, a Mars-sized object, known as Theia, collided with the early Earth, leading to the formation of our Moon. While it's widely accepted that the Moon was created from the debris of this impact, it was uncertain what happened to Theia.

Recent research and computer simulations have provided intriguing insights. Most of Theia, it appears, was absorbed into the Earth, forming these mysterious blobs. The high iron content in these blobs is believed to be responsible for their increased density. These blobs are not just a minor detail; they account for about 2% of the Earth's mass and are double the mass of the Moon.

This discovery could potentially serve as concrete evidence of the moon-forming collision on Earth. Furthermore, it offers a unique opportunity to investigate the Earth's ancient history and its unique position as the only confirmed habitable planet. By understanding the consequences of this primordial collision, scientists hope to unravel why Earth is distinct from other rocky planets in our solar system, providing valuable insights into our planet's evolution and habitability.





Does Odd-Even Work?-Indian Express Explained

Environment

Key takeaways:

1. **Odd-Even Scheme Resumes in Delhi:** Delhi revives odd-even policy to tackle severe air pollution following Diwali. The scheme aims to alleviate traffic congestion and reduce pollution levels during a week-long implementation.
2. **Air Quality Crisis in Delhi:** Delhi grapples with chronic poor air quality, frequently exceeding an AQI of 450. Geographical factors, combined with low temperatures and sluggish winds, trap pollutants close to the ground, resulting in persistent smog.
3. **Odd-Even Scheme Basics:** Under the odd-even system, vehicles can only operate on alternate days based on their registration numbers. The initiative seeks to cut the number of cars on the road, with an ultimate goal of lowering AQI.
4. **Vehicular Emissions and Air Pollution:** Vehicles contribute significantly to Delhi's air pollution, responsible for up to 30% of the city's annual PM 2.5 concentration. NO₂ emissions have surged, exceeding acceptable levels at some locations.
5. **Farm Fires and Air Pollution:** Farm fires in nearby states exacerbate pollution during certain periods. Although they contribute significantly during peak periods, their annual impact remains relatively low.
6. **Effectiveness of the Odd-Even Scheme:** Data from 2019 indicates that AQI improved during the odd-even scheme, but experts caution against attributing air quality solely to this measure. Multiple factors influence air quality, making it challenging to pinpoint the scheme's exact impact.

Mains easy language:

The odd-even scheme is making a comeback in Delhi to combat the city's severe air pollution problem, particularly after the Diwali festival. The scheme, which restricts the use of cars based on their registration numbers, is being implemented for the fourth time in the last seven years. It's a simple concept: cars with odd-numbered plates can drive on odd dates, and those with even-numbered plates on even dates.

Delhi's air quality has been consistently poor, with an Air Quality Index (AQI) often exceeding 450. This is exacerbated by the city's geographical features that trap pollutants close to the ground, especially during cold and windless conditions. Vehicular emissions are a major contributor to the city's air pollution, accounting for up to 30% of the annual PM 2.5 concentration. Nitrogen dioxide (NO₂) emissions from vehicles have also been on the rise, exceeding safety standards at some locations.

Additionally, fires from neighboring states, where farmers burn crop stubble, contribute to air pollution during specific periods. While these fires substantially impact air quality during those times, their overall annual contribution remains relatively low.

While the odd-even scheme has been implemented before and has shown some effectiveness in reducing air pollution, experts caution that attributing air quality improvements solely to the scheme is complex. Air quality depends on various factors, including weather conditions and other pollution sources. Nevertheless, the scheme remains a prominent effort to address Delhi's challenging air quality issue.

Odd Even's health impact:What Studies, Doctors Say-Indian Express Explained

Environment

Key takeaways:

1. **Ineffectiveness of Odd-Even Policy:** Delhi's odd-even policy, meant to reduce pollution, is seen as a short-term fix. Dr. Sagnik Dey from IIT-Delhi notes its limitations, with exceptions and weather conditions making it inconsistent in curbing emissions.
2. **Limited Impact on Pollution Reduction:** Studies find a modest 5-10% reduction in particulate matter levels during odd-even rules, with varying results across the city, and mid-day hours being more effective.
3. **Significance of Reducing Nitrogen Dioxide (NO₂):** Fewer vehicles during odd-even periods lead to lower nitrogen dioxide (NO₂) levels. Recent AIIMS research underscores the importance of reducing NO₂, which causes a 53% increase in ER visits, surpassing PM_{2.5}'s impact.
4. **Long-Term Pollution Control Strategies:** Experts recommend long-term solutions like phasing out BSIV vehicles and promoting electric alternatives. Regional implementation of pollution controls is crucial for a more significant impact.
5. **Air Purifiers for Children's Health:** Dr. Madan suggests using air purifiers in schools to protect children from pollution. This cost-effective measure reduces kids' exposure to pollutants, preventing future lung diseases.

Mains easy language:



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The odd-even policy in Delhi, which restricts vehicles based on their license plate numbers to reduce pollution, might not be the magic solution many hoped for. It's like putting a small bandage on a big wound. Dr. Sagnik Dey from the Indian Institute of Technology-Delhi explains that while the policy helps a little during the day, it's not consistent, and there are too many exceptions. The reduction in car emissions doesn't always mean the air gets better because it depends on the weather. So, there isn't enough evidence to prove that it's significantly improving our health.

Studies have shown that during odd-even periods, there is a minor decrease in particulate matter in the air, but it's only around 5-10%, which isn't a game-changer. The impact varies across the city and is more effective during mid-day hours. Additionally, experts stress the importance of reducing nitrogen dioxide (NO₂) levels as NO₂ can lead to more emergency room visits than the more well-known pollutant, PM_{2.5}.

To combat air pollution effectively, experts recommend long-term solutions like getting rid of old vehicles and promoting electric ones. These measures need to be applied regionally, not just in Delhi. In the meantime, using air purifiers in schools can protect children's health by reducing their exposure to harmful pollutants. While the odd-even policy isn't a long-term solution, there are other steps that can make a more significant difference in the long run.

A National Security Strategy for India: what it should be guided by-Indian Express Explained

Internal security

Key takeaways:

1. **Public Awareness and Cohesion:**A publicly articulated National Security Strategy (NSS) is vital for public awareness and fostering a common understanding of India's national security.
2. **Comprehensive Security Coverage:**The NSS must comprehensively address various security aspects, including military, economic, diplomatic, and environmental security.
3. **Global Significance:**India's growing global importance necessitates a comprehensive NSS, demanding high-level government approval due to the complex geopolitical landscape.
4. **Constitutional Principles:**The NSS should be guided by flexible principles derived from India's Constitution, ensuring alignment with the nation's core values and interests.
5. **Reasonable Completion Timeframe:**Drafting the NSS should be a thoughtful process without unnecessary delay, with a reasonable completion timeframe of approximately two years to adapt to evolving circumstances.

Mains easy language:

India is working on its first-ever National Security Strategy (NSS), a significant document that outlines how the country plans to protect its interests and ensure its safety. This move is essential because it ensures that the government's approach to national security is transparent and well-understood by the public.

The NSS will cover a wide range of security aspects, including military, economic, diplomatic, human, and environmental security. It's not just about the military; it's about safeguarding every aspect of the nation's well-being, from food and water security to climate and economic stability. India's growing role on the global stage and complex geopolitical scenarios make it vital to have a clear and comprehensive strategy.

The NSS will be guided by principles rooted in India's Constitution, reflecting the nation's democratic values and the rule of law. These principles will provide the foundation for formulating the strategy and ensure that it aligns with India's core values and interests.

Drafting the NSS is a meticulous process, and it's crucial not to rush it. However, it shouldn't be delayed excessively either. A reasonable completion timeframe of around two years allows for thoughtful deliberation and adaptation to changing circumstances.

In summary, India's move to draft its first NSS is a significant step towards ensuring national security, transparency, and a well-informed public. It will address diverse security dimensions, guide India's global role, and be rooted in democratic principles, with careful consideration for evolving circumstances.

SWAY OF POPULISM-Indian Express Editorial

Economics

Key takeaways



| Clear your doubts now.



1. **Free Grain Scheme Continues:**The NFSA of 2013 provided subsidized foodgrains to a significant portion of India's population. It legally entitled three-fourths of India's rural and half of the urban population to 5 kg of foodgrains per person per month at subsidized prices.
2. **Extension by Modi's BJP Government:**Modi's BJP government not only continued the NFSA but also made issued foodgrain entirely free from January 2023, and this practice will extend beyond their current term until 2028.
3. **Five-Year Extension:**Prime Minister Modi announced the extension of the free grain scheme until 2028. Under the new name "Pradhan Mantri Garib Kalyan Anna Yojana," the distribution of free grains will continue.
4. **Competitive Populism:**In Chhattisgarh, the ruling Congress pays farmers well above the central government's minimum support price (MSP) for paddy, creating competition among states to offer better prices.
5. **Sanctity of the Centre's MSP:**The practice of some states paying farmers well above the MSP raises questions about the sanctity of the central government's MSP, leading to potential challenges for governments in other states.
6. **Fiscal Sustainability:**Distributing rice for free after procuring it at high prices poses fiscal sustainability concerns, especially considering the added costs of transport, milling, bagging, storage, and more.
7. **Political Economy Malaise:**Governments today prioritize delivering freebies over investing in essential sectors like public education, healthcare, irrigation, and agricultural research. This reflects a deeper issue where short-term transactional politics take precedence over long-term development.

Mains easy language:

The government in India has been providing free or highly subsidized food grains to a large portion of the population through the National Food Security Act (NFSA) since 2013. The Modi-led BJP government has not only continued this practice but made it completely free for a year starting from January 2023. They also announced an extension of this free grain scheme, now known as the Pradhan Mantri Garib Kalyan Anna Yojana, for the next five years, continuing until 2028.

However, this move has sparked a competitive trend among states. For example, in Chhattisgarh, the Congress-led government is paying farmers more than the central government's set prices for paddy, creating challenges for other states to match these prices.

This practice raises questions about the fiscal sustainability of procuring rice at high prices and then distributing it for free. Moreover, it highlights a trend where governments opt for short-term, transactional politics by providing freebies rather than investing in long-term development, like education, healthcare, and agriculture.

DELAYED, DENIED-Indian Express Editorial

Sociology

Key takeaways:

1. **Gender Bias Throughout Legal Process:**The study reveals persistent gender bias in the legal process, especially in cases of violence against women, resulting in multi-stage discrimination from complaint registration to prosecution.
2. **Historical Inequality:**This gender bias is not new; reports and anecdotes show women's complaints, not just in Haryana but across India, often dismissed or not taken seriously, leading to delays and withdrawal pressure.
3. **Judicial Comments:**Recent judicial comments, like the Madhya Pradesh High Court's misuse claims about Section 498A and the Calcutta High Court's "legal terrorism" description, further discourage women seeking justice.
4. **Disheartening Consequences:**The consequences are disheartening. Women face significant hurdles in both seeking justice and being heard, and procedural solutions like all-women police stations and fast-track courts fall short.
5. **Prioritizing Change:**Concrete steps are needed to combat systemic discrimination. This includes increasing women's representation in the police force (currently at 11.7%) and providing greater sensitization and training throughout the legal system to create a more equitable environment for women seeking justice.

Mains easy language:

The recent study examining over 4 lakh First Information Reports (FIRs) in Haryana shines a light on the persistent discrimination against women within the legal system. It reveals that women who file complaints, particularly in cases of violence against them, often face substantial hurdles throughout the entire legal process, from reporting to prosecution. This bias is not a new problem; past reports and stories have consistently shown that women's complaints are frequently disregarded, leading to delays and even pressure on them to withdraw their cases.

What's even more concerning are recent comments by high courts, like the Madhya Pradesh High Court's accusations of misuse of the law and the Calcutta High Court's labeling of women's complaints as "legal terrorism." These comments not only misrepresent the facts but also discourage women from seeking justice.



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The consequences are disheartening: women are disadvantaged not just in their pursuit of justice but in the very act of being heard. Simple solutions like all-women police stations and fast-track courts aren't enough. To change this deeply rooted discrimination, we must take concrete steps, including increasing the representation of women in the police force (currently at just 11.7%) and providing comprehensive training throughout the legal system. Only through these systemic changes can we create a more just and equitable environment for women seeking justice.

08th November 2023

The problem with the '70 hours a week' line-The Hindu Editorial

Sociology

Key takeaways:

1. **Narayana Murthy's Misguided Proposal:** Infosys co-founder Narayana Murthy's suggestion of a 70-hour workweek for Indian youth to enhance the country's competitiveness is criticized as flawed and unrealistic.
2. **Innovation Over Extended Working Hours:** The article underscores the importance of innovation in boosting productivity rather than placing the burden on workers to increase working hours.
3. **Violation of International Labor Standards (ILS):** The proposal to work 70 hours a week goes against international labor standards and the International Labor Organization's Decent Work Agenda, potentially hindering Indian industry's global market access.
4. **Low Investment in Research and Development (R&D):** India's inadequate investment in research and development, with a low percentage of GDP allocated to R&D, is identified as a key factor contributing to its lower productivity and competitiveness.
5. **Emphasis on Responsible Supply Chain Practices:** The article highlights the importance of adhering to labor rights and international labor standards in the context of developing supply chain regulations and international trade agreements to secure India's position in global markets.

Mains easy language:

In this article, the author criticizes the idea put forward by Infosys co-founder Narayana Murthy, who suggested that young Indians should work 70 hours a week to make India more competitive. The author argues that this proposal is fundamentally flawed for several reasons.

First, the idea that working longer hours will make India competitive is incorrect. In reality, advanced countries like Germany and Japan have reduced their working hours over the years as their economies have become more productive. Working less, not more, is often a sign of a strong and productive economy.

Second, Narayana Murthy's proposal places the burden of increased productivity on the shoulders of workers, when the real issue is the lack of investment in innovation. Innovation is a crucial driver of productivity, and companies and organizations should invest more in this area.

Furthermore, the proposal violates international labor standards and the International Labor Organization's Decent Work Agenda, which sets guidelines for working hours to ensure decent and productive work for both men and women. Non-compliance with these standards could harm India's global market aspirations.

The article also highlights India's low investment in research and development, which is a critical factor in productivity. Finally, it emphasizes that India needs to uphold labor rights and international labor standards to participate in global supply chains, as developed countries are increasingly demanding these standards. In summary, the article emphasizes the importance of innovation, compliance with labor standards, and responsible supply chain practices to enhance India's competitiveness, rather than pushing for longer working hours.

A verdict that hampers international law obligations-The Hindu Editorial

Economics

Key takeaways:

1. **Taxation Uncertainty for Foreign Investors:** Foreign investors in India face challenges due to unpredictable taxation measures, creating a tough environment.
2. **MFN Clause and Tax Treaties:** The issue is about interpreting the Most Favored Nation (MFN) clause in India's tax treaties, which involve withholding taxes and preferential treatment based on OECD membership.





3. Supreme Court's Ruling on MFN Provisions:The Court ruled that the MFN provision does not apply to the India-Netherlands DTAA, leading to potential tax burdens and reopened cases for foreign investors.

4. Freezing Treaty Provisions in Time:The Court's decision essentially freezes treaty provisions at signing without accounting for missing language in the India-Netherlands DTAA.

5. Doctrine of Dualism vs. Monism:The decision highlights dualism, requiring international law to become domestic law through legislation, departing from monism's approach.

6. Impact on International Law and Potential Violations:The interpretation allows the executive branch to avoid international law obligations by not issuing domestic notifications, raising concerns about international law compliance and disputes.

Mains easy language:

In India, foreign investors are grappling with the uncertainty of tax regulations, which can be traced back to both government decisions and court rulings. A recent case in the Supreme Court added to this uncertainty. The case revolved around a clause called the Most Favored Nation (MFN) clause in tax treaties that India has with other countries. These treaties are meant to prevent double taxation of income and provide specific tax rates for foreign entities operating in India.

The Supreme Court's decision in this case led to significant concerns. It ruled that the MFN clause would not apply in the India-Netherlands tax treaty, and the reason given was that when the treaty was signed, Slovenia wasn't a member of the OECD. This decision could impose a substantial tax burden on foreign investors and potentially reopen previous tax cases.

What's troubling about this decision is that it essentially freezes treaty provisions at the time they are signed, ignoring the evolving circumstances of the countries involved. This ruling also reinforces the idea of 'dualism,' meaning that international law should be transformed into domestic law through specific legislation, which differs from the 'monist' approach of seamlessly incorporating international law into domestic legal systems.

The real concern is that this interpretation allows the government to avoid international law obligations by not issuing necessary domestic notifications. This raises questions about India's commitment to international legal standards and its potential for international disputes. The decision has added to the existing uncertainty in India's business environment, which foreign investors find daunting.

Closer together -The Hindu Editorial

International relations

Key takeaways:

- 1. Bilateral Development Initiatives:** India and Bhutan are working together on infrastructure and connectivity projects, marking a significant shift towards regional development driven by both nations.
- 2. Transformational Plans:** The discussions involve completing surveys for rail links connecting Bhutan to Assam, facilitating Bhutan-Bangladesh trade, and upgrading border checkpoints, which have the potential to change the region's development story.
- 3. Bhutan's Economic Challenges:** Bhutan's economy, primarily reliant on hydropower and tourism, has been adversely affected by the COVID-19 pandemic and global warming concerns, leading to emigration of educated youth.
- 4. Prosperity-Boosting Projects:** Proposed initiatives, including a Special Economic Zone at the Bhutan-Assam border and an airport at Gelephu, aim to stimulate growth and investment in Bhutan, addressing its economic challenges.
- 5. Regional Growth and Collaboration:** India's "energy exchange" strategy and collaborative efforts with neighboring countries to build connectivity, markets, and energy links provide a sustainable path forward amid challenges with Pakistan and Myanmar, fostering regional cohesion and security.

Mains easy language:

In simple terms, India and Bhutan are teaming up to make a big difference in their region. They're focusing on building better roads, railways, and connections between their countries. This is a crucial step because it means both nations are working together to create more opportunities for the people living in their region.

One major project they're planning is a new railway line that will link Bhutan to Assam in India. They're also looking into building another railway to connect Bhutan with West Bengal in India. These railways will make it easier for goods to be transported, boosting trade and economic growth.

Bhutan's economy has been hit hard by the COVID-19 pandemic and worries about climate change. Many young and educated people have had to leave the country in search of better opportunities. To address this, Bhutan's king has proposed setting up a





Special Economic Zone at the border with Assam and building an airport in Gelephu. These projects are expected to bring in investments and create jobs.

India's plan to share energy with Bhutan and other neighboring countries will also help the region grow. By working together, India and Bhutan hope to overcome challenges and bring more prosperity to their region. This collaboration is especially important as they face concerns about China's growing influence in the area. It's a promising step towards a more secure and prosperous future for both nations and their region.

In troubled waters in Qatar-The Hindu Editorial

International relations

Key takeaways:

- 1. Indian Navy Veterans Sentenced to Death:** In Qatar, eight Indian Navy veterans were sentenced to death by the Court of First Instance, which has caused shockwaves in India.
- 2. Limited Information on the Case:** The details of the case are scarce. The accused veterans, including three captains, four commanders, and a sailor, were employed by Dahra Global Technologies and Consultancy Services, which provided support to the Qatari Navy. They are accused of espionage.
- 3. Speculation and Media Coverage:** The lack of concrete information has led to various speculations in the Indian media, often reflecting political biases. Some have suggested an Israeli connection, while others speculated about Pakistan's role in their arrest.
- 4. Need for Diplomacy and Restraint:** Diplomatic efforts are being made to resolve the situation. The author emphasizes the importance of behind-the-scenes diplomatic engagement with Qatar and calls for patience and restraint from the media to avoid further inflaming the situation.
- 5. Qatar's Role and International Relations:** Qatar has close ties with the U.S., Western powers, Iran, and Turkey. It has been active in regional diplomacy. The author suggests that the case is a standalone security issue and not linked to bilateral ties or regional politics.
- 6. Maintaining a Balanced Approach:** The author advises against reacting with anger and prejudice and highlights the importance of maintaining composure during this sensitive time.

Mains easy language:

In Qatar, eight Indian Navy veterans have been sentenced to death, causing widespread concern in India. These veterans, including three captains, four commanders, and a sailor, were employed by a company that provided support services to the Qatari Navy. They are accused of espionage, but the details of the case remain limited.

The media's coverage of the situation has led to various speculations, such as an Israeli connection or Pakistan's role in their arrest, without concrete evidence. However, it's crucial to remember that Qatar maintains close ties with several countries, including the U.S., Western powers, Iran, and Turkey. The author suggests that this case is a standalone security issue and shouldn't be linked to India's broader diplomatic relations or regional politics.

The author calls for patience and restraint, urging the media to avoid spreading anger and prejudice. Instead, the focus should be on diplomatic efforts to resolve the situation behind the scenes. Maintaining composure is essential, as this case is sensitive, and hasty reactions could worsen the situation.

In summary, the article highlights the need for a diplomatic approach to address the sentencing of Indian Navy veterans in Qatar, emphasizing the importance of keeping emotions in check and conducting diplomatic efforts to resolve the situation.

How are the MiG21 fighter jets being phased out?-The Hindu Text and Context

Science and technology

Key takeaways:

- 1. Phasing Out MiG-21 Fighter Jets:** On October 31, 2023, India's MiG-21 fighter jets, which have been in service since 1963, made their final flight over Rajasthan. The Indian Air Force (IAF) is replacing them with Sukhoi-30 MKI aircraft.
- 2. Historical Significance:** MiG-21 was the IAF's first supersonic fighter and played a crucial role in major conflicts. It has been in service for six decades and has been involved in Indo-Pak conflicts and other operations.
- 3. Phasing Out Plan:** The IAF plans to phase out all MiG-21 squadrons by 2025. These aging aircraft will be replaced with the indigenous Light Combat Aircraft (LCA) Mk1A, which is expected to fill the gap.



| Clear your doubts now.



4. **MiG-21's Legacy:** During the 1971 Bangladesh War and the 1999 Kargil conflict, MiG-21s demonstrated their effectiveness. However, over the years, the MiG-21 fleet witnessed over 400 accidents, resulting in around 200 pilot fatalities.
5. **Replacement and Future Plans:** The IAF has already inducted LCA Tejas and Rafale fighter jets, increasing its squadron strength. The procurement of 83 LCA Mk1A from Hindustan Aeronautics Limited (HAL) is set to begin in 2024, with plans to acquire an additional 97, making it a significant part of the IAF's future force. Additionally, larger LCA-Mk2 and Advanced Medium Combat Aircraft (AMCA) are under development.

Mains easy language:

India's iconic MiG-21 fighter jets, which have served for six decades, are being phased out by the Indian Air Force (IAF). This move is part of a long-awaited modernization effort to replace aging aircraft with more advanced ones. On October 31, 2023, the last flight of the MiG-21 took place over Rajasthan, marking the end of an era. These fighter jets were the IAF's first supersonic aircraft and played pivotal roles in major conflicts, including the 1971 Bangladesh War and the 1999 Kargil conflict.

The IAF had initially intended to retire the MiG-21s much earlier, but delays in newer aircraft, especially the indigenous Light Combat Aircraft (LCA) Tejas, extended their service. The IAF now aims to replace the MiG-21s with the LCA Mk1A, with deliveries starting in early 2024. This indigenous aircraft is expected to become a major part of the IAF's future fleet. Additionally, the IAF has inducted Rafale fighter jets and aims to develop the LCA-Mk2 and the fifth-generation Advanced Medium Combat Aircraft (AMCA) for the future.

The retirement of the MiG-21s signifies a significant step toward modernizing India's air force. It comes as the IAF seeks to enhance its capabilities and maintain a competitive edge in the evolving geopolitical landscape. The phasing out of these historic jets is both a farewell to a bygone era and a step toward a more technologically advanced and capable air force.

Understanding the fundamentals of how electricity is transmitted-The Hindu Text and Context

Key takeaways:

1. **Components of Power Transmission:** Electricity transmission consists of three main parts: generation, transmission, and distribution. Power is generated at plants and transmitted through substations, cables, and transformers before reaching homes and businesses.
2. **Efficiency through Voltage and Current:** Efficient transmission relies on high voltage and low current. Transformers play a crucial role in achieving this balance by reducing energy loss during transmission.
3. **Cable Thickness and Energy Loss:** Cable thickness affects energy loss. Thicker cables are more efficient but costlier, striking a balance between efficiency and cost is crucial.
4. **Advantages of Alternating Current (AC):** Alternating current (AC) is favored for transmission due to its adaptability and efficiency compared to direct current (DC).
5. **Three-Phase AC Transmission:** Three-phase AC systems are common in power transmission, allowing efficient electricity distribution to homes and appliances.
6. **National Grid and Grid Operation:** National grids integrate generation, transmission, and distribution. They adapt to various energy sources, control voltage, manage power, and prevent outages for reliable power supply. Synchronized grids enhance efficiency and reliability.

Mains easy language:

Electricity is the lifeblood of modern society, and understanding how it's transmitted is crucial. Think of it as a three-step process: generation, transmission, and distribution. First, electricity is generated at power plants, whether they use coal or harness renewable energy like solar and wind. Then, it travels through a network of substations, cables, transformers, and control systems. Finally, it reaches your home or business to power your devices.

Efficiency is key to keeping costs down and reducing energy loss. To achieve this, transmission systems use high voltage and low current. Transformers play a vital role in this process by boosting voltage and lowering current, which reduces energy loss during transmission.

The thickness of the cables used also affects energy loss. Thicker cables are more efficient but cost more, so it's a trade-off between efficiency and expense.





Most of the time, power is transmitted as alternating current (AC). AC is versatile and efficient, making it ideal for our needs. It's like a dance where the voltage changes direction, and this dance is mapped onto a circle. Three-phase AC systems are common, with different wires carrying electricity at distinct phases.

National grids bring everything together. They integrate power generation, transmission, and distribution and adapt to different energy sources and changing demands. Grids ensure we have a reliable power supply, but they also need safeguards to prevent large-scale outages. In short, understanding how electricity is transmitted is essential to keeping our lights on and our devices running.

India's hypertension map-Indian Express Explained

Sociology

Key takeaways:

- 1. Hypertension Care Disparities:** Significant disparities in hypertension prevalence, diagnosis, treatment, and control exist among Indian states and districts.
- 2. Low Diagnosis and Treatment Rates:** National data reveals that a substantial proportion of individuals with hypertension do not receive a diagnosis or treatment, with only one in three diagnosed and one in five receiving treatment.
- 3. State-Level Variation:** While the prevalence of hypertension is similar among southern states, it is higher than the national average, and southern states exhibit better treatment outcomes.
- 4. District-Level Variability:** Districts within the same state can have significant differences in hypertension diagnosis, treatment, and control, as illustrated by examples from Meghalaya and Karnataka.
- 5. Influence of Demographics and Education:** Factors such as gender, age, socioeconomic conditions, and education level play a significant role in determining the level of care received for hypertension, with women more likely to be diagnosed, treated, and have controlled blood pressure.

Mains easy language:

The recent study on hypertension in India has uncovered some crucial findings. It shows that there are significant differences in how hypertension (high blood pressure) is managed across different parts of the country. The study, based on National Family Health Survey data, reveals that many people with hypertension are not even diagnosed. In fact, only one out of three individuals with high blood pressure receives a proper diagnosis. And out of those who do get diagnosed, only one in five actually starts treatment. Even fewer, just one in twelve, are successful in controlling their blood pressure.

The research also sheds light on disparities at both the state and district levels. In southern states, the prevalence of hypertension is higher than the national average, but more people there are receiving treatment and successfully controlling their condition. However, even within states, there are significant variations. For example, different districts in Meghalaya and Karnataka show differences in diagnosis and treatment rates, highlighting the need for more targeted and decentralized healthcare solutions.

Furthermore, the study reveals that gender, age, socioeconomic status, and education level all play a role in hypertension care. Women are more likely to be diagnosed, while older individuals and those with higher education and socioeconomic status receive better care.

Understanding these disparities is essential for healthcare planning, and it's clear that managing chronic conditions like hypertension requires a different approach than acute diseases. It involves not just diagnosis but a continuum of care, including regular medication availability, digitization of records, and follow-up measures. The study's insights will help local governments address these disparities and provide better care for those with hypertension, potentially saving lives.

NFSA and PM's free grains promise for 5 years:what it means-Indian Express Explained

Economics

Key takeaways:

- 1. PM Modi Extends NFSA Free Foodgrains Scheme:** Prime Minister Narendra Modi announced a five-year extension of the National Food Security Act (NFSA) free foodgrains scheme during election rallies in Madhya Pradesh and Chhattisgarh.
- 2. End of PM-GKAY Pandemic Relief:** The Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY), which provided additional free foodgrains to NFSA beneficiaries during the pandemic, ended on January 1, 2023.
- 3. PM-GKAY History and Significance:** The PM-GKAY scheme was initiated in April 2020, offering 5 kg of free foodgrains on top of existing entitlements under the NFSA.



| Clear your doubts now.



4. **Beneficiaries and Impact:**The extension of the NFSA will benefit approximately 80 crore people and may be used as a political talking point in the BJP's election campaign.
5. **Economic Costs and Government Subsidy:**The government's food subsidy bill has been increasing over the years, and the estimated cost of distributing free foodgrains under NFSA for the 2023 calendar year is around Rs 2 lakh crore.
6. **AAY and PHH Households:**The NFSA categorizes beneficiaries into Antyodaya Anna Yojana (AAY) and Priority Households (PHH) with different entitlements based on family size. The extension is expected to provide cost savings for these families.

Mains easy language:

In a recent announcement, Prime Minister Narendra Modi extended the National Food Security Act (NFSA) free foodgrains scheme for five more years during election rallies in Madhya Pradesh and Chhattisgarh. This scheme, often referred to as PM-GKAY, had previously provided extra free foodgrains to NFSA beneficiaries during the pandemic but ended on January 1, 2023.

PM-GKAY started in April 2020 and offered 5 kg of free foodgrains in addition to the regular food entitlements under NFSA. The extension is expected to benefit approximately 80 crore people and might be highlighted in the BJP's election campaign.

The NFSA aims to ensure that a significant portion of India's population has access to affordable food. However, the government's expenses on food subsidies have been steadily increasing over the years. Extending the NFSA will likely cost the government around Rs 2 lakh crore in 2023.

Under the NFSA, beneficiaries are divided into two categories: Antyodaya Anna Yojana (AAY) households and Priority Households (PHH), each with different entitlements based on family size. The extension is anticipated to save money for these beneficiary families.

Overall, the extension of the NFSA is a significant step to provide continued support for millions of people in India, ensuring they have access to essential food items at affordable prices for the next five years.

An important punctuation-Indian Express Editorial

International relations

Key takeaways:

1. **India-US Partnership Strengthened:**The 2+2 dialogue highlights the growing India-US partnership, with recent advancements in defense, diplomacy, and technology cooperation, strengthening their relationship.
2. **Concerns Over Chinese Revisionism:**The central theme is addressing China's assertive actions, particularly in the South China Sea, exemplified by recent tensions with the Philippines, raising significant concerns.
3. **Potential Impact on Quad Summit:**The 2+2 meeting's outcome could affect the proposed Quad summit, focusing on responding to China's maritime assertiveness in East Asian waters and the risk of drawing the US into a broader conflict.
4. **Changing Dynamics in the Philippines:**The Philippines' shifting foreign policy, moving away from China under President Ferdinand Marcos Jr., includes renewed military cooperation with the USA and increased engagement with Japan.
5. **Trade vs Security Dilemma:**Nations like India face a dilemma due to significant trade dependencies on China, making them susceptible to economic coercion while also dealing with security and strategic disagreements, akin to Australia's trade boycott and India's trade deficit concerns.

Mains easy language:

In the upcoming India-US 2+2 meeting, both countries will discuss their strengthened partnership, particularly in defense, diplomacy, and technology. The key concern on the agenda is China's aggressive behavior, especially in the South China Sea, which has raised alarms for both India and the US.

Recent disputes in the South China Sea, involving China's assertiveness and its clashes with the Philippines, highlight the urgency of addressing this issue. The potential impact of this meeting extends to a proposed Quad summit in January 2024, where China's maritime assertiveness will be a focal point. Mismanagement of this situation could draw the US into a broader conflict, with global implications.

The Philippines, once a US ally, has shifted closer to China in recent years. However, under its current leadership, it's showing signs of distancing itself from China, renewing military cooperation with the USA, and strengthening ties with Japan.

The challenge for many nations, including India, lies in balancing trade dependencies on China with security concerns. While they face potential economic coercion, they also have to navigate security and strategic differences with China. This dilemma is further





complicated by China's revisionist behavior, making the India-US 2+2 meeting a crucial punctuation mark in addressing these complex issues.

DEEPFAKE CHALLENGE-Indian Express Editorial

Science and technology

Key takeaways:

1. **Deepfake Proliferation:**Deepfakes, generated using AI tools, have become a widespread issue, with deceptive videos and images spreading through social media platforms.
2. **Global Concern and Acknowledgment:**The Bletchley Declaration, signed by 28 countries including the US, UK, France, China, Japan, and India, recognizes the risks associated with deepfakes and calls for global action.
3. **Diverse Regulatory Approaches:**Different countries are adopting various regulatory strategies to address deepfake-related concerns, with some favoring strict oversight and others opting for a lighter touch.
4. **Tech Companies' Role:**Leading technology companies like Alphabet, Meta, and OpenAI are implementing measures such as watermarking AI-generated content to help users identify deepfakes.
5. **Balancing Innovation and Regulation:**Policymakers are challenged to strike a balance between regulating AI to address concerns like privacy, discrimination, and intellectual property rights while also nurturing innovation in the field.

Mains easy language:

In recent times, we've witnessed the rise of deepfake videos, which are created using artificial intelligence. These videos can make it seem like people are saying or doing things they never actually did. This poses a significant problem, as these misleading videos can easily spread through social media, making it hard to tell what's real from what's fake.

The global community is taking this issue seriously. At a recent summit in the UK, 28 countries, including the US, UK, and India, recognized the risks linked to deepfakes. They emphasized the potential harm caused by manipulating and generating misleading content through AI. This has led to calls for worldwide efforts to combat the problem.

However, different countries are taking different approaches to regulate AI. Some prefer strict rules and oversight, while others want a lighter touch. For example, the US is working on new AI safety standards, while India is considering a framework with a risk assessment system.

Major tech companies like Alphabet, Meta, and OpenAI are also getting involved. They are adding watermarks to AI-generated content to help people identify deepfakes.

But it's not just about regulating AI; it's also about encouraging innovation. Policymakers need to strike a balance between safeguarding against deepfake-related problems like privacy violations and supporting the continued development of AI technology. This is a complex challenge that requires thoughtful solutions.

09th November 2023

An under-discussed facet of colonial history-The Hindu Editorial

History

Key takeaways:

1. **Colonial Exploitation:**The British Empire engaged in licensed looting, draining resources and impoverishing colonies in service of capitalism.
2. **Shift from Slavery to Indentured Labor:**Slavery was replaced by indentured labor, euphemistically termed, leading to the migration of millions from India to work in British colonies.
3. **Plight of Indentured Laborers:**Indentured laborers, misled and burdened by debt, faced perilous voyages and endured harsh conditions upon reaching distant lands.
4. **Role of Indian Tamils in Sri Lankan Plantations:**The demand for intensive labor in Sri Lankan tea plantations led to the organized transfer of Indian Tamils, becoming integral to the tea industry.
5. **Discrimination and Struggle for Integration:**Plantation Tamils faced discrimination, denial of basic rights, and struggled for assimilation in Sri Lankan society.
6. **Post-Colonial Challenges and Nation-Building:**The ongoing challenge of nation-building in Sri Lanka emphasizes the need for decolonization, inclusive identity, and a post-colonial approach for economic and social revival.



| Clear your doubts now.



Mains easy language:

This article explores the often-overlooked history of Tamil indentured laborers who arrived in Sri Lanka in 1823, marking its bicentenary. The author highlights the exploitative practices of the British Empire, describing it as licensed looting that drained resources and left colonies impoverished. As slavery was abolished, it was replaced by indentured labor, leading millions from India to work in British colonies.

The plight of these laborers was grim, facing misleading promises, perilous sea voyages, and daunting debts upon arrival. In Sri Lanka, the transition from coffee to tea plantations created a demand for labor, bringing Indian Tamils into prominence. However, discrimination and denial of basic rights hindered their assimilation into Sri Lankan society.

Despite facing adversity, the Plantation Tamils, as they became known, forged an identity rooted in Tamil traditions. Over generations, they strived for integration, eventually gaining citizenship and voting rights. The article emphasizes the ongoing challenges of nation-building in post-colonial Sri Lanka, calling for decolonization to foster an inclusive identity and address economic and social revival. The bicentenary serves as a reminder of the struggles endured and the unfulfilled task of building a united and inclusive nation.

Taiwan, a Malacca blockade and India's options-The Hindu Editorial

International relations

Key takeaways:

- 1. Geopolitical Tensions in the Taiwan Strait:**China's ongoing intimidation of Taiwan through air force and navy deployments raises questions about potential involvement by other nations, including India, in the event of a conflict between the United States and China over Taiwan.
- 2. Infeasibility of Naval Blockade:**Naval blockade against commercial shipping in the Strait of Malacca or Andaman Sea is not practical due to international law challenges, trade dependencies of multiple nations, the lengthy and sovereign nature of the Strait, and lack of support from affected countries.
- 3. Complexities in Commercial Shipping:**Identifying and regulating commercial shipping is complicated by factors such as vessel sovereignty, flag, registration, insurance, and ownership. Routes can be changed through transshipment in Southeast Asian ports.
- 4. Alternative Shipping Routes and Reserves:**Even if the Strait of Malacca were blocked, shipping could detour through alternative routes like the Sunda or Lombok Straits. China's onshore and floating Strategic Petroleum Reserves provide resilience against disruptions.
- 5. Consequences of Naval Actions:**Naval blockade or unilateral actions against Chinese vessels would be considered a declaration of war, potentially leading to broader conflicts beyond the maritime domain. Regional countries and China's influence in international forums would likely oppose such actions.
- 6. India's Limited Role in a US-China Conflict:**India's primary role in a conflict over Taiwan would be focused on defending its territorial interests and sea lines of communication. The partnership with the US is expected to strengthen, but there are limitations to India's capabilities and actions in the event of a US-China conflict.

Mains easy language:

The article discusses the rising tension between China and Taiwan, with China flexing its military might. People are wondering if India would step in if there's a clash between China and the United States over Taiwan. The idea of India blocking sea routes in the Strait of Malacca or the Andaman Sea is explored. However, it turns out that stopping ships there is not really practical due to international laws, trade dependencies, and the involvement of other nations like Indonesia and Malaysia.

The complexity of identifying and controlling commercial shipping is highlighted, with factors like vessel sovereignty and changing routes making it challenging. Even if the Strait of Malacca were closed, ships could find alternative routes, like the Sunda or Lombok Straits. Moreover, China's onshore and floating oil reserves give it some resilience. The article warns against naval blockades, as they could escalate into full-blown wars. Past instances, like the British blockade leading to World War I and the US embargo on Japan sparking World War II, serve as historical lessons. The focus shifts to India's role, indicating that in the event of a US-China conflict, India's primary concern would be defending its own borders and sea routes rather than taking direct action in distant waters.

Importance of 'loss and damage' funds-The Hindu Text and Context

Environment

Key takeaways:



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- 1. Climate Crisis Focus:**The climate crisis emphasizes adaptation and 'loss and damage' (L&D). Adaptation is proactive, while L&D represents unavoidable consequences like economic losses and ecosystem degradation.
- 2. Loss and Damage Fund Origins:**COP 19 in 2013 established the L&D fund to aid economically developing nations facing climate-induced losses. COP 25 and COP 26 further developed its implementation.
- 3. Transitional Committee Challenges:**The TC struggles to operationalize the L&D fund, with four meetings lacking consensus on issues like World Bank hosting, CBDR, and eligibility criteria.
- 4. Recent TC5 Meeting Outcome:**TC5 suggests interim hosting at the World Bank Financial Intermediary Fund for four years. Developing nations compromise, but developed nations, especially the U.S., remain non-committal as primary donors.
- 5. Implications of Outcome:**TC disagreements highlight a trust deficit, complicating global climate negotiations. The weakened L&D fund poses threats to climate justice, economies, and environmental stability.
- 6. Importance of L&D Funds for Climate Justice:**L&D funds are vital for addressing irreversible climate consequences. Affluent nations must fulfill obligations, or upcoming COP 28 talks risk the breakdown of global climate action.

Mains easy language:

In the face of the worsening climate crisis, two critical terms stand out: adaptation and 'loss and damage' (L&D). Adaptation involves proactive responses to climate change, while L&D signifies the irreversible consequences that can't be mitigated. It encompasses real losses beyond money—economic, human, and ecological.

The L&D fund, conceived over 30 years ago, aims to hold affluent nations accountable for historic pollution. Established at COP 19 in 2013, it provides financial aid to developing nations facing losses due to climate change. Recent developments, including COP 25 and COP 26, set the stage for its implementation. However, the Transitional Committee (TC) faces challenges, with four meetings ending without clear recommendations.

TC5, an unplanned meeting, recently concluded in Abu Dhabi with recommendations for interim hosting at the World Bank Financial Intermediary Fund. Despite concessions by developing nations, major contributors like the U.S. remain hesitant. This lack of consensus reveals a trust gap between wealthy and emerging economies, impacting global climate negotiations. The weakened L&D fund poses threats to climate justice, economies, and environmental stability. The importance of these funds lies in addressing irreversible climate consequences, urging affluent nations to fulfill their obligations. Failure may intensify pressure on upcoming COP 28 talks, risking a breakdown in global climate action.

Trouble with India's guidelines on genetically modified insects-The Hindu Science

Science

Key takeaways:

- 1. Funding Stagnation in Biotechnology:**India's biotech funding, at 0.0001% of the GDP, remains stagnant post-COVID-19, hindering the Department of Biotechnology's pandemic efforts.
- 2. Unclear Guidelines for GE Insects:**April 2023 guidelines on Genetically Engineered (GE) insects lack clarity on 'beneficial' types, creating uncertainty for researchers and potential funders.
- 3. Purpose Ambiguity in GE Insects:**Guidelines, while mentioning applications like pest control, don't align with broader bioeconomy goals, raising questions about the meaningful impact of GE insects.
- 4. Researchers' Uncertainty and Investment Hurdles:**Guidelines exclusively for research create uncertainty, deterring investors and hindering progress in GE insect research.
- 5. Ambiguity in Risk Groups and Checks:**Categorizing GE insects by risk groups adds confusion, while unclear Environment Ministry criteria complicates regulatory processes.
- 6. Misalignment with Bioeconomy Goals:**GE insect guidelines do not sync with Bioeconomy 2022 goals, lacking a clear stance on research priorities and impeding progress in a low-funded sector.

Mains easy language:

India's biotechnology sector is facing funding challenges, with only 0.0001% of the GDP allocated, hindering crucial initiatives led by the Department of Biotechnology (DBT), especially in pandemic preparedness. In April 2023, the DBT released guidelines for Genetically Engineered (GE) insects, but these lack clarity on the definition of 'beneficial' insects and their intended purposes. This ambiguity creates uncertainty for researchers and potential funders, potentially impeding progress in this crucial biotechnological field.





The guidelines, while highlighting potential applications like pest control, do not align with broader bioeconomy goals, raising concerns about the meaningful impact of GE insects. Moreover, the exclusive focus of the guidelines on research creates uncertainty for scientists exploring genetic engineering in insects, discouraging crucial investments needed for progress. Categorizing GE insects by risk groups introduces confusion, and unclear criteria for Environment Ministry approval complicates regulatory processes. Overall, the guidelines do not align with the ambitious goals outlined in the Bioeconomy 2022 report, impeding progress in a sector that is already constrained by low public and private funding.

Questions over employment-Indian Express Editorial

Economics

Key takeaways:

- 1. Rural Female Labor Force Surge:** A substantial increase in female labor force participation, particularly in rural areas, from 18.2% in 2017-18 to 30.5% in 2022-23, indicating a significant positive shift.
- 2. Diverse State and Education Trends:** Growth observed across states with varying income levels, including high-income states like Karnataka and Gujarat, as well as low-income states like Odisha and Rajasthan. Education levels also saw an increase in participation, from uneducated to graduates.
- 3. Concerns Over Employment Nature:** Despite the rise in participation, concerns arise as most new entrants engage in self-employment, especially in "own account enterprises" or as helpers in household enterprises, lacking secure salaried or wage employment.
- 4. Income Stagnation in Self-Employment:** The surge in self-employed women, particularly in rural areas, is accompanied by stagnant real incomes. The average earnings for self-employed women barely kept pace with inflation.
- 5. NREGA Trends and Productive Employment:** While NREGA employment for women increased, wages remained lower than private markets, underscoring the absence of more productive employment opportunities.
- 6. Economic Recovery Signs:** Indications of economic recovery with improved credit growth through the NBFC channel and strong performance of smaller firms. However, the sustainability of these trends and their impact on the female labor force participation rate remains uncertain.

Mains easy language:

In recent years, more and more women in India, especially in rural areas, have joined the workforce, marking a significant positive shift. From 2017-18 to 2022-23, the overall participation rate increased from 36.9% to 42.4%, with rural female participation soaring from 18.2% to 30.5%. This means a lot more women, roughly around 56 million, are now part of the rural workforce.

However, there's a catch. While the numbers look encouraging, most of these new entrants are not getting regular salaried jobs. Instead, they are predominantly self-employed, working in their own businesses or as helpers in household enterprises. This raises concerns about the lack of secure and well-paying employment opportunities for women.

Moreover, the earnings of these self-employed women haven't kept pace with inflation, indicating that their real incomes may not be improving. Even under government employment schemes like NREGA, women's wages are lower than what they could earn in private markets.

Despite signs of economic recovery, questions linger about the sustainability of these positive trends and whether they will lead to better opportunities for women in the workforce. The nature of employment and the potential for real income growth remain key areas of uncertainty.

A matter of integrity-Indian Express Editorial

Polity

Key takeaways:

- 1. Role of CAG in Governance:** The Comptroller and Auditor General of India (CAG) plays a crucial role in ensuring transparency, accountability, and financial integrity in the government's functioning.
- 2. Citizen-Centric Approach:** Emphasizing a citizen-centric approach, the CAG places the Indian citizen at the center for the implementation of government programs, actively engaging with citizens and appreciating their concerns and feedback.
- 3. Technology-Driven Citizen Engagement:** Leveraging technology, such as smartphone applications and digital reports, enhances citizen engagement, making it more effective and scalable in the modern governance landscape.



| Clear your doubts now.



4. Empowerment of Local Governance:The 73rd and 74th Constitutional amendments empower local governments, emphasizing people's participation in planning, decision-making, and implementation, with the CAG supporting these efforts through capacity building.

5. International Center for Local Governance:An envisioned international center for local governance serves as a hub for capacity building, fostering excellence in local government auditing both nationally and internationally.

6. Democracy's Vitality:The vitality of democracy relies on the synergy of accountability and citizen engagement, with the CAG catalyzing good governance while highlighting the shared responsibility of institutions and citizens in nurturing democratic principles.

Mains easy language:

In simple terms, the article discusses the crucial role of the Comptroller and Auditor General of India (CAG) in ensuring that the government works transparently, responsibly, and efficiently. As India's democracy grows, the CAG becomes even more important in promoting good governance and safeguarding the interests of the people.

The CAG focuses on engaging with citizens, making sure that their concerns and feedback are heard and considered in the government's decision-making. Technology plays a key role in this, with the use of smartphone apps and digital reports to enhance citizen engagement.

The article also highlights the empowerment of local governments, emphasizing the participation of people in decision-making processes. The CAG supports local governance through capacity building and ensuring transparency at the grassroots level.

Furthermore, there's an international perspective, with the vision of establishing a center of excellence for local governance, promoting best practices in auditing not only in India but globally.

Ultimately, the article emphasizes the symbiotic relationship between accountability and citizen engagement, stressing the responsibility of both institutions and citizens in fostering a mature democracy that works for the people.

Electoral Bonds and Electoral Trusts: how they are different-Indian Express Explained

Polity

Key takeaways:

1. Dual Schemes ET vs. EB:Two distinct schemes for political donations exist: the 2013 Electoral Trusts (ET) Scheme and the 2018 controversial Electoral Bonds (EB) Scheme.

2. Transparency in ETs:Electoral Trusts operate transparently, requiring contributor details and annual reports to the Election Commission. Donors renew trusts every three financial years, donating 95% to political parties.

3. Anonymity in EBs:The Electoral Bonds Scheme prioritizes donor anonymity, with parties reporting only aggregate donations to the Election Commission to protect individual contributors' privacy.

4. Surge in EB Funding:From 2017-18 to 2021-22, donations through Electoral Bonds exceeded Electoral Trusts by over five times, totaling Rs 9,208 crore compared to Rs 1,631 crore.

5. BJP Dominance in Funding:The BJP received 72% of the total Rs 2,269 crore donated through electoral trusts. Congress secured 10% of EB funding and 9.7% through ETs, while Trinamool Congress received 8.3% via EBs and 0.11% through trusts. The BJD received about 1% of total trust funds, ranking third after the BJP and Congress.

Mains easy language:

In simple terms, there are two ways companies and individuals donate to political parties in India. The older method, Electoral Trusts (ET) introduced in 2013, is like a transparent piggy bank where donors must reveal who they are, and trusts have to report everything to the government. However, in 2018, a new and controversial method called Electoral Bonds (EB) was introduced. It's like a secret piggy bank – donors remain anonymous, and parties only have to tell the government how much money they got, not who gave it.

Surprisingly, more and more money is now going into the secret piggy bank. From 2017 to 2021, political parties received over five times more money through Electoral Bonds compared to Electoral Trusts. The ruling party, BJP, is the big winner, getting 72% of the money from the transparent piggy bank and even more from the secret one. The Congress party also gets a share, but not as much.

So, the big question is whether it's better to know who's giving money or just how much money is being given. The government says the secret piggy bank protects donors' privacy, but critics worry it hides important information about who influences our politicians.



| Clear your doubts now.



One year of Project Cheetah-Indian Express Explained

Environment

Key takeaways:

1. **Limited Wild Roaming:** Project Cheetah falls short on its promise, with only a 20% success rate in allowing the introduced cheetahs to roam freely in the wild as initially planned.
2. **Survival Challenges:** Despite claims of a 50% survival rate, the project faces a 40% loss in its adult cheetah population, raising concerns about the cats' adaptability and well-being in the Indian wilderness.
3. **Reproduction Setbacks:** The goal of cheetahs successfully reproducing in the wild faces setbacks, as some births occur in captivity, and a significant number of cubs do not survive.
4. **Local Impact and Livelihood:** While the project generates jobs and contracts for local communities and increases land prices, questions arise about the long-term sustainability of these benefits.
5. **Paradigm Shift in Conservation Strategy:** The project's shift from establishing a self-sustaining cheetah population in Kuno to managing a meta-population through assisted dispersal indicates a potential paradigm shift in conservation strategies, raising concerns about the impact on natural wildlife dispersal.

Mains easy language:

Project Cheetah's one-year update reveals a mixed bag of outcomes. While aiming to reintroduce cheetahs into the wild in India, only 20% of the time was spent outside enclosures as planned. Survival rates fall short, with a 40% loss in the adult cheetah population, challenging the project's success. Reproduction faces setbacks, as some births occur in captivity, and several cubs don't survive.

On the positive side, the project contributes to local communities by generating jobs and contracts, leading to increased land prices. No conflicts between humans and cheetahs have been reported in the area. However, concerns arise about the long-term sustainability of these benefits.

The project's conservation strategy undergoes a shift from establishing a self-sustaining cheetah population in Kuno to managing a dispersed population, raising questions about its effectiveness. As challenges persist, the project's future success remains uncertain, requiring careful consideration and potential adjustments in its approach to ensure the well-being of the introduced cheetahs and the overall conservation goals.

WHO RUNS GAZA HEALTH MINISTRY, OFFICIAL SOURCE OF CASUALTY DATA-Indian Express Explained

International Relations

Key takeaways:

1. **Gaza's Health Ministry as Casualty Data Hub:** Amid Israel's bombardment, Gaza's death toll tops 10,000, and with sealed borders, the Ministry of Health is the exclusive source for accurate casualty figures in this vulnerable enclave.
2. **Ministry's Unique Affiliation and Operation:** Operating independently under Hamas, the Ministry collaborates with the Palestinian Authority, adding complexity to the region's dynamics.
3. **Leadership Structure and Operations:** Led by Health Minister Mai al-Kaila, the ministry's structure includes a deputy in Gaza, managing day-to-day affairs with a mix of recent Hamas hires and Fatah-affiliated civil servants.
4. **Death Toll Calculation Process:** Hospitals record every wounded person and morgue arrival, entering data into a shared system. Spokesperson Ashraf al-Qidra releases regular updates despite connectivity challenges.
5. **Reliability of Ministry's Data:** Human Rights Watch confirms the ministry's figures as fairly accurate, endorsing its credibility in providing crucial casualty information for the conflict-ridden region.

Mains easy language:

In the midst of Israel repeatedly bombing Gaza, over 10,000 lives have been lost, and the only official source for casualty information is Gaza's Ministry of Health. This ministry, under the control of Hamas, operates separately from political and security agencies. Despite Hamas dominance, it collaborates with the Palestinian Authority, adding complexity to the situation.

The Ministry of Health, led by Health Minister Mai al-Kaila, employs a mix of recent Hamas hires and civil servants affiliated with the Fatah party. They diligently calculate the death toll by recording every wounded person and morgue arrival, sharing this data with spokesperson Ashraf al-Qidra, who releases regular updates, despite connectivity challenges.



| Clear your doubts now.



Interestingly, the ministry doesn't distinguish between civilians and combatants, a distinction clarified later by the UN and rights groups. Human Rights Watch, a New York-based NGO, finds the ministry's figures fairly accurate, establishing its reliability in providing crucial casualty information for the conflict-ridden region. In essence, amid the devastating conflict, Gaza's Ministry of Health stands as the primary source for understanding the human toll in the region, facing challenges but maintaining credibility in reporting the harsh realities on the ground.

10th November 2023

Acknowledge India's economic successes too-The Hindu Editorial

Economics

Key takeaways:

- 1. Robust Economic Growth:** India's economy exhibits impressive post-COVID-19 growth, achieving a rapid 7.2% YoY in FY2023, the fastest among major economies.
- 2. Global Economic Ranking:** Despite being the fifth-largest economy, India is projected to become the third-largest globally by 2027, indicating significant and swift economic expansion.
- 3. Post-2008 Challenges and Reforms:** After the 2008 global financial crisis, India faced economic challenges, but since 2014, key reforms like economic liberalization and the Insolvency and Bankruptcy Code have strengthened the economy.
- 4. Inclusive Growth Prioritization:** The government's commitment to inclusive growth is evident through initiatives like Sabka Saath Sabka Vikas, resulting in a noteworthy reduction in multidimensional poverty and improved rural living standards.
- 5. Agricultural and Health Advancements:** Government support has led to unprecedented growth in agriculture and positive trends in health indicators, contributing to an overall enhancement in the quality of life.
- 6. Foreign Investment Attraction:** Calibrated economic liberalization measures have resulted in an upward shift in foreign direct investment inflows, showcasing India as an attractive destination for global investments.
- 7. Successful Government Reforms:** Reforms such as the Insolvency and Bankruptcy Code, demonetization, GST, and the reduction in corporate tax rates have successfully addressed economic challenges, attracting private investments and fostering a dynamic economic landscape.

Mains easy language:

India's economy has been on a roll, growing faster than other major economies post-COVID-19. In simple terms, the country's money-making engine has been revving up at an impressive rate of 7.2% in the fiscal year 2023, outpacing big players on the global economic stage. Despite being the world's fifth-largest economy, India is gearing up to grab the bronze medal, projected to become the third-largest by 2027. This means that in terms of money and economic strength, India is becoming a big player, rubbing shoulders with the giants.

The journey hasn't been all smooth. After the 2008 global financial hiccup, India faced some economic bumps. However, since 2014, the government has been tweaking things to get the economic engine purring smoothly again. They introduced changes like letting more foreign money flow in, making it easier for businesses to function, and dealing with financial hiccups. It's like they've been fine-tuning the economic machine to make it more efficient and attractive to global investors.

But it's not just about the big numbers. The government is also putting effort into making sure everyone gets a slice of the economic pie. Initiatives like "Sabka Saath Sabka Vikas" show a commitment to inclusive growth, making sure that the benefits of economic growth reach everyone, especially those in rural areas. They're not just looking at the big industries; they're also helping farmers and making sure people in villages have better lives.

In this economic story, agriculture and health are like the heroes who are doing exceptionally well. Government support has made the farming sector grow like never before, and health indicators are showing positive signs. So, it's not just about the money; it's also about making sure people have better lives, whether they are in big cities or small villages. Acknowledging these successes, along with recognizing the challenges, paints a more complete picture of India's economic journey. It's not just about the destination; it's about the journey and making sure everyone benefits along the way.

Chip off the block-The Hindu Editorial

Economics

Key takeaways:



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- 1. Underutilized Incentives:** Government incentives for semiconductor manufacturing (PLI) are largely unused, raising questions about the effectiveness of the substantial funds allocated.
- 2. Unclear Objectives:** Lack of clarity on government achievements and goals in semiconductor spending prompts concerns about the value derived from significant investments.
- 3. Employment and Value Addition Concerns:** Current schemes show limited promise for job creation and substantive value addition, as semiconductor production relies on advanced systems with minimal labor involvement.
- 4. Global Manufacturing Challenges:** The success of PLI hinges on attracting a semiconductor "ecosystem," facing obstacles from hesitant multinational chipmakers and complexities in global supply chains and transport.
- 5. Diversification Needed:** Efforts should extend beyond large manufacturing plants; encouraging domestic semiconductor design talent, through initiatives like design-linked incentives, is crucial.
- 6. Lack of Tangible Outcomes:** The article stresses the need for clear outcomes from PLI spending, questioning whether goals involve safeguarding cyber sovereignty, reducing electronics costs, or establishing India as a global manufacturing hub.
- 7. Clarity and Course Correction:** Defining clear outcomes is vital for recognizing failures and enabling course correction before substantial PLI spending occurs without substantial results.

Mains easy language:

The government's push to boost semiconductor manufacturing in India is facing challenges as funds earmarked for incentives remain largely unused. The lack of clear goals and achievements in this spending raises concerns about whether the substantial funds are delivering value. The schemes in place show limited promise for creating jobs, as semiconductor production relies heavily on advanced technology with minimal manual labor.

Attracting a global semiconductor "ecosystem" is proving difficult due to hesitancy among multinational chipmakers and challenges in international supply chains and transport. The article emphasizes the need to go beyond just building large manufacturing plants, urging efforts to nurture domestic semiconductor design talent through initiatives like design-linked incentives.

While the government's intentions are to bolster India's position in the global electronics market, questions arise about the tangible outcomes desired from the significant spending. Is it about securing cyber sovereignty, making electronics more affordable for Indian consumers, or establishing India as a global electronics manufacturing hub? Clarity on these objectives becomes crucial for identifying shortcomings and making corrective measures before substantial funds are spent without substantial results.

The Agartala-Akhaura rail link-The Hindu Text and Context

Economics

Key takeaways:

- 1. Inauguration of Agartala-Akhaura Rail Link:** Prime Minister Narendra Modi and Bangladeshi PM Sheikh Hasina recently inaugurated the Agartala-Akhaura rail link, connecting India's northeast with Bangladesh.
- 2. Travel Time Reduction:** The dual gauge rail line, spanning 12.24 km, significantly reduces travel time between Agartala and Kolkata from 31 hours to just 10 hours, creating a more efficient transportation link.
- 3. Objectives and Benefits:** The project aims to enhance connectivity, boost trade, and strengthen ties between India and Bangladesh, aligning with India's 'Act East Policy' and 'Neighbourhood First Policy.' It is expected to support small-scale industries and promote tourism in the region.
- 4. Cost and Funding:** The total cost of the project on the Indian side was approximately ₹862.58 crore, with funding coming from various sources, including the Ministry for the Development of the Northeast Region and the Ministry of External Affairs.
- 5. Historical Background:** The idea of the rail link dates back to 1974, gaining momentum in 2010 with the signing of a memorandum of understanding during Sheikh Hasina's visit to India.

Mains easy language:

The newly inaugurated Agartala-Akhaura rail link, connecting India's northeast with Bangladesh, is a game-changer, significantly slashing travel time from Agartala to Kolkata from 31 hours to just 10 hours. Prime Ministers Narendra Modi and Sheikh Hasina celebrated the completion of this 12.24 km dual gauge rail line, emphasizing its role in strengthening ties between the two nations. This railway project aligns with India's broader policies, such as the 'Act East Policy' and the 'Neighbourhood First Policy,' aiming to not only enhance connectivity but also boost trade and support small-scale industries and tourism in the region.





The historical roots of this endeavor stretch back to 1974, gaining momentum in 2010 with the signing of a memorandum of understanding. The total cost, around ₹862.58 crore, was sourced from various channels, underlining the collaborative effort invested in this cross-border initiative. This rail link is not just about reducing travel time; it symbolizes a shared commitment to regional cooperation and economic development. With the pandemic underscoring the importance of robust supply chains, this railway project is a timely effort to strengthen connectivity and trade between India and Bangladesh, offering a more efficient and cost-effective mode of cross-border transportation.

Why has the govt. issued a directive on deepfakes?-The Hindu Text and Context

Science and technology

Key takeaways:

- 1. Government Directive:** The Indian government instructs social media platforms to remove deepfake videos within 24 hours, following the IT Rules 2021, responding to recent instances involving actors Rashmika Mandanna and Katrina Kaif.
- 2. Evolution of Deepfakes:** Deepfakes, emerging in 2017, leverage artificial intelligence, allowing even semi-skilled individuals to create convincing fake content like morphed audio-visual clips and images.
- 3. Alarming Rise in Usage:** Cybersecurity experts report a 230% surge in deepfake use by cybercriminals and scammers, suggesting it may replace phishing techniques in the near future.
- 4. Technology Behind Deepfakes:** Utilizing generative adversarial networks (GANs), deepfake technology learns and duplicates subjects' movements and facial expressions, making detection challenging, known as "unsupervised learning."
- 5. Legal Framework in India:** Mandated by IT Rules 2021, social media platforms must promptly remove reported deepfake content within 36 hours, including artificially morphed images.
- 6. Potential Misuse and Positive Applications:** Deepfake technology poses risks like inciting violence and spreading misinformation but also serves positive applications, aiding ALS patients in voice recreation.
- 7. International Responses:** The EU issues guidelines for an independent fact-checking network, and the U.S. introduces the bipartisan Deepfake Task Force Act to counter the deepfake threat globally.

Mains easy language:

The Indian government has stepped in to address the rising threat of deepfake videos, instructing social media platforms to swiftly remove such content within 24 hours. This move follows the emergence of manipulated videos featuring popular actors Rashmika Mandanna and Katrina Kaif. Deepfakes, powered by advanced artificial intelligence, have evolved since their inception in 2017, allowing even those with limited skills to create highly realistic fake content, including morphed audio-visual clips and images.

The concerning aspect is the significant surge in deepfake use by cybercriminals and scammers, with experts predicting that it might soon replace traditional phishing techniques. Deepfake technology operates through generative adversarial networks (GANs), making it challenging to detect forgeries by learning and duplicating subjects' movements and facial expressions, a process known as "unsupervised learning."

In response to this evolving threat, India's IT Rules 2021 mandate the prompt removal of reported deepfake content by social media platforms. Beyond the potential misuse of this technology for inciting violence or spreading misinformation, there are positive applications, such as assisting individuals with ALS in digitally recreating their voices.

Internationally, the EU has issued guidelines for an independent fact-checking network, and the U.S. has introduced legislation, the Deepfake Task Force Act, to collectively counter the growing menace of deepfake technology.

Considering the impact of diabetes on your liver-The Hindu Science

Science

Key takeaways:

- 1. Rising Diabetes Prevalence:** The number of people with diabetes in India has reached 101 million, with an additional 136 million having prediabetes, emphasizing the increasing health concern.
- 2. Overlooked Connection with the Liver:** While diabetes complications affecting the eyes, kidneys, heart, and nerves are well-known, the link between diabetes and the liver has only recently gained attention.
- 3. Liver's Role in Glucose Management:** The liver, a vital organ, stores excess glucose as glycogen. Fatty Liver, a condition prevalent in over 50% of type 2 diabetes patients, results from the accumulation of excess fat in the liver.



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- 4. Hepatic Insulin Resistance:** Fatty Liver leads to Hepatic Insulin Resistance, reducing insulin effectiveness in the liver. This results in increased release of glucose, contributing to elevated fasting plasma glucose levels.
- 5. Bidirectional Relationship:** Fatty liver can lead to type 2 diabetes, and vice versa. Obesity and diabetes together significantly increase the likelihood of developing fatty liver.
- 6. Progression to Severe Conditions:** Fatty liver, if not addressed, can lead to Non-alcoholic Steatohepatitis (NASH), cirrhosis, and, in severe cases, hepatocellular carcinoma (HCC).
- 7. Shifting Approach to Treatment:** A shift from a glucose-centric approach to a metabolic-based care is underway in diabetes treatment, recognizing the crucial role of the liver, heart, and kidneys. Lifestyle modifications, including diet and exercise, are vital for managing metabolic dysfunction-associated fatty liver disease (MAFLD).

Mains easy language:

As diabetes prevalence surges in India, World Diabetes Day prompts a closer look at an often-overlooked aspect—the profound impact of diabetes on the liver. The liver, a multifunctional organ, plays a pivotal role in glucose management. The intricate relationship between diabetes and the liver involves the development of Fatty Liver, a prevalent condition in type 2 diabetes. This condition contributes to Hepatic Insulin Resistance, disrupting insulin function and exacerbating glucose release.

Understanding the bidirectional link, where fatty liver can lead to diabetes and vice versa, emphasizes the need for comprehensive metabolic care. Fatty liver, if unchecked, progresses to severe stages, including NASH, cirrhosis, and even HCC. Recognizing the liver's centrality in diabetes care, a holistic approach is evolving, focusing on metabolic health alongside glucose control. Lifestyle modifications, encompassing diet and exercise, emerge as potent tools in managing metabolic dysfunction-associated fatty liver disease. This shift signifies a broader approach to diabetes care, acknowledging the interconnected roles of the liver, heart, and kidneys. As we mark World Diabetes Day, integrating liver health into regular check-ups becomes essential for comprehensive diabetes management.

Does a diet high in fibre help manage blood sugar levels?-The Hindu Science

Science

Key takeaways:

- 1. Fiber's Crucial Role:** Amidst the common advice to reduce sugar intake for diabetes management, there's a growing emphasis on incorporating a significant amount of fiber into the diet.
- 2. STAR Survey Insights:** The 'STAR' survey reveals positive outcomes for individuals with Type 2 diabetes who consumed a high-fiber supplement, showcasing lower blood sugar levels, increased weight loss, and improved satiety.
- 3. Global Recognition of Fiber:** Studies worldwide highlight the vital role of fiber not only in controlling blood glucose but also in lowering cholesterol and maintaining digestive health.
- 4. Fiber Intake Deficiency:** Despite known benefits, many people with diabetes fall short of the recommended daily fiber intake, especially as traditional diets shift towards processed foods.
- 5. Affordability Challenges:** Healthier options like fruits, vegetables, and nuts tend to be more expensive, contributing to the diabetes burden. Advocacy for policy changes aims to make nutritious foods more accessible.
- 6. Strategies for Fiber Incorporation:** To meet recommended fiber levels, experts recommend a gradual and diversified approach, incorporating oats, nuts, whole grains, and non-starchy vegetables into daily meals for improved diabetes management.

Mains easy language:

As the emphasis on reducing sugar for diabetes management persists, a new dietary focus emerges—incorporating a substantial amount of fiber. The STAR survey, involving individuals with Type 2 diabetes, unveils promising outcomes for those who consumed a high-fiber supplement. Lower blood sugar levels, increased weight loss, and enhanced feelings of satiety were reported, shedding light on the potential benefits of fiber-rich nutrition.

Recognizing the global significance of fiber in maintaining not only blood glucose but also cholesterol and digestive health, the survey underscores a deficiency in fiber intake among individuals with diabetes. Traditional diets relying on whole grains have evolved into modern patterns with decreased fiber consumption, primarily from processed foods.

Affordability challenges arise as healthier options prove more expensive, contributing to the diabetes burden. Experts advocate for policy changes to make nutritious foods accessible to a broader population. To meet recommended fiber levels, a gradual and diversified approach is suggested, incorporating oats, nuts, whole grains, and non-starchy vegetables into daily meals. While the shift toward a fiber-rich diet may seem daunting, it holds promise in reshaping diabetes management strategies.





India, US and the AI bridge-Indian Express Editorial

International Relations

Key takeaways:

1. **AI in India-US Dialogue:** The India-US 2+2 dialogue spotlights the critical need for in-depth discussions on artificial intelligence (AI) collaboration.
2. **Biden's Civilian Focus:** President Biden's AI Executive Order prioritizes securing civilian uses, protecting privacy, and promoting innovation but leans less on defence aspects.
3. **Pentagon's Military Emphasis:** The Pentagon's updated AI strategy emphasizes integrating AI into military operations, focusing on maintaining a "decision advantage" for the US armed forces.
4. **US-China AI Competition:** Both initiatives underscore the intense global competition between the US and China in AI for economic and military dominance.
5. **Defence Innovation Bridge:** Collaboration in AI defense strategies gains momentum, as seen in recent agreements between the US Space Force and Indian startups, marking the early stages of a promising partnership.
6. **Responsible AI Governance:** Both nations must collaborate on the responsible development and usage of AI, addressing economic, societal, democratic, and defence-related challenges for effective global governance.

Mains easy language:

The India-US 2+2 dialogue, where foreign and defense ministers meet, is now turning its focus to Artificial Intelligence (AI). Recent events, such as President Biden's AI Executive Order and the Pentagon's updated AI strategy, highlight the urgency for comprehensive discussions on AI collaboration. While Biden's order primarily addresses civilian use, the Pentagon underscores the military's keen interest in integrating AI into operations for a strategic advantage.

These moves signify a broader global competition, particularly with China, as nations vie for dominance in AI, impacting economic and military realms. The dialogue emphasizes the need for responsible AI development and governance, considering potential misuse and societal consequences.

Moreover, the defense innovation bridge, initiated during PM Modi's US visit, is yielding results with the US Space Force collaborating with Indian startups, marking the beginning of a promising defense partnership in AI. The dialogue aims to address the challenges posed by AI, from economic concerns to national defense strategies, and to ensure its responsible and ethical use globally.

SHADOWS OF RISK-Indian Express Editorial

Economics

Key takeaways:

1. **Positive Recovery:** The NBFC sector in India is on a positive trajectory, showing improvements in capital, assets, and profitability.
2. **Financial Metrics Boost:** Key financial indicators, including the capital-to-risk-weighted-assets ratio (CRAR), have significantly improved, reaching 27.6% in 2022-23 from 22.9% in 2019-2020. Both gross and net non-performing asset (NPA) ratios are declining.
3. **Concerns on Bank Financing:** The report raises alarms about the increasing trend of bank financing for NBFCs, posing a potential systemic risk. Tighter preventive measures are deemed necessary to avert a broader financial crisis.
4. **Systemic Risk Caution:** Caution is advised against relying solely on post-2017 liquidity risk ratios to gauge systemic risk. Externalities not considered in decision-making processes may lead to adverse spillover effects during financial turbulence.
5. **NBFCs' Economic Role:** The report underscores the pivotal role of NBFCs, especially for MSMEs, in sustaining economic growth. Regulators must learn from past mistakes to ensure the continued health of the sector for overall economic stability.

Mains easy language:

The India Finance Report by the Centre for Advanced Financial Research and Learning (CAFRAL) offers a positive outlook on India's non-banking financial companies (NBFCs) or the shadow banking sector. The report shows that after facing challenges in 2018 and during the Covid pandemic, NBFCs have improved in terms of money matters like capital, assets, and profits.

Financial health indicators, such as the capital-to-risk-weighted-assets ratio (CRAR) and non-performing asset (NPA) ratios, have all gotten better, signaling a positive trend. However, the report also raises a warning about a new concern – the increasing reliance on



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bank financing for NBFCs. This could lead to bigger financial problems affecting the entire system, urging the need for preventive actions.

The report emphasizes that just looking at recent financial numbers may not be enough to understand potential risks. It suggests that external factors not considered by individual companies in their decision-making can lead to bigger issues during economic challenges. Lastly, the report stresses the crucial role played by NBFCs, especially in supporting smaller businesses, and calls on regulators to avoid repeating past mistakes by ensuring the continued health of the NBFC sector for the sake of overall economic stability and growth.

A FIGHT TO THE END-Indian Express Editorial

Science

Key takeaways:

- 1. High TB Burden in India:** India hosts over a fourth of the world's tuberculosis (TB) patients, with a staggering 28 lakh cases recorded in 2022, as per a recent WHO report.
- 2. Positive Trends and Optimism:** Despite the high numbers, there are positive trends in India's fight against TB. The report notes reductions in TB mortality and incidence over the past eight years, attributing these improvements to enhanced case detection systems.
- 3. Concerns About Undiagnosed Cases:** While progress is acknowledged, the WHO warns of potential undiagnosed cases, especially from the pandemic years, indicating the need for continued vigilance and robust surveillance.
- 4. Challenge of Multi-Drug Resistant TB (MDR-TB):** India faces a significant challenge with MDR-TB, an extremely virulent variant. The WHO estimates 1,19,000 new cases yearly, but the Indian TB program reports only slightly over half of these cases, revealing gaps in detection and reporting.
- 5. Need for Molecular Diagnostics:** Experts emphasize the importance of molecular diagnostics, especially in treating contagious diseases like TB. Despite recommendations, traditional sputum smear tests remain prevalent in India, potentially leading to underreporting and undertreatment.
- 6. Treatment Challenges:** TB treatment is demanding, causing side effects ranging from nausea to jaundice. The report highlights the importance of a supportive healthcare system, but less than 68 percent of MDR-TB patients completed treatment in 2020.
- 7. Target to Eliminate TB by 2025 Likely Unattainable:** Despite efforts, the report suggests that India is likely to miss its target of eliminating TB by 2025, indicating a need for policymakers to heed recommendations from recent studies, including the WHO's findings.

Mains easy language:

India is facing a significant battle against tuberculosis (TB), with a whopping 28 lakh cases reported in 2022—more than a fourth of the global TB patients. The latest WHO report brings both good and concerning news. On the positive side, there's a reduction in TB mortality and incidence in the past eight years, attributed to improved case detection. However, there's a worry about potential undiagnosed cases, especially from the pandemic years.

A major hurdle is the emergence of multi-drug resistant TB (MDR-TB), an extremely potent variant. India is reported to have only slightly over half of the estimated MDR-TB cases, indicating a gap in detection and reporting. Despite recommendations for advanced molecular diagnostics, traditional tests persist, possibly leading to underreporting.

Treating TB is tough, with side effects ranging from nausea to jaundice. Less than 68 percent of MDR-TB patients completed treatment in 2020, emphasizing the need for a supportive healthcare system. Alarmingly, it's suggested that India might miss its 2025 target to eliminate TB. Policymakers are urged to take heed of these findings, emphasizing the crucial need for addressing challenges in detection, treatment, and adopting advanced diagnostic methods to effectively combat TB.

100,000 GALAXIES IN A SINGLE FRAME: THE PROMISE EUCLID-Indian Express Explained

Science and Technology

Key takeaways:

- 1. Euclid Telescope's Impact:** The Euclid telescope, launched by the European Space Agency, has delivered unprecedented, detailed images, showcasing a new level of scale and clarity.
- 2. Unique Capability vs. JWST:** Euclid stands out from the James Webb Space Telescope (JWST) by excelling in imaging wide sections of the universe simultaneously, making it adept at locating elusive objects like free-floating worlds.



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- 3. Mission to Map Dark Matter:** Euclid aims to map a third of the extragalactic sky, providing insights into how dark matter influences the shapes and motions of visible celestial objects.
- 4. Impressive Image Content:** The released images include snapshots of 1,000 galaxies from the Perseus cluster and over 100,000 galaxies in the background, offering valuable information about the presence and impact of dark matter.
- 5. Understanding Dark Energy:** Euclid's detailed resolution is expected to contribute to mapping the distribution of galaxies across cosmic time, aiding in our understanding of dark energy, the force behind the universe's expansion.
- 6. Future Plans for Extensive Sky Mapping:** Anticipated in 2025, Euclid's first maps of the universe are set to cover more sky area than all data collected by the Hubble Space Telescope, promising revolutionary insights into the cosmos, dark matter, and galaxy evolution.

Mains easy language:

The Euclid telescope, launched by the European Space Agency, is making waves with its incredible images of the universe. These pictures, more detailed than ever before, reveal a scale and clarity that have amazed scientists. Unlike other telescopes like the James Webb Space Telescope (JWST), Euclid has a unique talent for capturing wide sections of the universe at once, making it perfect for finding hidden objects like free-floating worlds.

Euclid has a special mission – to map a large part of the sky and unlock the mysteries of dark matter. Dark matter is a mysterious force that holds the universe together, and scientists want to understand how it shapes the movement and appearance of celestial objects. The released images include breathtaking views of 1,000 galaxies from the Perseus cluster and over 100,000 galaxies in the background. These images offer crucial clues about the existence and impact of dark matter.

Euclid's detailed resolution is not just about pretty pictures; it's a key tool in understanding dark energy, the force causing the universe to expand. In 2025, scientists plan to release Euclid's first maps of the universe, covering more sky area than all the data collected by the Hubble Space Telescope. These maps hold the promise of transforming our understanding of the cosmos, dark matter, and the evolution of galaxies.

11th November 2023

The rice of the matter-Indian Express Editorial

Environment

Key takeaways:

- 1. Supreme Court Directive:** The Supreme Court urges immediate cessation of stubble burning in Delhi's neighboring states—Punjab, Haryana, Rajasthan, and Uttar Pradesh—enforcing the directive through local law enforcement.
- 2. Air Quality Impact:** Stubble burning, notably in Punjab, contributes significantly to Delhi's air pollution, constituting almost 38% of pollution on November 7. Urgent measures are needed to address this primary pollution source.
- 3. Health Concerns:** The Air Quality Life Index report warns of a potential loss of nearly 12 years in life expectancy for Delhi residents if pollution, mainly from stubble burning, persists.
- 4. Environmental Consequences:** Highlighting environmental repercussions, the article emphasizes the need to reduce paddy cultivation in the Punjab-Haryana belt, citing substantial greenhouse gas emissions estimated at 5 tonnes of CO₂ eq/ha.
- 5. Policy Recommendations:** To discourage paddy cultivation, proposed measures include subsidies for farmers transitioning to alternative crops, incentives for private-sector ethanol production, and stricter regulations on paddy procurement by state agencies.
- 6. Public Distribution System Diversification:** Diversifying the Public Distribution System by incorporating more nutritious crops is suggested to minimize environmental impact and pollution, addressing the excessive reliance on rice and wheat.

Mains easy language::

The Supreme Court has directed neighboring states around Delhi, including Punjab, Haryana, Rajasthan, and Uttar Pradesh, to immediately stop burning leftover crops in their fields, known as stubble burning. This is because the smoke from these fires is a major contributor to the polluted air in Delhi. The Court suggested that local law enforcement should ensure that farmers follow this directive.

Stubble burning, especially in Punjab, is causing a lot of the pollution in Delhi. On a specific day, almost 38% of the pollution was due to this burning. If this pollution continues, it could reduce the life expectancy of people in Delhi by almost 12 years, according to a report.





To tackle this, the article suggests that the areas where farmers grow a particular crop called paddy should be reduced. This is because growing paddy in these areas leads to a lot of pollution. The article also proposes giving money to farmers who grow other crops instead of paddy, and encouraging private companies to make a type of fuel called ethanol from crops. Additionally, there's a suggestion to change the system where the government buys crops from farmers to make sure farmers who burn leftover crops are paid less. Lastly, the article recommends adding more nutritious crops to the government food distribution system to help people eat healthier and reduce pollution.

THE UNEQUAL DEEPFAKE RISK-Indian Express Editorial

Science and technology

Key takeaways:

1. **Deepfake Threat:**The widespread use of deepfake technology, highlighted by Rashmika Mandanna's viral video, poses a significant risk by manipulating images and videos, leading to the objectification of women online.
2. **Online Stigma:**Women in India face societal stigma around their online presence, creating a "double embodiment" effect. The digital world complicates user consent, influenced by traditional roles.
3. **Loss of Liberty Online:**Online representation intensifies women's over-identification with physical characteristics, compounding societal subordination offline.
4. **Consent Challenges:**Assumptions of blanket consent for women sharing content online are challenged, as the evolving landscape blurs lines between personal expression and monetization.
5. **Impact on Rights:**Attention-grabbing deepfakes harm vulnerable users, curtailing women's freedom of speech and compelling some to shut down profiles, limiting access to technology.
6. **Legal Framework and Privacy:**Legal frameworks must consider women's vulnerabilities, ensuring privacy rights amid third-party manipulations. Evolving moderation policies for positive freedoms is crucial for a safer digital space.

Mains easy language:

The rise of deepfake technology, demonstrated by a recent incident involving Rashmika Mandanna, raises concerns for women's safety online. In India, societal roles add to the challenges women face in the digital space, creating a unique set of problems known as the "double embodiment." Women experience a loss of freedom online, amplifying their offline social challenges.

Sharing content on social media doesn't mean blanket consent for any use, challenging assumptions about online privacy. The harmful impact of attention-grabbing deepfakes extends beyond personal harm to curtail women's freedom of speech, limiting their access to online opportunities.

To address these issues, legal frameworks must consider women's specific vulnerabilities and ensure their right to privacy in the online world. Current rules focusing on negative freedoms need to evolve, embracing positive freedoms that support equal public participation. Balancing these considerations is crucial for creating a safer and fairer digital space for women.

Wall Street, China and India-Indian Express Editorial

Economics

Key takeaways:

1. **China's Resilience:** Despite global concerns about China's economic growth, recent investor conferences in Hong Kong revealed unexpected resilience, shifting focus away from China's challenges.
2. **U.S. Debt Worries:** Wall Street financiers expressed more worry about the U.S. government debt market than China's economic issues. Concerns arose regarding the potential difficulty for the U.S. government to refinance its growing debt, given substantial foreign demand.
3. **Shift to Private Markets:** Globally, financial activity is moving from public to private markets, with non-banks gaining prominence. The consensus is that banks matter less, and the trend of "de-banking" is viewed positively, with unregulated private markets considered no riskier than banks.
4. **Banking Industry Changes:** Some bankers were defensive, highlighting recent bank failures as isolated incidents. The discussion noted the changing landscape where banks matter less, a departure from their significant role in the 2008 financial crisis.
5. **Improved Sentiment in Hong Kong:** The conference in Hong Kong signaled the city's recovery as an international financial center. Chinese officials reassured about Hong Kong's global financial status amid reduced capital inflows from the West.



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6. **India's Investment Appeal:** Fragile economic conditions in China contrast with a strong case for investing in India. Investors find India more appealing due to its management's focus on return on capital, offering a counterpoint to China's historically abundant capital approach.

Mains easy language::

Investors gathered in Hong Kong expressed surprise at China's economic resilience despite international concerns. Wall Street financiers, instead of focusing on China's challenges, turned their attention to worries about the U.S. government debt market. The panel discussed the potential difficulty for the U.S. government to refinance its growing debt, given significant foreign demand.

The financial landscape is shifting from public to private markets globally, with non-banks gaining prominence. This "de-banking" trend is seen as positive, with unregulated private markets considered no riskier than banks. Some bankers were defensive, emphasizing recent bank failures were isolated incidents.

Hong Kong's conference marked an improvement from the previous year, signaling the city's recovery as an international financial center. Chinese officials reassured about Hong Kong's global financial status amid reduced capital inflows from the West.

Investors find India more appealing than China due to its management's focus on return on capital, in contrast to China's historically abundant capital approach. Fragile green shoots in China emphasize India's strong case for investment. Overall, the financial landscape is evolving, with attention shifting away from traditional banking institutions and a cautiously optimistic outlook for both China and India.

Seeding clouds to clean the air -Indian Express Explained

Environment

Key takeaways:

1. **Innovative Pollution Control:** Delhi's government is considering a novel approach—cloud seeding—to induce artificial rain and combat air pollution, showcasing a forward-thinking initiative in addressing environmental challenges.
2. **Cloud Seeding Mechanism:** The process involves introducing substances like silver iodide or potassium iodide into clouds to accelerate droplet formation, enhancing microphysical processes that lead to rainfall and potentially alleviate air pollution.
3. **Seasonal Challenges:** Previous cloud seeding attempts during the monsoon revealed mixed results. Implementing this method in Delhi's winter, influenced by western disturbances, presents unique challenges due to distinct cloud characteristics during this season.
4. **Uncertain Pollution Impact:** The potential of cloud seeding to effectively reduce air pollution is uncertain and requires thorough exploration. While successful rain could temporarily clear pollutants like PM2.5, its impact on other pollutants depends on sustained and heavy rainfall.
5. **Temporary Relief:** Rain resulting from cloud seeding can provide temporary relief by pushing down airborne particles, offering a respite from pollutants like PM2.5. However, sustained and intense rainfall is essential for a significant and lasting impact on other pollutants.
6. **Proactive Government Initiatives:** The exploration of cloud seeding underscores the government's proactive stance in seeking innovative solutions for pollution control, highlighting a commitment to finding effective and unconventional measures to address environmental challenges.

Mains easy language:

Delhi is exploring a groundbreaking strategy to address its air pollution crisis—cloud seeding, a method traditionally used to induce rain. Cloud seeding involves introducing certain substances into clouds to enhance the formation of droplets and promote rainfall. While this method has been tried during the monsoon in India, its application in non-monsoon months, especially for pollution control, is a novel concept.

However, there are challenges and uncertainties associated with this approach. Previous attempts during the monsoon yielded mixed results, and applying cloud seeding during Delhi's winter, when clouds form due to western disturbances, poses unique difficulties. The potential impact on air pollution is yet to be fully understood, with experts highlighting the complexity of cloud systems.

Successful rain resulting from cloud seeding could offer temporary relief by washing away pollutants like PM2.5. Still, sustained and heavy rainfall would be necessary to significantly affect other pollutants like ground-level ozone and sulfur dioxide. In essence, while the idea of cloud seeding for pollution control is innovative, comprehensive research and careful consideration are essential before implementing such a strategy.





RAPID MELTING OF ICE SHEETING WEST ANTARCTICA NOW UNAVOIDABLE— THIS WHAT IT COULD MEAN-Indian Express Explained

Geography

Key takeaways

1. **Inevitable Melting:** The study warns that West Antarctica's ice sheet will melt rapidly, irrespective of emission cuts, posing a global threat with a potential 5.3-meter sea level rise.
2. **Global Consequences:** Severe impacts are expected for vulnerable coastal cities, including India, as West Antarctica's waters warm three times faster than the 20th century, accelerating ice sheet melting.
3. **Comprehensive Study:** Titled 'Unavoidable future increase in West Antarctic ice-shelf melting,' the research by British Antarctic Survey and Northumbria University experts in Nature details West Antarctica's warming.
4. **Role of Ice Sheets:** The study emphasizes the crucial role of ice sheets in determining global sea levels, with West Antarctica's melting contributing to rising seas.
5. **Worsening Scenarios:** Regardless of fossil fuel scenarios, the study projects significant Amundsen Sea warming and increased ice shelf melting until 2045, guaranteeing major sea level rise.
6. **Mitigation Imperative:** Despite grim findings, the study stresses the interconnected nature of climate change and calls for persistent efforts beyond West Antarctica's melting.

Mains easy language:

The West Antarctic ice sheet is in trouble, and a recent study reveals that its rapid melting is now inevitable, regardless of our efforts to cut carbon emissions. This poses a major global threat, potentially raising sea levels by 5.3 meters, particularly impacting vulnerable coastal cities, including those in India. Even if we manage to limit global warming as per the best-case scenarios, the waters around West Antarctica are set to warm three times faster than they did in the 20th century, hastening the melting process.

The study, conducted by experts from the British Antarctic Survey and Northumbria University, paints a grim picture of the future. It's titled 'Unavoidable future increase in West Antarctic ice-shelf melting over the twenty-first century' and was recently published in the journal Nature. The research highlights the critical role of ice sheets in determining global sea levels, with West Antarctica's ice sheet loss contributing to rising seas.

Despite the alarming findings, the study emphasizes that the melting West Antarctic ice sheet is just one piece of the larger climate change puzzle. Efforts to mitigate climate change impacts should persist, recognizing the urgent need for comprehensive solutions beyond addressing the immediate threat of West Antarctica's melting.

Can go all the way to Amarnath Shrine by car,says BRO— here's how-Indian Express Explained

Economics

Key takeaways:

1. **Historic Milestone:** The Border Roads Organisation's (BRO) Project Beacon upgraded the road to the Amarnath cave shrine, allowing motor vehicles to reach the holy site directly for the first time.
2. **Previous Access Challenges:** Pilgrims traditionally faced challenging treks or used discontinued helicopter services to reach the shrine, located at an altitude of 13,000 feet.
3. **Gadkari's Plan:** Union Minister Gadkari proposed a Rs 5,300 crore plan to enhance access, including a two-lane motorable road, a tunnel, and a pedestrian track.
4. **Tunnel and Ropeway:** The proposed tunnel from Sheshnag to Panchtarni aims to ease the trek's challenging part. A 9 km ropeway from Baltal to the shrine is also planned.
5. **BRO's Role:** The BRO took over maintenance of pedestrian tracks, widening them to allow trucks and pick-up vehicles to reach the cave shrine.
6. **Improved Accessibility:** Pilgrims can now travel directly to the Amarnath shrine by car, marking a significant improvement in accessibility.

Mains easy language:

The Border Roads Organisation (BRO) has achieved a groundbreaking feat by upgrading the road leading to the Amarnath cave shrine, allowing cars to reach the holy site directly for the first time. Traditionally, pilgrims faced challenging treks or relied on



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discontinued helicopter services to access the shrine, perched at an altitude of 13,000 feet in the snow-clad Himalayas of Kashmir's Lidder Valley.

Union Minister Gadkari introduced an ambitious plan, allocating Rs 5,300 crore to improve accessibility. This comprehensive proposal involves constructing a two-lane motorable road, a tunnel, and a pedestrian track to simplify the pilgrimage. The planned tunnel from Sheshnag to Panchtarni aims to alleviate the most arduous part of the journey, while a proposed 9 km ropeway from Baltal to the shrine offers an alternative means of transportation.

The BRO's pivotal role in widening tracks has facilitated the passage of trucks and pick-up vehicles all the way to the sacred Amarnath cave shrine. This significant enhancement in accessibility marks a new era for pilgrims, enabling them to travel directly by car. The initiative not only simplifies the journey for devotees but also reflects a crucial step in preserving the sanctity of this revered site in the heart of the Himalayas.

Revamping the criminal justice system to fit the bill-The Hindu Editorial

Polity

Key takeaways

1. **Comprehensive Overhaul:** The proposed Bills offer a rare chance for a comprehensive overhaul of India's criminal justice system, moving beyond mere amendments.
2. **Modernization Challenges:** The Bills prompt critical questions about their alignment with modern jurisprudence, including the inclusion of civil law matters and the shift towards a more reformatory system.
3. **Overlap with Special Laws:** Despite attempts to address conflicts, the Bills still show overlap with existing special laws, potentially causing duplication and inconsistency, especially in areas like abortion.
4. **Definitional Clarity:** Concerns arise about the adoption of the Mental Healthcare Act's definition of mental illness, potentially creating exemptions for substance abuse but not for mental retardation.
5. **Updating Outdated Illustrations:** The Bills retain outdated illustrations, like chariots and palanquins, highlighting the need for their update to reflect contemporary situations for better clarity.
6. **Crucial Parliamentary Scrutiny:** Given the potential impact on the criminal justice system, a meticulous parliamentary examination is essential, particularly addressing concerns related to age thresholds, gender-related offenses, and overall effectiveness.

Mains easy language:

The Indian government is planning a major revamp of its criminal justice system through three new bills that would replace core laws established in the 19th and 20th centuries. These bills—Bharatiya Nyaya Sanhita, Bharatiya Nagarik Suraksha Sanhita, and Bharatiya Sakshya Bill—are currently under examination by the Parliamentary Standing Committee on Home Affairs. Unlike simple amendments, these bills provide a unique opportunity to comprehensively modernize the legal framework underpinning the country's criminal justice system.

Key concerns arise about how well these bills align with modern legal principles. Questions include whether they incorporate civil law matters, shift towards a more reformatory rather than punitive approach, and ensure consistency in implementing penalties. Additionally, there's a need to scrutinize potential conflicts with existing special laws, addressing issues like abortion and maintaining clarity in definitions, especially concerning mental illness.

The bills also retain some outdated elements, such as illustrations involving chariots and palanquins, emphasizing the importance of updating these examples to reflect contemporary scenarios. Crucially, parliamentary scrutiny is vital to ensure these bills create a fair, just, and efficient criminal justice system, addressing concerns related to age thresholds, gender-related offenses, and overall effectiveness in protecting citizens' rights.

12th November, 2023

Modified antifungal agent shows reduced toxicity in mice- The Hindu Science

Science Tech

Key takeaways:

1. **Development of a Modified Antifungal Agent:** A new structurally modified antifungal agent has shown promising results in reducing toxicity while maintaining antimicrobial properties.



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2. **Background on Amphotericin B (AmB):** AmB, a traditionally used antifungal agent, is effective but highly toxic, especially to renal cells. It works by forming spongelike aggregates that bind to and extract ergosterol from fungal cell membranes, leading to cell death.
3. **Toxicity Concerns:** The toxicity of AmB in humans, particularly in renal cells, has been a significant concern. It was unclear if the mechanism causing fungal cell death also contributed to this toxicity.
4. **Research Approach:** Researchers, led by Arun Maji at the University of Illinois, created AmB analogues to study how modifications affect biological activity. They focused on the parts of the molecule that bind sterols.
5. **Findings on Renal Cell Death:** The study found that renal cell death was due to AmB binding and extracting cholesterol from kidney cell membranes.
6. **Creation of AM219:** A new variant, named AM219, was designed to bind and extract fungal ergosterol without affecting mammalian cholesterol. This aims to reduce the toxic effects on kidneys.
7. **Results in Human and Animal Models:** AM219 was found to be renal-sparing in human renal cells and mice, and it retained high efficacy as an antifungal treatment.
8. **Resistance Resilience:** The treatment also showed resilience against antimicrobial resistance.
9. **Potential for Wider Application:** The mechanism of action is common across many antifungal molecules, suggesting that this technique could reduce toxicity in other drug treatments, thereby increasing their clinical efficacy.
10. **Broader Implications:** The authors propose that rational tuning of interactions between small molecules could lead to improved treatments for fungal infections, which still cause millions of deaths annually, and potentially other antimicrobials that target specific lipids.

Mains in Easy Language

Scientists have developed a new version of an antifungal medicine that is less harmful to the body while still being effective against fungal infections. The original medicine, Amphotericin B (AmB), although good at killing fungi, can be dangerous, especially to the kidneys. AmB works by attaching to a component of the fungus cell, ergosterol, and removing it, which leads to the death of the fungus. However, this process can also damage human kidney cells. Researchers, led by Arun Maji, experimented with making small changes to AmB. They discovered that the kidney damage was caused by AmB removing cholesterol from the kidney cells. This led to the creation of a safer version, named AM219, which can fight fungus without affecting the cholesterol in human cells, thus being safer for the kidneys. This new version was tested in human kidney cells and mice, proving to be effective against fungus without harming the kidneys. Additionally, AM219 is good at staying effective even when fungi try to become resistant to it. This approach could potentially be applied to other antifungal medicines, making them safer and more effective. The study suggests that this method could lead to better treatments for fungal infections, which are a significant health concern globally.

On Haryana's road to 'near elimination of stubble burning', some wins, some hiccups- Indian Express

Environment Ecology

Key takeaways:

1. **Reduced Fires in Haryana:** Two districts, Kaithal and Jind, have seen fewer fires due to better management of crop residue. However, complete elimination of burning might take a few more years, requiring better access to machinery and increased awareness.
2. **Challenges with Machinery:** High-cost machines like balers, which turn straw into bales, are not easily accessible to small farmers. There's also a problem with selling these bales and an unclear supply chain for alternative uses of paddy straw.
3. **Decrease in Crop Residue Burning:** Recent data shows a reduction in instances of crop residue burning in these areas compared to previous years.
4. **Economic and Logistical Issues:** Farmers face difficulties with the high cost and maintenance of balers, along with challenges in storing and selling straw bales.
5. **Stubble Burning Alternatives and Government Incentives:** Some farmers still burn stubble due to the high cost of alternatives. The government provides incentives for non-burning methods and imposes fines for burning. However, issues like subsidy distribution and the tight schedule between crop cycles are hurdles.
6. **Future Outlook:** Improvement is expected as more machinery becomes available and awareness increases, aiming for a larger scale management of straw through non-burning methods in the upcoming years.

Mains in Easy Language

In Haryana, India, specifically in the districts of Kaithal and Jind, there's been some progress in reducing the burning of crop residue, a common practice among farmers to clear fields quickly. However, it's recognized that completely stopping this practice might



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take a few more years. This is due to the need for easier access to helpful machinery, better incentives for farmers, and more awareness about alternative methods.

One such alternative is using machines called balers, which compress leftover crop straw into bales. These bales can then be used for other purposes like fuel, instead of burning the straw. But these machines are expensive, and not every farmer can afford them. Moreover, there's an issue of unsold straw bales, which can be wasted, especially if they get wet in the rain.

Statistics indicate a reduction in instances of straw burning compared to previous years. But still, some farmers, like Bijender Singh, struggle with the economics of using a baler. The high cost of running and maintaining these machines, coupled with difficulty in selling the straw bales, presents a challenge.

Not all farmers have turned to these machines. Some, like Ajmer, continue to burn the straw because alternatives like super-seeders, which mix the straw back into the soil, are too expensive.

There is some industrial demand for straw, with companies purchasing it for use in power plants, but this has its own set of challenges, like insufficient demand and incomplete infrastructure.

The government is trying to help by providing incentives to farmers who adopt non-burning methods and imposing fines on those who continue to burn straw. However, the distribution of these subsidies is uneven, leaving some farmers without much-needed support.

Looking ahead, officials are hopeful that with more available machinery, increased awareness, and better planning, the practice of burning straw will further decrease. They aim to manage the straw more effectively in the coming years, thereby reducing the reliance on burning it.

Government in denial, Economy in distress by P.Chidambaram- Indian Express Opinion

Economy

Key takeaways:

1. **Economic Growth Rate in India:** The article discusses the average GDP growth rate in India during the tenure of the BJP government. In the first nine years under the BJP, the average growth rate was 5.7%, and with the projected rate of 6.5% in 2023-24, it would be 5.8% for the ten years. This is compared to the growth rates during the UPA I and II regimes, which were 8.5% and 7.5% respectively.
2. **Significance of the Decline in Growth Rate:** The decline in the growth rate by 1.8% compared to the UPA years is considered significant, with implications for national security, infrastructure, investments, job creation, welfare measures, household consumption, savings, poverty reduction, and improvements in education and health.
3. **Concerns About Inflation and Unemployment:** The article highlights the issues of rising prices and unemployment as major concerns. Inflation has led to reduced household consumption and savings, impacting the sale of consumer goods and vehicles. The unemployment rate, particularly among graduates and youth, remains high.
4. **Government Job Reductions:** There has been a 22% decline in government jobs under the current government, based on CMIE data.
5. **Economic Outlook:** The Ministry of Finance's monthly review suggests a gloomy economic outlook with risks including higher inflation, increased interest rates, reduced household consumption, and increased borrowings.
6. **Bank Credit Growth:** Although bank credit growth seems impressive, it is primarily driven by personal and gold loans, indicating that this growth is for consumption rather than industrial investment.
7. **Three Economic Engines Stalled:** The article notes that only the engine of government investment is functioning, while private investment, private consumption, and exports are stalled. The author suggests that acknowledging these weaknesses is essential for finding opportunities for improvement.
8. **Overall Economic Scenario:** The author conveys a somber view of the current economic scenario in India, indicating that tough times may continue, and expressing hope for future improvement.

Mains easy language::

The article discusses India's economy, focusing on how it has performed in recent years. It compares the average economic growth rate under the current BJP government, which is around 5.7% to 5.8%, to the higher rates of 7.5% to 8.5% during the previous UPA government. This difference is significant because it impacts many aspects of life, including government spending on infrastructure, job availability, and the overall quality of life. The article also highlights two major problems facing the country: inflation, which makes everything more expensive, and unemployment, with a notable lack of jobs, especially for young people and graduates. There's also a mention of a reduction in government jobs. A report from the Ministry of Finance suggests a rather bleak economic outlook, with expectations of higher prices, higher interest rates, and reduced spending by people. Interestingly, while there's





growth in bank lending, it's mostly in personal and gold loans, indicating that people are borrowing more for daily needs rather than business investments. The article notes that only government spending is actively helping the economy, with private investments and exports lagging behind. Overall, the article paints a picture of an economy that is facing several challenges and expresses hope for improvement in the future,

14th November 2023

A bond of secrecy-Indian Express Editorial

Polity

Key takeaways:

1. **Electoral Bond Secrecy:** The article discusses the issue of maintaining secrecy around electoral bonds, highlighting that almost all information is public except for the identity of the giver, receiver, and the bond itself.
2. **Transparency vs. RTI Act:** While the introduction of electoral bonds as a political funding instrument is accepted, the non-disclosure of information is questioned for being against transparency principles and the Right to Information (RTI) Act.
3. **State Collusion:** The article questions why the state colludes with political parties by granting income tax exemption, especially when political parties resist coming under the RTI Act.
4. **Supreme Court's Position:** The Supreme Court (SC) has refrained from delegitimizing electoral bonds in past hearings, leaving uncertainty about its stance. The article anticipates whether the SC will address issues of anonymity and tax exemption in the upcoming judgment.
5. **Tax Exemption Principles:** The article argues against tax exemption for electoral bonds without full disclosure, likening it to state subsidy. It proposes aligning tax laws with principles governing the utilization of subsidy in other schemes funded by the exchequer.
6. **Utilization of Funds:** The piece suggests obliging political parties to spend tax-exempt funds substantially for election purposes within a specified period or face losing the benefit of exemption.
7. **Periodic Audits and Limits:** To ensure proper utilization, the article proposes periodic audits by a Comptroller and Auditor General (CAG)-appointed firm every five years. It also suggests imposing limits on party expenditure during elections.
8. **Counterintuitive Secrecy:** The article raises a counterintuitive question about why contributors prefer to remain anonymous when supporting the democratic cause, contrasting this with open contributions in other countries.

Mains easy language:

The article delves into the contentious issue of electoral bonds, spotlighting the paradox between their acceptance as a legitimate political funding instrument and the veil of secrecy shrouding them. While the public is privy to most information surrounding these bonds, the identities of the giver, receiver, and the bond itself remain concealed. The piece scrutinizes the non-disclosure of such crucial details, contending that it runs counter to transparency principles and the Right to Information (RTI) Act. Moreover, it questions the perplexing alignment between the state and political parties in granting income tax exemption, especially given the parties' reluctance to come under the RTI Act's purview.

The Supreme Court's historical hesitance to delegitimize electoral bonds raises uncertainty about its stance. The upcoming judgment is awaited with anticipation, prompting questions about whether the court will address anonymity concerns and the fairness of tax exemptions. The article advocates for reforms, suggesting that tax exemption should be treated akin to state subsidies, subject to principles governing subsidy utilization in other schemes funded by the exchequer. It proposes stringent measures such as periodic audits, expenditure limits, and taxation of unutilized funds to ensure responsible financial practices within political parties. The narrative encourages society to reflect on the counterintuitive culture of concealing contributions to political causes and questions the support for such secrecy within the political system.

AFFIRMING PRIORITIES-Indian Express Editorial

International Relations

Key takeaways:

1. **Middle East Alignment:** India and the US show growing alignment on Middle East issues, particularly in condemning Hamas terrorism and supporting Israel's right to self-defense.
2. **Nuanced Approach:** India's stance in recent UN votes reflects nuance—abstaining when Hamas wasn't mentioned, yet voting to condemn Israeli settlements on another occasion.



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3. **Deepening Partnership:** The "two plus two" meetings serve as a key platform for deepening the strategic partnership between India and the US, covering defense, technology, counter-terrorism, and a new focus on Asian security.
4. **Shift in Dynamics:** Despite past differences, India and the US are increasingly cooperating, addressing challenges like China's assertiveness in the Indo-Pacific and forming strategic alliances with nations like Israel and the UAE.
5. **Economic Corridor:** At the G-20 summit, India, the US, and Saudi Arabia unveiled plans for an economic corridor connecting the Subcontinent to Europe, signaling a broader strategic vision.

Mains easy language:

The article underscores a significant shift in India's stance on Middle East issues, particularly in its alignment with the United States. This alignment was evident in the recent "two plus two" meetings where both nations condemned Hamas terrorism and expressed support for Israel's right to self-defense. Notably, India showcased a nuanced approach in recent UN votes, abstaining when Hamas wasn't mentioned and voting to condemn Israeli settlements on a separate occasion.

The deepening strategic partnership between India and the US is a focal point, encompassing defense, technology, counter-terrorism, and an emerging emphasis on Asian security concerns. This collaborative effort has evolved despite historical differences, reflecting a shared response to challenges posed by China's assertiveness in the Indo-Pacific. The article also highlights joint initiatives, such as forming strategic alliances with nations like Israel and the UAE and unveiling plans for an economic corridor connecting the Subcontinent to Europe at the G-20 summit.

This evolving dynamic signifies not only a recalibration of India's geopolitical priorities but also a potential catalyst for regional peace and prosperity. The nuanced and cooperative approach adopted by India in global forums indicates a strategic vision beyond immediate concerns, emphasizing a broader partnership with the United States and key regional players.

With a little help from the Sun-Indian Express Editorial

Economics

Key takeaways:

1. **Solar Mini-Grid Revolution:** A private sector-led revolution aims to uplift 500 million people from energy poverty through clean energy mini-grids in rural areas.
2. **World Bank's Endorsement:** The World Bank endorses privately owned solar mini-grids as the most cost-effective solution, targeting electrification for 75% of the 675 million still lacking electricity globally.
3. **Diverse Services Beyond Power:** Solar mini-grid companies not only provide reliable power but also offer services like telephony, irrigation, agro-processing, and e-mobility, acting as rural development accelerators.
4. **Climate Resilience:** Solar mini-grids are vital for climate-vulnerable regions, demonstrating adaptation and resilience capabilities crucial for farming-dependent areas in Africa and Asia.
5. **Complementing Centralized Grids:** Solar mini-grids play a complementary role even where centralized grids exist, as seen in Cambodia's successful integration of formerly isolated mini-grids.
6. **Investment Disparities and Solutions:** Global solar investments are disproportionately low, emphasizing the need for innovative financial mechanisms. Initiatives like the International Solar Alliance's Global Solar Facility aim to catalyze investments in under-served regions.
7. **Solar's Viability and Cost:** Solar energy presents a financially viable path to energy independence, with costs lower than coal and natural gas, contingent on sunlight availability.

Mains easy language:

A revolution led by private companies is changing the lives of 500 million people in rural areas globally, lifting them out of energy poverty through solar mini-grids. These mini-grids, endorsed by the World Bank, are considered the most cost-effective way to bring electricity to areas still in darkness, with over 20,000 already installed. Beyond providing clean power, these mini-grid companies act as rural development hubs, offering services like telephony, irrigation, and e-mobility, showcasing their adaptability and resilience in climate-vulnerable regions.

Their success is evident in Cambodia, where formerly isolated mini-grids were seamlessly integrated into the national grid, benefiting over a million consumers. However, despite their potential, there's a significant lack of global investment in solar projects, particularly in developing countries. Initiatives like the International Solar Alliance's Global Solar Facility aim to address this imbalance by catalyzing investments in under-served regions, striving to unlock the potential of solar mini-grids.

Solar energy emerges as a financially viable solution, presenting lower costs than traditional sources. Its widespread adoption, especially in underserved markets, contributes to energy independence and climate action. The collaboration between the private



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and public sectors in India serves as an example of how clean energy adoption can drive innovation and ensure robust energy supply with minimal carbon emissions.

Easing wheat, rising rice-Indian Express Explained

Economics

Key takeaways:

1. **Wheat Prices:**Russia's mass export of cheap wheat led to a sharp global price decline. Wheat prices hit a record high in March 2022 but have significantly dropped by October 2023.
2. **Rice Prices:**India, a major rice exporter, imposed restrictions, causing a global price surge. Bans on white non-basmati rice exports and minimum prices for basmati and parboiled non-basmati rice contributed to the increase.
3. **Government Actions:**Lower global wheat prices made imports feasible, and the Indian government managed wheat stocks well. However, export restrictions on rice posed challenges, influencing global prices.
4. **Inflation Implications:**Domestic production heavily influences cereal inflation in India. Edible oil prices collapsed, leading to decreased imports and negative retail edible oil inflation.
5. **Future Outlook:**Wheat stocks are expected to meet the minimum buffer by April 1, 2024, with increased sales and continued PDS supplies. Challenges persist for rice due to export restrictions affecting global prices.
6. **Election Considerations:**Political factors, especially impending national elections, may impact decisions regarding import duties on wheat.
7. **Global Dynamics:**Global agricultural markets, shaped by major exporters and various factors, exhibit complexity in responding to both domestic and international influences.

Mains easy language:

The article discusses how global wheat and rice prices are being influenced by the actions of major exporting countries. Russia's decision to flood the market with cheap wheat has drastically reduced global wheat prices. In contrast, India, as the world's top rice exporter, implemented restrictions on rice exports, causing global rice prices to rise.

The Indian government has effectively managed its wheat stocks, making wheat imports economically viable due to lower international prices. However, rice faces challenges because India's export restrictions have impacted global prices. The text highlights the contrasting situations in wheat and rice markets.

Looking ahead, wheat stocks are expected to meet minimum requirements by April 2024, easing concerns about shortages. However, the future of rice remains uncertain due to export restrictions. Political considerations, especially with national elections approaching, may influence decisions related to import duties on wheat.

Overall, the global agricultural market is intricate, responding to the actions of major exporting nations, and affected by various domestic and international factors. The article emphasizes how these dynamics shape the prices of essential commodities and impact economies worldwide.

Once upon a time,a plan to join Red Sea with Mediterranean through Israel-Indian Express Explained

International Relations

Key takeaways:

1. **Israel's Plan:**Israel's conflict with Hamas has sparked speculation about a larger plan, potentially involving the creation of the Ben Gurion Canal for economic advantages.
2. **The Ben Gurion Canal:**Envisioned since the 1960s, the canal aims to connect the Gulf of Aqaba to the Eastern Mediterranean, challenging the Suez Canal's dominance.
3. **Feasibility Challenges:**The Ben Gurion Canal faces logistical, political, and funding obstacles, making its realization seem largely fantastical.
4. **Suez Canal's Significance:**The Suez Canal, crucial for global maritime trade since 1869, has historical conflicts and congestion issues.
5. **Historical Context:**Historical conflicts over the Suez Canal include the 1956 nationalization and wars involving the UK, France, and Israel.
6. **Timeline Uncertainty:**The timeline for the shipping lane concept through Israel is unclear, with the Ben Gurion Canal Project remaining an ambitious infrastructure plan.



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7. **Technological Considerations:** Past studies explored the canal's technological feasibility, including risky options like buried nuclear explosives.
8. **Hurdles and Complexity:** The project is extremely complex and costly, with a proposed route longer than the Suez Canal, presenting significant challenges.
9. **Current Focus:** Despite the allure of the Ben Gurion Canal, the current emphasis is on addressing issues with the Suez Canal rather than pursuing the ambitious project actively.

Mains easy language:

In the realm of speculative geopolitical strategies, Israel's ongoing conflict with Hamas in Gaza has sparked rumors about a potential grand plan. Some believe that Israel's aim to eliminate Hamas is linked to a long-discussed economic opportunity—the creation of a canal through Israel's Negev Desert. This ambitious project, known as the Ben Gurion Canal, would connect the Gulf of Aqaba (eastern arm of the Red Sea) to the Eastern Mediterranean, challenging Egypt's monopoly over the Suez Canal.

The Suez Canal, operational since 1869, is a critical waterway facilitating global maritime trade, handling around 13% of global shipping. However, the canal faces challenges such as congestion, as seen with the Ever Given incident in 2021, and historical conflicts over Egypt's control.

The Ben Gurion Canal project, envisioned since the 1960s, remains largely fantastical due to monumental logistical, political, and funding challenges. While the idea of an alternative to the Suez Canal is intriguing, the proposed canal's longer route and potential use of nuclear explosions make it complex and risky. The current focus remains on resolving issues with the Suez Canal, despite the theoretical allure of the Ben Gurion Canal.

Realism, not machismo, to counter terror-The Hindu Editorial

Internal Security

Key takeaways:

1. **Realistic Counter-Terrorism:** The article advocates for a realistic and thoughtful approach to counter-terrorism, emphasizing the need to avoid impulsive and aggressive responses.
2. **Measured Response to Attacks:** India's restraint after the 2008 Mumbai attacks is commended, highlighting how a measured response prevented potential negative consequences such as a nuclear standoff.
3. **Global Context Influence:** The global context, particularly the U.S. focus on the "war on terror," played a significant role in shaping India's response and avoiding military escalation.
4. **International Diplomacy:** By not resorting to immediate military action, India garnered international support, maintained economic stability, and contributed to the decline of Pakistan's fortunes post-9/11.
5. **Balakot Air Strikes:** The Balakot air strikes in 2019 are acknowledged as a carefully calibrated move, signaling strength and resolve without resorting to full-scale war.
6. **Importance of Strong Leadership:** The article underscores the importance of strong leadership but advocates for strength derived from deliberate actions rather than aggressive posturing.
7. **Strategic Diplomacy vs. Invasion:** Emphasizes the significance of strategic diplomacy over invasion, particularly in the context of India and Pakistan being nuclear powers.
8. **Avoiding Unintended Consequences:** Calls attention to the potential unintended consequences of immediate military action, urging nations to consider broader international implications in their counter-terrorism strategies.

Mains easy language:

The article discusses how India dealt with terrorism, suggesting that it's better to think carefully than to act aggressively. After the 2008 Mumbai attacks, India didn't immediately attack Pakistan. The author praises this decision, saying it prevented more problems, like a dangerous nuclear situation. They point out that global events, especially the U.S. focus on fighting terrorism worldwide, influenced India's choices.

Instead of fighting, India talked with other countries and got support. This helped keep India's economy stable, while Pakistan faced difficulties. The article mentions a later event in 2019, where India did a targeted air strike in Balakot, showing strength without starting a big war.

The author argues that India's careful approach after the Mumbai attacks was smart. It gained international support, kept the economy steady, and contributed to problems for Pakistan. The article emphasizes that being strong doesn't mean acting





aggressively all the time. It says that strong leaders make smart decisions, and it's better to plan carefully than to rush into things, especially when dealing with serious issues like terrorism.

Community rights and forest conservation-The Hindu Text and Context

Environment

Key takeaways:

1. **Amendment Objectives:** The Forest Conservation Amendment Act, 2023, primarily seeks to address climate change and deforestation by emphasizing effective forest management and afforestation.
2. **Selective Applicability:** The amendment applies selectively to areas categorized under the 1927 Forest Act, excluding specific converted lands and regions near borders designated for linear projects.
3. **Controversial Provisions:** Authorization of security infrastructure, ecotourism, and safari initiatives has sparked criticism, particularly from tribal communities and human rights activists concerned about their impact.
4. **Historical Context:** Rooted in the Godavarman Thirumulkpad case, the amendment faces opposition from private landowners and conservation groups, who fear adverse effects on industrial progress.
5. **JPC Approval:** The Joint Parliamentary Committee (JPC), with limited opposition representation, approved the amendment, which subsequently passed both houses without extensive debates.
6. **Changes to Tribal Consent:** Recent revisions remove the necessity for tribal consent, allowing state governments to engage in specific activities without approval, raising concerns about indigenous rights.
7. **Unaddressed Issues:** The amendment fails to address growing human-animal conflicts, posing threats to both Adivasi livelihoods and wildlife in forest areas.

Mains easy language:

The Forest Conservation Amendment Act, 2023, is like a makeover for how we handle our forests. It wants to fight climate change and deforestation by managing forests better and planting more trees. But here's the catch – it allows some parts of the forest to be used for things like security measures, tourism, and entertainment. This has upset some tribal communities and people who care about human rights. They worry that it might hurt the people who depend on the forest for their livelihoods.

This whole thing started because of an old legal case in 1996, and now the government wants to change the rules. The people who opposed this change are worried it will harm the environment and hinder industrial progress. The government made this change without talking much to some states, causing more concerns.

One big change is that now the government doesn't need permission from tribal communities for certain activities in the forest. This has upset many who think this could lead to unfair decisions. There's also a plan for compensatory afforestation, meaning if they cut down some trees, they have to plant the same amount somewhere else. But, it doesn't say what type of trees, leaving room for doubts.

Overall, this forest law change seems good on paper, but some worry it might harm the environment, people, and wildlife in practice.

Starry Euclid images spur probe of 'dark universe'-The Hindu Science

Science and technology

Key takeaways:

1. **Euclid Telescope Mission:** ESA and NASA's Euclid telescope has been launched to study dark matter and dark energy, fundamental components of the universe.
2. **Precision Imaging:** Euclid has demonstrated its precision with sharp images, including observations of the Perseus cluster and billions of galaxies up to 10 billion light years away.
3. **Dark Matter Insights:** The telescope's observations provide insights into dark matter, with structures like the Perseus cluster suggesting its presence and influence on galaxy rotations.
4. **Dark Energy Confirmation:** Euclid contributes to the ongoing understanding of dark energy, confirmed in the 1990s and linked to the accelerated expansion of the universe.
5. **Mission Goals:** Euclid's primary goals include creating a 3D map covering a significant portion of the sky to detect variations related to the dark universe, enhancing our understanding of the cosmic web.
6. **Operational Challenges:** Despite initial technical challenges, Euclid is overcoming issues and is expected to continue its mission for six years, with potential for an additional six months of observations.



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7. **Strategic Orbit:** Positioned at Lagrange point 2, Euclid orbits 1.5 million km from Earth in a stable position, sharing this point with NASA's James Webb Space Telescope.

Mains easy language:

Euclid, a powerful space telescope launched by the European Space Agency and NASA, is on a mission to uncover the secrets of the universe's mysterious dark matter and dark energy. These enigmatic forces make up a whopping 95% of the cosmos. Euclid recently shared incredibly detailed images, showcasing its ability to capture galaxies, including the massive Perseus cluster, millions and even billions of light years away.

Scientists believe that understanding dark matter's role, especially in structures like the Perseus cluster, could help explain why galaxies rotate differently than expected. Dark energy, discovered in the 1990s, is also part of Euclid's investigation, connected to the surprising acceleration of the universe's expansion.

Despite initial technical hurdles, Euclid is overcoming challenges and will spend the next six years creating a detailed 3D map of the sky. This map aims to unveil tiny variations related to the dark universe, shedding light on the cosmic web of the universe's structure. Positioned in a stable orbit 1.5 million km away from Earth, Euclid's discoveries may revolutionize our understanding of the fundamental building blocks of the cosmos.

15th November 2023

Arms and the Man and AI - Indian Express Editorial

International Relations

Key takeaways:

1. **Global Debate on AI in Military:** There's a worldwide conversation about using artificial intelligence (AI) for weapons. Some want strict limits, while major countries are already making weapons that can work without human control.
2. **UN Resolution on Autonomous Weapons:** The UN discussed stopping dangerous weapons that can act on their own. But powerful countries like the US, China, and India had different opinions about this.
3. **US-China Race for AI Weapons:** The US and China are racing to develop the best AI-powered weapons. China can make them quickly because it has many factories and resources. The US wants to stay ahead by controlling important technology.
4. **India's Position and Challenges:** India isn't as advanced in making AI weapons but faces big problems with China. Even though India voted against the UN resolution, it's trying to balance its security needs and global rules about AI in weapons.
5. **India Needs to Boost AI Skills:** India wants to be better at using AI for defense. It's not just about making a few cool gadgets; India needs to invest a lot in learning about AI and making many types of technology for its military.
6. **India's Global Role in Setting Rules:** India wants to help decide the rules for using AI in weapons worldwide. By working with other countries, India aims to make sure that when using smart weapons, people are still the ones making important decisions, not machines.
7. **Pragmatic Engagement with Global Issues:** India is taking a practical approach to global concerns. It's prioritizing its security while also contributing to discussions about responsible AI use in weapons.

Mains easy language:

In today's world, there's a big debate about using smart technology called artificial intelligence (AI) in weapons. Some countries, like the US, China, and India, are making weapons that can act on their own without needing humans to control them. This has sparked a global discussion because some people worry that these weapons could be dangerous if they're not used responsibly.

Recently, the United Nations (UN) discussed whether to stop making these kinds of weapons that work without human control. However, different countries had different opinions about this idea. The US and its allies supported limitations on these weapons, while China abstained, and India voted against the plan.

The US and China are in a race to develop the best AI-powered weapons. China, with its large industrial capacity, can produce these weapons quickly, posing a challenge to the US's efforts to stay ahead by controlling vital technology. India, though not as advanced in making AI weapons, faces security challenges, especially with China.

Despite voting against the UN proposal, India is trying to balance its security needs and the global rules about using AI in weapons. India wants to improve its ability to use AI for defense. It aims to collaborate with other countries to establish fair and responsible



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rules, ensuring that when using these smart weapons, human judgment remains in control, not machines. Ultimately, it's about safeguarding security while advocating for fair play in this new technological race for advanced weaponry.

DAL-ROTI INFLATION-Indian Express Editorial

Economics

Key takeaways:

1. **Inflation Concerns:** RBI Governor highlighted ongoing vulnerabilities in consumer price index (CPI) due to persistent food price shocks.
2. **Current Trends:** October's CPI shows overall retail inflation at 4.87%, declining for the third straight month. However, food inflation stands higher at 6.61%, mainly affected by volatile components like vegetables.
3. **Essential Food Items:** Staples like cereals and pulses face sustained high inflation. Cereal inflation remained double-digit for 14 months, and pulses inflation is the highest in years at 18.79%.
4. **Agricultural Challenges:** Poor monsoon affected kharif season yields, lowering cereal and pulses production compared to the previous year.
5. **Government Measures:** The government managed stocks but needs further action. Suggestions include reducing import duties on essential items like wheat, yellow/white peas, and chana to address high inflation in staples like dal-roti.

Mains easy language:

The Reserve Bank of India and the government are facing a critical challenge due to persistently high food inflation, particularly in essential items like cereals and pulses. While overall inflation has decreased, food prices, especially for dal-roti staples, remain significantly high.

The recent CPI figures show a decline in general inflation but highlight the glaring issue of essential food items becoming more expensive. Cereals and pulses, vital for everyday meals, have been facing double-digit inflation for an extended period, mainly due to poor monsoon and decreased agricultural production.

With lower kharif season yields and unfavorable weather projections for the upcoming rabi crop, the situation might worsen. The government has managed existing stocks and sales but needs to take proactive measures, such as reducing import duties on essential food items, to alleviate the burden of high dal-roti inflation, which is not just an economic concern but also a significant political issue.

Nine things to do for clean air-Indian Express Editorial

Environment

Key takeaways:

1. **Collaborative Action:** Cooperation among industries, transportation, and households is vital to effectively tackle air pollution. Unified efforts across these sectors are essential in combating its sources.
2. **End Crop Burning:** Discovering alternatives to burning crop residues is crucial to curbing harmful emissions. Finding sustainable ways to manage agricultural waste will greatly contribute to cleaner air.
3. **Enhance Public Transit:** Investing in affordable, eco-friendly public transport options is key. Developing reliable transit systems encourages reduced dependence on private vehicles, thus lowering pollution.
4. **Embrace Clean Energy:** Encouraging the adoption of renewable energy sources is pivotal for pollution reduction. Shifting away from fossil fuels to cleaner energy helps cut down harmful emissions.
5. **Regional Strategies:** Implementing pollution reduction strategies on a regional scale is essential. Coordinated approaches across regions ensure a more effective solution to air pollution.
6. **Effective Waste Management:** Efficient handling of construction and demolition waste is crucial in decreasing pollution. Better waste disposal practices can significantly improve environmental conditions.
7. **Strict Enforcement & Community Engagement:** Consistent enforcement of environmental regulations is vital. Also, educating and involving communities in adopting cleaner habits is essential for sustainable progress in reducing air pollution.

Mains easy language:

The article highlights the pressing issue of air pollution in India and emphasizes the urgent need for a comprehensive approach to address this critical problem. It sheds light on the far-reaching impacts of air pollution, causing severe health issues and economic losses. Despite awareness, the complexity of the issue lies in its multifaceted nature, crossing boundaries between rural and urban areas, and diverse emission sources.



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The piece advocates for a unified effort to combat air pollution, stressing the importance of coordinated actions across various sectors and regions. It suggests crucial interventions to mitigate pollution, including alternatives to crop residue burning, investment in eco-friendly public transportation, adoption of clean energy sources, efficient waste management, and strict enforcement of environmental regulations.

Moreover, it emphasizes the significance of community engagement and education in fostering sustainable habits and practices to reduce pollution. The article draws attention to successful strategies implemented in other countries, suggesting their adaptation in the Indian context. It underscores the importance of technological advancements and financial support to implement real-time monitoring systems and interventions effectively.

Overall, the piece strongly advocates that piecemeal approaches won't suffice in tackling air pollution. Instead, a holistic, integrated approach involving cooperation among industries, government, communities, and technology is crucial to combat this pervasive issue and improve the overall quality of life for people in India.

Bridge to nowhere-The Hindu Editorial

International Relations

Key takeaways:

1. **India's Voting Pattern:** India's recent voting decisions at the United Nations General Assembly (UNGA) regarding resolutions related to Gaza and Israel have been contradictory and unclear.
2. **Conflicting Votes:** India abstained from a resolution for a cease-fire in the Israeli strikes on Gaza but voted in favor of other resolutions criticizing Israel's increased settlements in the Occupied Territories and supporting Palestinian rights and the UN Refugee and Works Agency (UNRWA).
3. **Unclear Government Stand:** The official explanation for these votes as "routine" contradicts India's stance on the crisis and has created confusion regarding the government's position.
4. **Explanation of Votes:** India justified its abstention from the original UNGA resolution, citing the lack of an explicit condemnation of specific attacks by Hamas, but none of the resolutions actually referred to these attacks.
5. **Lack of Action:** India did not propose amendments or advocate for changes in these resolutions during the UNGA's Fourth Committee deliberations.
6. **Indian Diplomacy:** Despite India's historical support for the Palestinian cause and a two-state solution, the government hasn't actively intervened or called for a cease-fire in the ongoing crisis.
7. **Need for Explanation:** The article stresses the importance of India clarifying its position on the conflict, advocating for a cease-fire, and actively engaging in efforts to alleviate the situation in Gaza and among Palestinians.
8. **Opportunities for Engagement:** Upcoming global summits like the Voice of Global South and G-20 could provide platforms for India to articulate its stance and contribute to ending the violence and establishing post-conflict scenarios.

Mains easy language:

The article discusses India's unclear stance on the Gaza-Israel conflict at the United Nations. It highlights India's contradictory voting behavior at the UN General Assembly, abstaining from a resolution calling for a cease-fire in Gaza while supporting other resolutions critical of Israel's actions.

The confusion arises from India's reasoning for abstaining, citing a lack of condemnation of specific attacks by Hamas in the resolution. However, the resolutions voted on didn't actually refer to these attacks, leading to inconsistency in India's explanation.

Despite India's historical support for Palestinian rights and a two-state solution, the government hasn't actively intervened or called for a cease-fire in the ongoing crisis. The article points out that India's voice, known for its balanced and assertive stance on such global issues, seems to be missing in this scenario.

It urges India to clarify its position on the conflict and actively engage in efforts to ease the situation. With upcoming global summits, the article suggests these platforms could offer opportunities for India to articulate its stance and contribute positively to ending the violence and shaping a better future for Gaza and Palestinians.

In essence, the article calls for India to take a clear, proactive, and balanced approach, maintaining its historical diplomacy while actively working towards resolving the Gaza-Israel conflict.

Search and seizure-The Hindu Editorial

Polity

Key takeaways:



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1. **Supreme Court Directive:** The Supreme Court has directed the Indian government to create guidelines safeguarding journalists' and individuals' rights regarding the seizure of their digital devices.
2. **Press Freedom Concerns:** Recent incidents involving the seizure and examination of journalists' laptops and smartphones have raised concerns about press freedom and source confidentiality.
3. **Guideline Recommendations:** The guidelines must prevent law enforcement from seizing devices without prior judicial warrants and should specify the information sought, avoiding broad and intrusive searches.
4. **Protection of Journalists:** It's crucial to protect journalists from self-incrimination, forced disclosure of sources, and ensure their data security during investigative procedures.
5. **Technological Measures:** Guidelines should permit technological measures like device cloning to enable journalists to continue their work while safeguarding their data during investigations.
6. **Transparency and Privacy:** The Court emphasizes a "balancing of interests" and the necessity of transparent guideline drafting involving public consultations. Recognizing privacy as a fundamental right, these guidelines impact all citizens who rely on digital devices.
7. **Update Laws:** Beyond safeguarding media professionals, there's a need to update search and seizure laws to address digital complexities and protect citizens' privacy in the digital age.

Mains easy language:

The article discusses the Supreme Court's directive to the Indian government, urging the formulation of guidelines safeguarding the rights of journalists and individuals concerning the seizure of their digital devices. Recent incidents involving the seizure and examination of journalists' laptops and smartphones have raised concerns about press freedom and the confidentiality of sources.

The guidelines recommended by the Court should prevent law enforcement from seizing devices without prior judicial warrants. They must specify the information sought, refraining from allowing broad and intrusive searches. It's crucial to protect journalists from self-incrimination or revealing their sources by force. Additionally, protocols should ensure data security, preventing leaks or tampering, and deleting irrelevant information promptly.

Technological measures allowing device cloning should permit journalists to continue their work while retaining their data during investigations. To prevent tampering, creating a record of the device at seizure is vital. The Court emphasizes a "balancing of interests" and the necessity of transparent guideline drafting involving public consultations.

Recognizing privacy as a fundamental right, the article underscores the broader impact of these guidelines on all citizens whose professional and personal lives are intertwined with vulnerable digital devices. Beyond safeguarding media professionals, the laws concerning search and seizure require updates to accommodate the complexities of the digital age.

In essence, the article emphasizes the importance of clear, protective guidelines to prevent undue interference with journalists' work and uphold the privacy rights of all citizens in this digital era.

A Norwegian perspective of India's digital journey-The Hindu Editorial

Science and technology

Key takeaways:

1. **Digital Progress in India:** India's impressive digital infrastructure, including digital identities for citizens, grants access to services, the economy, and government support.
2. **Role in Global Digital Agenda:** India led discussions at the G-20, establishing a framework for Digital Public Infrastructure, emphasizing the significance of digital public goods.
3. **Global Cooperation in Digital Development:** Countries like India spearhead digital public goods efforts. MOSIP, developed in Bengaluru, issued digital IDs to over 97 million people in diverse nations.
4. **Norway's Contributions:** Norway actively supports digital public goods globally through initiatives like the Digital Public Goods Alliance (DPGA), pledging to make national digital goods accessible worldwide.
5. **Examples of Digital Contributions:** Norway provides various digital goods such as weather services (Yr), plant health warnings (VIPS), and health management systems (DHIS2) to multiple countries.
6. **Addressing Food Insecurity:** Digital tools like VIPS play a role in Norway's efforts to combat global challenges like food insecurity, aligning with Sustainable Development Goal 2 (SDG2).
7. **Challenges in the Digital Domain:** Financing, data security, privacy concerns, and digital sovereignty are key challenges that governments and businesses need to navigate.
8. **Learning from India:** Collaboration between Norway and India can leverage India's digital journey's lessons to help other countries bridge the digital divide and promote inclusive development.



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Mains easy language:

This article discusses India's impressive strides in digital infrastructure and how it aligns with the global commitment to leave no one behind by 2030, as outlined in the Sustainable Development Goals (SDGs). India's Digital Public Infrastructure (DPI) has empowered citizens by providing digital identities, enabling access to various services, the digital economy, and government support.

The piece highlights India's role in advocating for digital public goods on the international stage, especially during its G-20 presidency. It emphasizes the importance of these digital assets and the establishment of a framework for Digital Public Infrastructure. Countries in the global South, including India, are leading efforts in sharing digital resources globally.

Norway's active involvement in the Digital Public Goods Alliance (DPGA) and its commitment to making national digital assets available worldwide within five years is also discussed. The article presents examples of Norway's contributions to global digital goods, such as weather forecasting services, health management systems, and tools aiding food security.

It addresses the challenges in the digital realm, including financing, data security, and privacy concerns, while urging collaboration between Norway and India to learn from India's digital journey and bridge the digital gap for global development.

The economy of a world without work-The Hindu Text and Context

Economics

Key takeaways:

1. **AI's Impact:** Elon Musk believes AI could replace all jobs, leading us to question the purpose of work in the future. He imagines a world where machines do everything humans currently do for work, making us reconsider why we work and what we do with our time.
2. **Economic Changes:** Such a scenario might cause significant shifts in how money and resources are distributed if traditional jobs become unnecessary. This could require rethinking our economic system to ensure fair sharing of resources among everyone.
3. **Different Views on Work:** Some people, like John Maynard Keynes, think that technological advancements will reduce work hours, allowing us to enjoy more leisure time. On the other hand, thinkers like Karl Marx believe that work is essential to human life, providing meaning and purpose.
4. **Overlooking the System:** Often overlooked in discussions about AI and job automation is the fact that in our current system, having a job is how most people access basic necessities like food and shelter. Without work, individuals might struggle to meet their basic needs.
5. **Big Changes Needed:** If AI makes many jobs disappear, it would require us to completely rethink how people earn money and obtain essential resources. New systems might need to be created to ensure everyone can access what they need to live.
6. **Universal Basic Income:** One proposed solution to the lack of jobs due to AI is the idea of universal basic income (UBI). This concept suggests giving everyone a regular sum of money regardless of their employment status. However, how this would work and its consequences are still uncertain.
7. **Understanding the Impact:** It's crucial to understand how technological advancements, like AI and automation, will affect our economy. We need to think about these changes alongside our economic structures rather than viewing them in isolation.

Mains easy language:

Elon Musk talks about a future where robots and AI take over all kinds of jobs, leaving humans to wonder why we even work. This could cause some big changes in how we handle money and resources. Some smart people from the past, like John Maynard Keynes and Karl Marx, had different ideas about work. Keynes thought that as technology gets better, people would have to work less, which might make life better. But Marx believed that working is what gives our lives meaning and that capitalism makes us lose touch with that meaning.

In our world today, having a job is how most of us get the things we need, like food and a place to live. If there are no jobs because of AI, lots of people might struggle to get these basics. Fixing this would mean making really big changes to how we do things, maybe even giving everyone some money regularly, no matter if they work or not (universal basic income). But doing all this is tough because the way things work now has made some people really rich and powerful, and they might not want things to change. Understanding how tech changes our economy is super important, and we need to think about it with our current economic systems in mind.





What India can expect from the 'Rashtriya Vigyan Puraskar' awards-The Hindu Science

Science

Key takeaways:

1. **Science Award Overhaul:** India introduces the 'Rashtriya Vigyan Puraskar' (RVP) while discontinuing numerous existing science awards, aiming to align with esteemed national honors.
2. **Broadened Recognition:** The RVP opens doors to diverse contributors, including scientists, technologists, and innovators from various sectors beyond academia, spanning multiple scientific domains.
3. **Shift from Cash Prizes:** Unlike previous awards, the RVP opts for certificates and medals instead of cash incentives for awardees.
4. **Gender Parity Concerns:** The RVP's age limit (45 years) for young scientists may disproportionately impact women due to career breaks, relocation, and childcare responsibilities.
5. **Inclusive Criteria:** Embracing team awards and recognizing technology-driven innovations alongside scientific research, the RVP aims for inclusivity beyond conventional scientific contributions.
6. **Recognition Beyond Routine:** To ensure fair acknowledgment, the RVP criteria necessitate reevaluation, emphasizing exceptional contributions beyond standard scientific endeavors.
7. **Evaluation Processes:** India's transformation requires stringent assessment and diverse selection committees for equitable evaluations, aiming for transparency and fairness in recognition processes.

Mains easy language:

India is overhauling its science awards, introducing the 'Rashtriya Vigyan Puraskar' (RVP) while discontinuing numerous existing awards, aiming to align with prestigious national accolades. The RVP broadens recognition, welcoming scientists, technologists, and innovators from diverse backgrounds, extending beyond academia and embracing various scientific fields. Notably, it replaces cash prizes with certificates and medals.

However, challenges persist. The RVP's age limit (45 years) for young scientists may disadvantage women due to responsibilities like relocation, childcare, and career breaks. While striving for gender parity, ensuring fair representation remains essential.

The RVP's inclusivity encompasses team awards and acknowledges technology-led innovations alongside research, emphasizing contributions beyond routine scientific endeavors. Yet, the RVP's criteria necessitate reevaluation to ensure recognition of extraordinary contributions beyond standard scientific work.

India's overhaul requires meticulous consideration of selection processes, ensuring diverse and balanced committees for fair evaluations. Continual assessment of the RVP's impact on scientific growth, diversity, and inclusivity will be crucial. Overall, this transformation aspires to establish a comprehensive, equitable, and transparent award system, potentially serving as a model for scientific ecosystems globally.

16th November 2023

As Gaza war rages, waiting for the other shoe to drop-The Hindu Editorial

International relations

Key takeaways:

1. **Long-standing Conflict:** Israel and Hamas have a history of conflict that stretches back a long time. They've had numerous fights and wars, creating a cycle of violence and tension.
2. **Current Conflict's Severity:** This time, the ongoing conflict between Israel and Hamas is proving to be more severe and destructive than their previous clashes. The impact is much larger, causing significant damage and danger for both sides involved.
3. **Potential Shifting Dynamics:** There's a possibility that other groups might join this conflict. If this happens, it could significantly alter the dynamics and relationships in that particular region.
4. **Challenges Faced by Israel:** Israel might encounter a multitude of challenges due to this conflict. Financial strains and potential dissatisfaction among its population with the government's actions are among the primary concerns.
5. **Global Ramifications:** The conflict's consequences might extend beyond the region where the fighting is happening. It could impact the entire world, affecting things like the price of oil and causing economic instability on a global scale.



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6. **India's Worries:** India might also face various issues because of this conflict. Economic challenges, including potential financial strains and worries regarding the safety of its citizens residing in the affected region, are some significant concerns.
7. **Importance of Preparedness:** All nations need to be vigilant and ready for potential worsening of the situation. Having well-thought-out plans to address these challenges is crucial in mitigating the impact and managing the consequences effectively.

Mains easy language:

The article focuses on the prolonged conflict between Israel and Hamas, highlighting its severity and potential global repercussions. It traces the history of this conflict, emphasizing its enduring nature with intermittent clashes and wars. Presently, the ongoing conflict is notably more intense and damaging than prior instances, affecting both Israel and Gaza significantly.

There's a concern that the conflict might expand, involving other groups beyond Hamas and Israel, potentially reshaping the regional dynamics. Israel faces multiple challenges, including possible financial strain and domestic discontent due to the conflict's toll on civilians.

The article underscores the conflict's potential global impact, suggesting that it could disrupt the world economy by influencing oil prices and causing instability. India, due to its ties with the region, might also encounter economic difficulties and safety concerns for its diaspora.

It emphasizes the importance of preparedness for all nations involved. Countries need to plan and be ready for potential worsening of the situation, ensuring measures are in place to handle economic challenges and the safety of their citizens. This includes India, which needs to navigate the conflict's impact on its economy and the safety of its people residing in the affected region.

In essence, the article highlights the prolonged and intense nature of the Israel-Hamas conflict, its potential broader implications on global geopolitics and economies, and the necessity for proactive measures by affected nations to mitigate the conflict's impact on their economy and citizens' safety.

The price of persistent federal frictions-The Hindu Text and Context

polity

Key takeaways:

1. **Increasing Friction:** Disputes between the Union government and States in India are becoming more frequent and intense, affecting social sector policies, regulatory bodies, and the powers of central agencies.
2. **Shift in Economic Relations:** Economic reforms since 1991 gave some autonomy to States, but their expenditure policies still rely on the Centre for revenue, leading to a strained Centre-State equation.
3. **Areas of Conflict:** Besides resource sharing, issues around social policies' uniformity, regulatory bodies' roles, and central agencies' power have become contentious between the Centre and States.
4. **Economic Consequences:** The Centre's expanding activities sometimes diminish States' investments, affecting infrastructure development, leading to underinvestment by States in key areas.
5. **Fiscal Competition:** States engage in competition with each other and the Centre due to fiscal limitations, leading to inefficiencies and duplicated policies, impacting welfare provisioning like pension reforms.
6. **Parallel Policies and Inefficiencies:** Federal disputes result in duplication of policies by the Centre and States, like pension reforms, causing inefficiencies and long-term fiscal consequences.
7. **Interdependence:** Despite disputes, both Centre and States rely on each other for effective policy implementation, emphasizing the necessity to preserve this interdependence.

Mains easy language:

The article highlights the escalating conflicts between India's Union government and State governments, particularly concerning social policies, regulatory frameworks, and central agencies' powers. While economic reforms since 1991 allowed some autonomy to States, their reliance on the Centre for revenue persists, leading to strained relations.

The friction has expanded beyond resource sharing, extending to social policies' uniformity and central agencies' interference. This friction affects economic investments, especially in infrastructure development, where States face constraints due to centralization of planning. This leads to underinvestment in key areas crucial for regional economies.

The strained relations also induce fiscal competition among States and the Centre, impacting welfare provisioning and causing inefficiencies due to duplicated policies. For instance, conflicting pension reforms showcase parallel policies between the Centre and States, leading to trust deficits and long-term fiscal implications.



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Ultimately, the article emphasizes the inescapable interdependence between the Centre and States for effective governance, despite ongoing conflicts, underscoring the need to preserve this symbiotic relationship for efficient policy implementation and national progress.

Raychaudhuri, the physicist who quietly defied the system-The Hindu Science

Science

Key takeaways:

1. **Amal Kumar Raychaudhuri's Contribution:** Despite pressure from the director of his institute, Raychaudhuri pursued his passion for general relativity, leading to his groundbreaking 1955 paper on the Raychaudhuri Equation.
2. **Birth Centenary:** 2023 marks Raychaudhuri's birth centenary, celebrating his remarkable contributions to the field of relativity.
3. **Early Life and Interest in General Relativity:** Born in 1923, Raychaudhuri discovered his fascination with general relativity while studying at the Indian Association of Cultivation of Science (IACS) in Kolkata.
4. **Einstein's Theory of General Relativity:** Einstein's theory explained gravity as the bending of space and time by massive objects, predicting singularities where gravity becomes infinitely strong.
5. **Raychaudhuri's Struggles:** Despite his interest in relativity, the director, Meghnad Saha, discouraged Raychaudhuri from pursuing this field. Raychaudhuri was forced to work on other topics but continued his research on singularities in his spare time.
6. **Raychaudhuri's Innovative Approach:** Raychaudhuri developed an original approach to understand singularities, using the analogy of ships converging at the North Pole to illustrate how matter moves in curved spacetime.
7. **Raychaudhuri Equation:** His analysis led to the formulation of the Raychaudhuri Equation, which played a pivotal role in subsequent theories by physicists like Penrose and Hawking.
8. **Recognition and Challenges:** Despite his groundbreaking work, Raychaudhuri faced limited recognition in India, experiencing setbacks in career advancements. He eventually became a revered teacher at Presidency College, Kolkata.

Mains easy language:

The article recounts the journey of physicist Amal Kumar Raychaudhuri, born in 1923, whose centennial birth year in 2023 celebrates his enduring contributions to general relativity. Raychaudhuri's fascination with this field emerged during his education at IACS in Kolkata, despite the challenges he faced from the institute's director, Meghnad Saha, who discouraged his interest in general relativity.

His groundbreaking 1955 paper introduced the Raychaudhuri Equation, a significant breakthrough in understanding singularities in spacetime, pivotal to subsequent revolutionary theories by physicists such as Roger Penrose and Stephen Hawking.

Raychaudhuri's determination and innovative approach, using the analogy of ships converging at the North Pole, led to his formulation of the equation. Despite limited recognition in India and career setbacks, Raychaudhuri's legacy as an inspirational teacher at Presidency College, Kolkata, echoes the importance of pursuing one's passions despite adversities, serving as an enduring source of inspiration for scientists. His story underscores the significance of following one's path, despite challenging circumstances, resonating profoundly within the scientific community.

NASA, ISRO prepare to launch joint space mission-The Hindu Science

Science and technology

Key takeaways:

1. **NISAR Joint Mission:** The NASA-ISRO Synthetic Aperture Radar (NISAR) mission, set for launch in the first quarter of 2024, is a joint endeavor between NASA and ISRO.
2. **Mission Objectives:** NISAR aims to survey Earth's land and ice-covered surfaces once every 12 days for a duration of three years. It will provide comprehensive data to understand changes in ecosystems, ice mass, vegetation, biomass, sea-level rise, groundwater, and natural hazards.
3. **Technological Advancements:** The satellite, equipped with synthetic aperture radar in two frequencies and an antenna reflector, is a significant advancement in capabilities compared to past missions, offering new insights into Earth's dynamics.
4. **Detailed Testing:** Prior to launch, comprehensive testing, including vibration, battery, simulation, and performance tests, is being conducted to ensure the functionality and performance of various spacecraft components and systems.



| Clear your doubts now.



5. **Mission Expansion:** If the mission operates successfully, there are plans to extend its duration beyond the initial three years to monitor and analyze long-term changes on Earth, providing a crucial baseline for understanding climate change and environmental shifts.

Mains easy language:

The collaborative effort between NASA and ISRO, known as the NASA-ISRO Synthetic Aperture Radar (NISAR) mission, is scheduled for launch in the first quarter of 2024. This mission aims to provide comprehensive and consistent data about Earth's land and ice-covered surfaces, contributing significantly to understanding various environmental changes.

NISAR's primary objectives include observing and analyzing changes in ecosystems, ice mass, vegetation, biomass, sea-level rise, groundwater, and natural hazards. The satellite's advanced technology, featuring synthetic aperture radar in two frequencies and an antenna reflector, promises greater capabilities than previous missions.

Before its launch, rigorous testing, including vibration, battery, simulation, and performance tests, is underway to ensure the functionality and performance of various spacecraft components.

Notably, the success of NISAR could lead to a mission extension beyond the initial three years. This extension would provide an essential baseline for monitoring and comprehending long-term shifts in Earth's environment, particularly concerning climate change and its impact on various ecosystems and ice sheets.

Ease of control-Indian Express Editorial

Technology

Key takeaways:

1. **Broadcasting Services Bill 2023:** Proposed to replace the 1995 Cable Television Networks Act, aiming for unified regulation over broadcasting, OTT, and digital media. Aligned with "ease of business" vision, but doubts linger over potential hidden control motives.
2. **Government Control Concerns:** Similarities drawn to controversial IT Rules 2021 raise suspicions about the real aim: "ease of control and regulation" versus citizen welfare.
3. **Historical Regulatory Doubts:** Previous BJP media regulations questioned for effectiveness; skepticism over whether the new bill genuinely serves citizens' interests.
4. **Draft Implications:** Ambiguous clauses in the new bill spark worries about minority community representation and censorship potential.
5. **Past Regulation Failures:** 1995 CTNR Act and later amendments didn't tackle core issues like the nexus between illegal cable operators, politicians, and broadcasters.
6. **Conflict of Interest Ignored:** Government overlooks conflicts in media; links between MSOs, politicians, and broadcasters undermine prior regulations' credibility.
7. **Need for Conflict Regulation:** Urgent necessity stressed for conflict-focused regulations; doubts raised about other regulations' genuine benefit for citizens.

Mains easy language:

The essay scrutinizes the Broadcasting Services (Regulation) Bill of 2023, expressing apprehensions about its underlying objectives, akin to past controversial regulations like the IT Rules. Doubts linger regarding whether the bill genuinely prioritizes facilitating a conducive business environment or leans towards a covert motive of exerting control. The narrative underscores historical skepticism towards prior BJP-led media regulations, casting doubt on the bill's alignment with citizen welfare.

A critical analysis of the draft bill unveils ambiguous clauses, raising concerns about potential repercussions on minority representation and the specter of censorship. Drawing from historical context, the essay highlights the inadequacies of previous regulations, notably the 1995 Cable Television Networks Act and its amendments, in addressing the intricate web of conflicts of interest among illegal cable operators, politicians, and broadcasters. These oversights resulted in an opaque and uncontrolled media landscape.

Furthermore, the essay underscores the government's consistent oversight or disregard for regulating conflicts of interest within the media industry. The intertwined relationships between Multiple System Operators (MSOs), politicians, and broadcasting entities have severely undermined the credibility and effectiveness of prior regulatory efforts.

In conclusion, the essay stresses the immediate necessity for regulations explicitly targeting conflicts of interest within the Indian media sector. It raises doubts about the true intentions behind other regulatory measures, suggesting they might prioritize control rather than genuinely fostering fair competition or benefiting citizens.



| Clear your doubts now.



A WIDER GAP-Indian Express Editorial

Economics

Key takeaways:

1. **Export Performance:** India's goods sold abroad increased slightly in October, but they're still lower than they were two years ago. Sectors like pharmaceuticals, electronics, engineering goods, and agriculture did well in terms of growth.
2. **Import Trends:** Importing goods into India has been steadily rising. October showed a significant jump in imports, especially in gold, which doubled compared to previous months.
3. **Trade Deficit Impact:** The trade deficit, which is the gap between what India buys and sells internationally, reached a record high in October at \$31.5 billion. Such a high deficit can negatively affect the value of India's currency, the rupee, against other currencies like the US dollar.
4. **Currency Impact:** When a country imports more than it exports, it can weaken its currency. A weaker currency means that more of that currency (in this case, rupees) is needed to buy the same things from other countries, which can further widen the trade deficit.
5. **Concerns and Monitoring:** Such a substantial trade deficit requires careful attention and monitoring as it can impact the strength of India's currency and have implications for the country's economy.

Mains easy language:

In October, India faced a big problem in its trade with other countries. It bought goods worth a lot more money than what it sold to them. This difference reached a record high of \$31.5 billion, making it the biggest difference in a single month.

When India sells fewer things to other countries and buys a lot more from them, it's called a trade deficit. This imbalance affects the country's currency, the rupee. If India keeps buying more than it sells, the rupee might become weaker compared to other currencies like the US dollar.

Selling goods abroad improved a bit in October, especially in areas like medicines, electronics, and farming products. But overall, the numbers are still lower than they were two years ago. On the other hand, India has been steadily buying more things from other countries. In October, imports went up a lot, especially in gold, which doubled compared to before.

The worry here is that a huge trade deficit can weaken the country's currency. When the currency becomes weaker, it takes more rupees to buy the same things from other countries, making the trade deficit even bigger. So, keeping an eye on this imbalance in trade is crucial to understand its impact on the economy and the value of India's currency.

SAY INDIAN CHEESE-Indian Express Editorial

Sociology

Key takeaways:

1. **Indian Cheese Recognition:** The recent global recognition of Eleftheria Cheese's Brunost at the World Cheese Awards signifies a milestone for India's cheese-making industry on the global stage.
2. **Evolution of Indian Cheese Consumption:** From a minimal understanding and consumption of primarily processed cheese in the past, India's relationship with cheese has evolved significantly.
3. **Indigenous Cheese Varieties:** While processed cheese gained popularity, indigenous varieties like Bandel cheese, Chhurpi, and Kalari have existed in India for centuries, each with its unique origins and regions.
4. **Changing Palates and Mainstream Appreciation:** Over the last three decades, increased access to affordable cheese, even if processed, has led to a widespread appreciation among Indians. This cheese has found its way into everyday foods, enhancing flavors and making them special.
5. **Innovation and Fusion:** The emerging trend of Indianizing European cheeses, like Cheddar with molaga podi or Cabecous infused with pav bhaji masala, highlights the fusion of global and local flavors, showcasing India's readiness to embrace diverse cheese cultures.

Mains easy language:

The recent triumph of Eleftheria Cheese's Brunost at the World Cheese Awards marks a turning point for India's cheese landscape. From an era where cheese was limited to processed variants used as toppings or ingredients, the country has now embraced a diverse array of indigenous cheese varieties. Despite a historical lack of interest in cheese, India boasts unique varieties such as Bandel cheese, Chhurpi, and Kalari, each with distinct regional roots.



| Clear your doubts now.



Over the past three decades, the nation's evolving palate has seen increased access to affordable cheese, which has found its way into everyday Indian dishes, elevating their flavors and making them special. This mainstream acceptance reflects a shift in India's cheese consumption habits, acknowledging the value and versatility cheese adds to culinary experiences.

Furthermore, the innovation in the cheese-making industry is evident through the fusion of European cheese techniques with Indian flavors, as seen in Cheddar infused with molaga podi or Cabecous blended with pav bhaji masala. This trend showcases India's readiness to embrace and experiment with diverse cheese cultures, bridging global techniques with local tastes.

Overall, the recognition of Indian cheese on the global platform signifies a significant leap forward, indicating India's emergence as a proud and evolving participant in the world of cheese-making cultures.

The cost of ambivalence-Indian Express Editorial

Key takeaways

1. **Policy Influences:** India's alcohol policy lacks a primary focus on public health, being influenced more by morality, religion, and revenue.
2. **Societal Ambivalence:** Conflicting attitudes toward alcohol exist, with varied perceptions of acceptable versus harmful use, often influenced by societal status, religion, and cultural beliefs.
3. **Gender Impact:** Women suffer from alcohol misuse by men, sparking social protests. Hypocrisy surrounds public condemnation and private endorsement of alcohol.
4. **Religious and Cultural Views:** Balancing acts occur, with some religions forbidding alcohol while society permits it on certain days, reflecting a nuanced approach.
5. **WHO Policy Shift and Indian Response:** India hasn't fully embraced the WHO's 'no alcohol is good' stance due to revenue concerns, resulting in conflicting state policies.
6. **Political and Bureaucratic Influence:** Revenue-driven policies prevail, leading states to favor alcohol sales despite health concerns, with bureaucracy lacking a health-focused approach.
7. **Lack of Comprehensive Health Strategy:** Weak enforcement plagues measures like licensing, taxation, and awareness. Surrogate alcohol advertising persists without legislative action.
8. **Need for Dialogue and Reform:** Open discussions are vital to address societal hypocrisy, debating traditionalism, modernism, religious influences, and health versus revenue trade-offs for a coherent national alcohol policy.

Mains easy language:

The synopsis revolves around India's complex relationship with alcohol, influenced by morality, religion, revenue, and health concerns. The policy landscape lacks a unified approach, driven by conflicting influences rather than a primary focus on public health.

Society grapples with an ambivalent stance toward alcohol, evident in varying views on acceptable versus harmful consumption. Women often suffer the consequences of alcohol misuse by men, leading to societal protests, while hypocrisy surrounds public condemnation despite private endorsement of alcohol consumption.

Religious and cultural perspectives further complicate matters, with some religions forbidding alcohol while society adopts a nuanced approach by permitting it on specific occasions.

The World Health Organization's revised stance on alcohol contrasts with India's policy, which remains conflicted due to revenue considerations, leading to divergent state-level approaches.

Political and bureaucratic influences prioritize revenue generation over health implications, resulting in policies favoring alcohol sales despite associated health concerns. Enforcement of measures such as licensing, taxation, and awareness remains weak, allowing continued violations like surrogate advertising.

The article emphasizes the necessity of open, non-judgmental dialogues in society to address this societal hypocrisy and conflicting attitudes. It advocates for a rational, health-oriented national alcohol policy, urging discussions on the balance between tradition and modernism, religious influences, and the trade-offs between health concerns and revenue generation.

APEC-Indian Express Explained

International relations

Key takeaways:



| Clear your doubts now.



1. **APEC Summit and Biden-Xi Meeting:** The APEC (Asia-Pacific Economic Cooperation) summit, held in California, is a regional economic forum established in 1989. It focuses on fostering economic integration and prosperity among its 21 member economies located around the Pacific Rim.
2. **Participants:** The 21 member economies of APEC include Australia, Brunei, New Zealand, Papua New Guinea, Hong Kong (as part of China), the Philippines, Indonesia, Malaysia, Vietnam, Singapore, Thailand, Chinese Taipei (Taiwan), China, Japan, South Korea, Russia, Canada, the United States, Mexico, Peru, and Chile.
3. **APEC's Objectives:** APEC advocates for free trade, reduction of trade barriers, and economic liberalization. Its early objectives included the establishment of a liberalized free trade area around the Pacific Rim, as outlined in the 1991 Seoul Declaration.
4. **India's Interest in APEC:** India formally requested to join APEC in 1991. The country's interest in joining was based on its geographical location, the potential size of its economy, and its degree of trade interaction with the Asia-Pacific region.
5. **Biden-Xi Meeting:** US President Joe Biden and China's President Xi Jinping were scheduled to meet at the APEC summit, signifying a significant diplomatic encounter amidst the ongoing multilateral discussions.

Mains easy language:

The APEC (Asia-Pacific Economic Cooperation) summit is a pivotal regional economic forum established in 1989, aimed at fostering economic integration and prosperity among its 21 member economies surrounding the Pacific Rim. Notable participants include countries such as the United States, China, Japan, Australia, and others.

APEC champions free trade, aims to lower trade barriers, and advocates for economic liberalization. Its objectives, outlined in the 1991 Seoul Declaration, include creating a liberalized free trade area around the Pacific Rim.

India, since 1991, has shown interest in joining APEC based on its strategic geographical location, the potential size of its economy, and its trade interactions within the Asia-Pacific region. Despite its interest, India's formal entry into the forum remains pending.

The recent APEC summit held in California gathered global attention, notably featuring a meeting between US President Joe Biden and China's President Xi Jinping, highlighting significant diplomatic engagements amidst the ongoing multilateral discussions.

Overall, APEC serves as a crucial platform for promoting economic cooperation and facilitating discussions on trade-related matters among its member economies, while India continues to express interest in becoming a part of this influential regional economic forum.

To build tunnel, rock must be thoroughly examined..., more time spent on studies -Indian Express Explained

Economics

Key takeaways:

1. **Tunnel Collapse:** An under-construction tunnel on the Yamunotri National Highway in Uttarakhand collapsed, trapping 40 workers inside. Possible causes include weak patches of fractured rock or water seepage, although a comprehensive investigation is needed for a definitive conclusion.
2. **Tunnel Excavation Methods:** Tunnels are excavated using two primary methods: Drill and Blast Method (DBM) involving explosives, and Tunnel Boring Machines (TBMs) which bore and support the tunnel simultaneously using rotating heads and precast concrete segments.
3. **Terrain and Excavation Methods:** Terrain influences excavation methods; TBMs are suitable for rock cover up to 400 meters tall, while DBM is used in regions like the Himalayas due to the mountainous terrain.
4. **Himalayan Tunnel Construction:** The Himalayas have varied rock conditions, some areas being fragile while others are stable. Proper investigations and technological solutions are key to overcoming challenges.
5. **Tunnel Construction Prerequisites:** Thorough rock investigation via seismic refraction waves and core sample analysis is crucial. Monitoring, appropriate support systems, and expert geological evaluations are necessary for stable tunnel construction.
6. **Current Rescue Operation:** Due to the collapsed tunnel, rescuers plan to use a trenchless technique by drilling horizontally underground using an auger machine. Mild steel (MS) pipes will be inserted to create a stable passage.

Mains easy language:

The collapse of a tunnel being constructed in Uttarakhand trapped 40 workers inside, likely due to weak rocks or water seepage. Tunnel construction involves methods like explosives or Tunnel Boring Machines (TBMs), chosen based on rock hardness. In the Himalayas, rough terrains often rely on explosives for tunneling.



| Clear your doubts now.



The Himalayas present varied rock types—some strong, some fragile. However, engineers have solutions, beginning with detailed studies before construction. Special machines assess rock strength, allowing experts to create safer tunnels despite fragile rock in certain areas.

Currently, rescuers aim to aid trapped workers using an innovative approach. Instead of large machines that could worsen conditions, they plan to employ an auger machine to dig sideways. This method aims to create a secure passage using strong pipes, ensuring the workers' safe escape without further disrupting the collapsed area.

Building tunnels, especially in challenging terrains like the Himalayas, demands meticulous planning and rock analysis. The Uttarakhand incident underscores safety's paramount importance in tunnel construction. The rescue team's unconventional method prioritizes safety, providing a way for trapped workers to escape without escalating the situation.

Ultimately, thorough geological studies, innovative solutions, and prioritizing safety remain integral in tunnel construction, especially in regions with diverse rock conditions like the Himalayas. The current rescue operation showcases a thoughtful approach aiming to aid trapped workers while minimizing risks of exacerbating the collapsed tunnel.

17th November 2023

MORE TO INDIA'S POWER-Indian Express Editorial

Economics

Key takeaways:

1. **Economic Ascendancy:** India's rapid economic growth, supported by reforms and a large domestic market, positions it among the fastest-growing economies globally, aiming for the five-trillion dollar milestone and a prominent global ranking.
2. **Soft Power Expansion:** India's cultural richness, diverse achievements, and newfound confidence contribute significantly to its soft power. Notably observed in successful global engagements, sports achievements, film industry excellence, and cultural exports.
3. **Global Participation:** Initiatives like the Quad, World Yoga Day, and forums like the Indo-Pacific Economic Forum (IPEF) serve India's security and economic interests, emphasizing active engagement in global discussions and advocacy for equitable solutions.
4. **Environmental Stewardship:** India showcases proactive environmental stewardship, as seen through initiatives like International Yoga Day and proposals at COP26, highlighting its commitment to global environmental protection and sustainability.
5. **Influential Advocacy:** Active participation in global discussions positions India as a voice of reason, advocating for equitable solutions and shaping international agendas on vital issues such as sustainability, energy security, and resilient supply chains.
6. **Diaspora Contribution:** The Indian diaspora plays a pivotal role in promoting Indian culture and values globally, contributing significantly to India's rising influence and showcasing its economic success, offering hope to citizens worldwide.
7. **Soft Power for Positive Change:** Leveraging India's soft power, encompassing economic growth, cultural richness, global engagements, and environmental stewardship, will enable the nation to be a catalyst for positive global transformations.

Mains easy language:

India's rise isn't merely confined to its economic success but extends to a burgeoning soft power that emanates from its culture, achievements, and global engagements. Economic growth, supported by reforms and a vast domestic market, positions India as a significant global player, aiming for a five-trillion dollar economy and a prominent global rank.

This ascendancy isn't limited to economic metrics; India's soft power, evident in various facets like successful global engagements such as the G20 Presidency, sports achievements, film industry excellence, and cultural exports, adds depth to its global influence. Initiatives like the Quad, IPEF, and International Yoga Day further India's interests while showcasing its traditions and values.

India's proactive stance on global issues, especially on the environment, strengthens its position as a responsible global player. However, leveraging this influence isn't solely the government's duty. It necessitates collaborative efforts from various sectors to promote India's culture, values, and contribute positively to global transformations. As India steps into the global spotlight, capitalizing on its soft power will enable it to be a force for positive change on the international stage.





Her knock on closed doors-Indian Express Editorial

Sociology

Key takeaways:

1. **Prevalence of Domestic Violence:** Many women endure various forms of abuse within their homes, including physical, emotional, and coerced actions, depicting the widespread nature of domestic violence.
2. **Laws vs. Insufficient Support:** Despite existing laws against such abuse, women often face inadequate support from law enforcement and judicial systems. Their complaints are sometimes dismissed or not taken seriously enough.
3. **Limited Assistance from Authorities:** When seeking help from the police, women are frequently discouraged, advised to resolve issues at home rather than receiving necessary legal assistance.
4. **Blame and Discouragement:** Media and courts sometimes blame women for misusing laws, which creates hesitation among women to seek legal support when facing domestic violence.
5. **Need for Strengthened Support Systems:** Women require increased support from law enforcement and judicial authorities to effectively address and seek justice for domestic violence cases.
6. **Escalating Reports of Abuse:** Records indicate a rise in reported incidents, emphasizing the urgency to address and combat the severity of domestic violence issues.
7. **Urgent Need for Enhanced Assistance:** It is vital to improve support systems, ensuring authorities take women's complaints seriously, to effectively tackle the persisting problem of domestic violence.

Mains easy language:

Despite legal provisions against domestic violence in India, women still endure severe physical, emotional, verbal, and sexual abuse within their homes. Reports highlight a worrying increase in crimes against women, yet the legal system continues to fail in ensuring justice for victims.

Section 498A of the IPC, introduced to address cruelty against women, has not led to significant improvements due to widespread police reluctance to file FIRs in domestic violence cases. Police often dissuade women from filing complaints, opting for counseling and reconciliation, leading to despair and sometimes tragic consequences.

Moreover, judicial comments that blame women for misusing laws and media sensationalism add to the narrative, discouraging women from seeking legal recourse. The burden is often placed on victims rather than questioning the oversights of law enforcement agencies and the judicial process, leading to further obstacles for women seeking justice against domestic violence.

'Crime' of adultery: What SC ruled and why-Indian Express Explained

Key takeaways:

1. **Legal Evolution of Adultery in India:** Until 2018, Section 497 of the IPC criminalized adultery but penalized only men, not women. The Supreme Court in 2018 nullified this discriminatory provision.
2. **Recommendation for Reinstating Adultery as a Criminal Offense:** The BNS, 2023 committee, proposed reinstating adultery as a crime but in a gender-neutral manner to protect the sanctity of marriage.
3. **Issues with the Recommendation:** Reintroducing adultery as a crime contradicts the Supreme Court's stance, which viewed Section 497 as discriminatory and a violation of constitutional rights.
4. **Contrast Between Recommendations and Constitutional Rights:** The committee's proposal conflicts with the evolving societal ethos of individual autonomy and women's rights within marriages.
5. **Legislative Limitations in Overturning the Supreme Court's Decision:** Parliament cannot pass laws directly contradicting the Supreme Court's rulings but can enact legislation addressing court concerns, aligning with constitutional rights.
6. **Considerations for Reintroducing Adultery as a Criminal Offense:** Any potential reintroduction of adultery as a crime must address the constitutional concerns raised by the Supreme Court, considering individual autonomy and constitutional rights within marriages and personal relationships.

Mains easy language:

In the past, India had a law that punished men for having affairs outside marriage but didn't apply the same punishment to women. However, the Supreme Court said this law was unfair in 2018 because it treated men and women differently.

Now, a committee wants to bring back a law that makes it a crime for both men and women to have affairs outside marriage. They think it's essential to protect the idea of marriage as very important in our society.



| Clear your doubts now.



But this suggestion doesn't match what the Supreme Court previously decided. The Court explained that such a law could take away people's rights and dignity, especially women's rights. They believe that privacy within marriages should be respected, and having an affair should be a reason for divorce, not a criminal offense.

The committee's idea clashes with the Court's decision, and Parliament can't directly ignore what the Court has said. If they want to change things, they have to think about what the Court said and make sure any new law respects people's rights, especially in marriages and personal relationships.

India and the US-China truce-Indian Express Explained

International relations

Key takeaways:

1. **US-China Meeting Was About Making Peace, Not Friendship:** The recent meeting between US President Biden and China's President Xi was more about stopping fights between them rather than becoming close friends.
2. **The Meeting is Important for the Whole World:** Everyone is interested in this meeting because how the US and China get along affects many countries and regions worldwide.
3. **India Doesn't Need to Worry Much:** India doesn't have to be too concerned about big changes happening between the US and China. What happened at the meeting won't drastically change things immediately.
4. **India Should Watch AI and Business Moves:** India needs to pay attention to how the US and China plan to regulate artificial intelligence (AI) and how China is trying to attract back American business leaders.
5. **Focus on Indo-Pacific Security:** India should keep an eye on what the US and China talk about regarding security in the Indo-Pacific area, the Middle East crisis, and the situation in Ukraine.
6. **China Seems Less Aggressive Now:** The leader of China is now talking less aggressively about becoming the most powerful country in the world. He wants China and the US to coexist peacefully.
7. **US Wants Talks, But Keeps Some Restrictions:** The US wants to talk to China to make things stable but still keeps some rules limiting business and technology cooperation with China.
8. **US Has Made Friends in Asia But Faces Problems Elsewhere:** The US has made stronger friendships in Asia but has big problems in Europe and the Middle East. It needs to talk to China to keep things calm.
9. **India's Strategy Is Important:** India needs to use its position smartly by being friends with the US, managing relations with Russia, and handling difficulties with China.
10. **No Big Changes Expected Soon:** It doesn't seem like anything major will change between the US and China right away, which gives India some time to see how things go in the big countries' relations.

Mains easy language:

The recent meeting between the leaders of the United States and China wasn't about becoming close friends but stopping fights between the two countries. People all around the world were interested in this meeting because how these two powerful countries get along affects many other countries too.

India doesn't need to worry too much about this meeting changing things drastically right away. However, it should pay attention to how the US and China plan to regulate artificial intelligence (AI) and how China tries to attract American business leaders back.

India should also keep an eye on what the US and China talk about regarding security in the Indo-Pacific area, the Middle East crisis, and the situation in Ukraine.

The leader of China seems less aggressive now. He talks about peacefully coexisting with the US rather than becoming the most powerful country in the world. The US wants to talk to China to make things stable, but it still keeps some rules that limit business and technology cooperation with China.

The US has made good friendships in Asia but faces big problems in Europe and the Middle East. It needs to talk to China to keep things calm in these regions.

India needs to use its position wisely by being friends with the US, managing relations with Russia, and handling difficulties with China.

For now, it doesn't seem like anything big will change between the US and China immediately. This gives India some time to see how things go between these two major countries.

Challenging the Electoral Bond Scheme-The Hindu Editorial

Polity



| Clear your doubts now.



Key takeaways:

1. **Electoral Bond Scheme (EBS) Background:** The Electoral Bond Scheme was introduced in India in 2018 as an attempt to encourage political donations through banking channels, supposedly aimed at cleaning up electoral funding.
2. **Opacity in Corporate Donations:** Political parties depend significantly on big businesses for funding, leading to a lack of transparency and public scrutiny regarding the sources of their funds. The EBS further obfuscates the identity of corporate donors.
3. **Legislative Changes and Opposition:** The amendments made in the legal framework of corporate donations through acts like the Finance Act of 2016 and 2017 were met with opposition and legal challenges. Critics argue that these changes erode transparency and promote corrupt practices.
4. **Challenges and Petitions:** The Association for Democratic Reforms (ADR) and Common Cause filed a PIL challenging the constitutionality of these amendments, asserting that they jeopardize transparency, autonomy, and promote opaque connections between politics and big business.
5. **Electoral Bond Dominance:** Electoral bonds have become the favored mode of political donations, with a significant percentage of donations received through these bonds, especially by major political parties.
6. **Impact on Elections:** The use of electoral bonds provides a significant advantage to incumbent political parties in influencing voter behavior and electoral outcomes.
7. **Legal Battle and Supreme Court's Response:** The Supreme Court rejected pleas to stay the electoral bond scheme, emphasizing the possibility for voters to deduce information by comparing corporate filings with political party accounts, although such disclosures lack disaggregated information about bond transactions.
8. **Anonymity of Donors:** The government has stressed the need to protect donor anonymity, citing it as a way to safeguard them from potential retribution, although critics argue that this level of anonymity favors corporate donors over individual contributors.
9. **Pending Constitutional Challenge:** The PIL challenging the constitutionality of electoral bonds has faced periods of activity and inactivity. The hope remains that the Supreme Court will rule in favor of transparency and empower voters for more informed choices in elections.

Mains easy language:

The Electoral Bond Scheme in India has been critiqued for its opacity, allowing corporate donors to contribute without disclosing their identities. Legislative changes have been challenged in courts, asserting that these amendments erode transparency, incentivize corruption, and establish a more opaque nexus between politics and big business.

Electoral bonds have become a prominent mode of political donations, significantly benefiting incumbent parties and impacting electoral outcomes. Despite challenges in court, including a plea to stay the scheme, the Supreme Court's response emphasizes the possibility for voters to deduce information, although such disclosures lack necessary details for comprehensive analysis.

The government's argument for protecting donor anonymity faces criticism, especially concerning corporate donors receiving greater protection than individual contributors. The hope is pinned on the judiciary to ensure a fair and transparent electoral process, empowering voters with the right information for informed decision-making in future elections.

Branded, generic and the missing ingredient of quality-The Hindu Editorial

Sociology

Key takeaways:

1. **Medical Shop Opinions:** Patients often trust unqualified sellers in medical shops over doctor's prescriptions. This trust is unique to medicine purchase, unlike other harmful products.
2. **Generic vs. Brand:** The NMC's directive for generic prescriptions faced protests due to concerns about cost and quality differences between generic and branded medicines.
3. **Quality Concerns:** Doubts persist regarding certain branded companies offering better quality drugs, raising concerns about alleged links between pharmaceutical companies and doctors.
4. **Quality Control Needed:** National drug surveys highlight the prevalence of substandard medicines, necessitating stringent measures and periodic testing.
5. **Government's Role:** Government needs to enforce stringent measures, ban substandard drugs, and penalize errant manufacturers to ensure medicine quality.
6. **Prescription Practices:** Until assured of medicine quality, doctors should be allowed to specify trusted company names in generic prescriptions.



| Clear your doubts now.



7. **Essential Medicine Availability:** There should be a ban on unscientific drug combinations, with essential medicines prioritized over non-essential ones.
8. **Affordable Medicine Access:** Policies for free medicines and diagnostics need proper execution under Universal Health Care. Regulating profit margins is crucial for affordability.
9. **Policy Reversals:** The withdrawal of the generic prescribing order could obstruct the goal of providing affordable generic medicines without brand names.

Mains easy language:

In India, people often trust the advice of medicine shopkeepers more than doctor prescriptions when buying medicines. There's a debate on whether doctors should write generic (like 'paracetamol') or brand names (like 'Crocin') in prescriptions, considering cost and quality differences. Concerns persist about the effectiveness of expensive branded medicines compared to cheaper generics and potential influences on doctors by big companies.

Ensuring medicine safety is crucial. People demand stringent government rules and regular checks to guarantee the safety of medicines sold in shops. The government's responsibility is significant: it needs strict regulations, penalties for substandard medicines, and assurance that only safe drugs are available.

To establish trust in prescriptions, some suggest allowing doctors to mention trusted company names for generic medicines until safety is assured. However, potential policy changes might hinder access to cheaper medicines without brand names, affecting those relying on affordable healthcare.

The focus remains on ensuring safe, affordable medicines for everyone, addressing concerns about influences on prescriptions and maintaining trust in medicine quality.

War in Myanmar-The Hindu Editorial

International relations

Key takeaways:

1. **Ethnic Rebel Offensive:** Myanmar's ethnic rebels launched a coordinated offensive against the junta, claiming territorial gains and prompting clashes in various regions. The junta responded with air strikes, causing civilian casualties.
2. **Junta's Crackdown:** Since the coup in February 2021, the military junta has violently suppressed protests, leading to thousands of civilian deaths, imprisonments, and displacement of millions.
3. **Shift in Political Dynamics:** The pro-democracy movement, once led by Aung San Suu Kyi with peaceful resistance, has evolved. It formed an underground government, collaborated with ethnic rebels, and now challenges the junta militarily.
4. **Challenges for the Junta:** The rebel offensive has caused territorial losses for the junta, contributing to its mounting difficulties. The military-led regime faces regional isolation, particularly within ASEAN.
5. **Call for Dialogue:** Rebels, led by new diverse leaders, urge the junta to withdraw from politics, propose a federal democratic system, and seek greater autonomy for ethnic minority regions. They advocate for talks to restore democracy and peace.
6. **Need for Regional Involvement:** Regional powers, including ASEAN, need to take proactive steps to facilitate a ceasefire and meaningful dialogue in Myanmar. Continued violence may have broader regional consequences.

Mains easy language:

Myanmar witnessed a recent offensive by ethnic rebels against the ruling junta, resulting in clashes and territorial shifts. The junta's violent suppression following the 2021 coup led to numerous civilian casualties, displacements, and a severe crackdown on dissent.

What sets this period apart is the transformed pro-democracy movement, which shifted from peaceful resistance to forming an underground government and aligning with ethnic rebels. This unexpected alliance challenges the junta's control and has caused significant territorial setbacks.

The junta faces growing difficulties, including territorial losses and regional isolation, prompting calls for dialogue from the rebels. They seek a federal democratic system and greater autonomy for ethnic regions, emphasizing the need for peaceful negotiations to restore democracy.

For regional stability, major stakeholders, particularly ASEAN members, must play an active role in initiating a ceasefire and fostering meaningful discussions. The continued violence in Myanmar poses broader regional implications, making a peaceful resolution imperative.





Should elections be state funded?-The Hindu Text and Context

Polity

Key takeaways:

Public Funding of Elections: Referring to it as "public" rather than "state" funding is crucial to emphasize that it's the citizens' money supporting elections.

Transparency in Election Process: Public funding can bring transparency, but its success depends on how it's implemented and monitored.

Viability of Public Funding: Reports suggest public funding is desirable to a certain extent, emphasizing the need for transparency, democracy within political parties, and a reliable mechanism to ensure no additional funds are accepted.

Challenges and Models: There's a lack of clarity on how public funding would work practically. Different countries have various models, but transparency requirements are crucial in most cases.

Political Parties and Accountability: Political parties' functioning as corporate entities and lack of internal democracy are significant concerns. Accountability and democratic principles are crucial if they are to receive public funds.

Mains Synopsis:

The debate over public funding of elections versus the existing system centers around transparency and accountability in the election process. Calling it "public" rather than "state" funding aims to establish citizens' ownership of the funds.

While public funding is perceived as desirable, ensuring transparency poses challenges. Reports highlight the necessity for strict monitoring, internal democracy within political parties, and mechanisms preventing additional funding sources.

Various models exist globally, but transparency norms are common among countries implementing public funding. The debate also underlines concerns about political parties functioning as corporate entities rather than democratic institutions, raising questions about their accountability to the public.

The viability of public funding depends on a clear framework, including transparent monitoring and ensuring political parties' adherence to democratic principles. The discussion emphasizes the need for stringent measures to prevent external financial influences in the electoral process.

How was the first vaccine for chikungunya approved?-The Hindu Text and Context

Science

Key takeaways:

1. **First Chikungunya Vaccine Approval:** The FDA approved the world's inaugural chikungunya vaccine, named Ixchiq, manufactured by Valneva, designed for individuals aged 18 and above at increased risk of chikungunya exposure.
2. **Chikungunya Disease:** Characterized by severe joint pain, fever, and impaired mobility, it is transmitted by *Aedes aegypti* and *Aedes albopictus* mosquitoes, considered an emerging global health threat with sporadic outbreaks across regions.
3. **Symptoms and Impact:** Chikungunya symptoms include joint pain, muscle pain, headache, nausea, fatigue, and rash. It's often misdiagnosed, with no known cure, offering only symptomatic relief using analgesics, antipyretics, rest, and adequate fluids.
4. **Prevention and Control:** Prevention methods include mosquito control activities, public health outreach, civic maintenance, and personal protective measures like using medicated mosquito nets and eliminating stagnant water sources.
5. **Vaccine Composition and Role:** The Ixchiq vaccine comprises a weakened chikungunya virus administered as a single dose via injection, causing similar symptoms to the disease. Clinical studies show effectiveness in generating an immune response, with common side effects reported.

Mains Synopsis:

The recent FDA approval of the world's first chikungunya vaccine, Ixchiq, marks a crucial milestone in combating this debilitating viral infection. Characterized by severe joint pain, fever, and mobility issues, chikungunya poses a global health threat, with outbreaks reported in various regions.

The disease's symptoms, often mistaken for dengue or zika, lack a specific cure, offering only symptomatic relief. Prevention primarily involves mosquito control and individual protective measures, emphasizing public health outreach and civic maintenance to reduce mosquito breeding grounds.



| Clear your doubts now.



Ixchiq's approval follows clinical trials showcasing its effectiveness in generating an immune response against chikungunya. Despite reported side effects, the vaccine's approval addresses an unmet medical need and provides hope for better management in regions where chikungunya prevalence is higher, like Brazil, Paraguay, India, and parts of western Africa.

The accelerated pathway for vaccine approval, similar to those developed for COVID research, may expedite the rollout in countries with high chikungunya prevalence, offering a promising tool in the fight against this debilitating disease.

18th November 2023

The geopolitical fallout of the Israel-Hamas war-The Hindu Editorial

International relations

Key takeaways:

1. **Changes in Focus:** The US was starting to pay less attention to the Middle East and wanted to bring Israel and Gulf nations closer together.
2. **Shifting Alliances:** Gulf countries changed their policies as the US focused less, allowing China to help Saudi Arabia and Iran talk and agree on some things.
3. **Hamas's Reaction:** Hamas, controlling Gaza, was okay with Saudi Arabia and Iran talking but didn't like Saudi Arabia making friends with Israel, which occupies land Palestinians claim.
4. **Hamas's Move's Impact:** Hamas attacked Israel to get people to notice the Palestinian issue and mess up possible peace talks between Saudi Arabia and Israel. Israel reacted strongly.
5. **Feelings in Arab Nations and Iran:** Many Arabs protested Israel's actions, while Iran spoke strongly in support of Palestine to bring Muslim nations together.
6. **Saudi Arabia's Response:** Pressure from Arab people made Saudi Arabia tie the Palestinian issue back to talks with Israel, going against what the US and Israel wanted.
7. **Uncertainty and Changes:** Israel's plans in Gaza are not clear, and Arab countries are trying to do more on their own, dealing with China and Russia instead of relying only on the US.
8. **Limits to US Influence:** The US supporting Israel strongly in this situation is making it harder for them in a changing Middle East where other big countries like China and Russia are becoming more involved.

Mains easy language:

In recent times, the US began to pay less attention to the Middle East, wanting to strengthen relationships between Israel and Gulf countries. This shift allowed China to help Saudi Arabia and Iran talk things out. However, a group called Hamas, controlling Gaza, wasn't happy about Saudi Arabia getting cozy with Israel, which occupies Palestinian land.

Hamas attacked Israel to grab attention for the Palestinian cause and disrupt possible peace talks between Saudi Arabia and Israel. Israel hit back hard, causing a stir in Arab nations, while Iran spoke up strongly for Palestine.

This caused a twist: Saudi Arabia felt pressure from its people and connected the Palestinian issue back to talks with Israel, which went against what the US and Israel wanted.

Now, Israel's plans in Gaza are uncertain, and Arab nations are trying to make their moves without relying too much on the US. This situation shows how supporting Israel strongly might make things tough for the US in a changing Middle East where other powerful countries are getting more involved.

Building the floor-The Hindu Editorial

International relations

Key takeaways:

1. **US-China Summit:** The recent meeting between President Biden and President Xi aimed to stabilize the tense relationship between the two nations.
2. **Outcome of Summit:** While major differences weren't resolved, the summit resulted in agreements to restart military communication and discuss safety in artificial intelligence.
3. **Establishing a Floor:** Both sides referred to establishing a base for their relationship, attempting to stabilize ties that have been tumultuous recently.
4. **Future Concerns:** Tensions might escalate due to upcoming events like Taiwan's elections and the US entering election mode, leading to increased rhetoric against China.



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5. **Fundamental Disagreement:** There's a fundamental difference in how both nations view their relationship—whether they're adversaries or partners. This remains a significant hurdle.
6. **Need for Engagement:** Both countries acknowledge the importance of maintaining open channels to prevent competition from escalating into conflict.

Mains easy language:

The recent meeting between the leaders of the US and China aimed to ease tensions between the two countries. While they didn't solve major issues, they agreed to discuss military matters and the safety of advanced technology.

Both sides talked about creating a more stable relationship, like laying a solid foundation. However, upcoming events, such as Taiwan's elections and the US gearing up for its own elections, might make things worse between them.

The big disagreement is whether they're rivals or partners. They both think they should talk more to avoid fighting, but they have different ideas about what their relationship should be in the future.

This situation holds important lessons for India's relationship with China, especially considering the ongoing border tensions. It's crucial for nations to keep talking and establish a strong base to avoid major conflicts between powerful countries.

In simple terms, the US and China met to calm things down, but they still have a lot to figure out. Their future interactions will depend on upcoming events and their differing views on their relationship. It's a reminder for countries like India to keep communicating to prevent big problems between big nations.

State of the economy — temper the euphoria-The Hindu Editorial

Economics

Key takeaways:

1. **Improved Growth Prediction:** The IMF has revised India's expected GDP growth for 2023-24 to 6.3%, indicating a positive trend amid a global economic slowdown. This suggests a degree of confidence in India's economic rebound and its ability to weather global economic challenges.
2. **Post-Pandemic Recovery:** India faced a significant economic setback during the COVID-19 pandemic. However, it's now exhibiting signs of recovery. Despite this positive outlook, there are lingering concerns about the quality of jobs created and the persisting high prices of essential goods, which affect the common people and might slow down the pace of recovery.
3. **Persistent Concerns Amid Recovery:** While the economic recovery is a positive indicator, critics and experts express worries about the sustainability and inclusiveness of this growth. Issues like unemployment, underemployment, and inflation in essential commodities are yet to be adequately addressed.
4. **Growing Deficit with China:** India's substantial trade deficit with China remains a critical concern. The country heavily relies on imports from China, leading to economic vulnerabilities and dependency issues. Efforts to reduce this trade deficit have not shown significant success yet.
5. **Declining Industrial Growth:** India's industrial growth and investment rates have been dwindling, raising concerns about the nation's economic progress. This decline could impact job creation and the overall strength of the economy in the long term.
6. **Challenges in Human Development:** India's ranking in global human development metrics has experienced a dip, indicating slower progress compared to other nations. This emphasizes the need for a more holistic approach to development beyond just economic indicators.

Mains easy language::

India's economy is getting better after facing tough times during the COVID-19 pandemic. The country's growth is picking up, but there are worries. Many people are still struggling to find good jobs, and the prices of essential things like food are still high, making it hard for some to afford them.

India buys more goods from China than it sells to them. This creates an economic problem because it can make India depend too much on China. Also, the factories in India that make things aren't growing as much as they should, which means fewer jobs for people.

While there's progress, some people aren't feeling its benefits. They're concerned about jobs, prices, and how the country trades with others. India needs to make more things in its own factories, balance its trade with other countries, and ensure that everyone benefits from the improving economy.



| Clear your doubts now.



It's important for India to work on these challenges to make sure everyone has good opportunities for work, essential things are affordable, and the country's economy stays strong and grows well.

Education and pollution-Indian Express Editorial

Environment

Key takeaways:

1. **Leadership Failure:** The incident of continuing with an open-air sports day despite severe pollution signifies leadership failure in prioritizing children's health over traditional events, highlighting the need for a change in decision-making approaches and proactive measures for health protection.
2. **Fear of Objecting:** Fear among staff and parents stifles objections, creating a culture of silence that hinders necessary changes, despite evident risks like health hazards from pollution.
3. **Subjective Perception:** Different generations perceive environmental decay differently; elders notice changes while the younger generation accepts degradation as the norm, impacting urgency in addressing issues.
4. **Incremental Decay:** Gradual environmental deterioration lacks the immediacy of dramatic events, hindering discussions and actions addressing climate change and sustainable development.
5. **Media Neglect:** Media often overlooks environmental issues like air pollution, focusing on positives, reducing awareness and urgency surrounding severe problems.
6. **Limited Concern:** Despite warnings, inadequate actions persist regarding air quality issues, reinforcing societal prioritization of routine over critical health and environmental concerns.

Mains easy language:

The people in charge didn't think it was essential to protect kids' health during a special event at school. They should have because pollution made the air bad, but they chose to continue as usual. Some teachers and parents were scared to say anything because they were worried they might get in trouble. This fear stopped them from speaking up, even though they knew the pollution was risky for the children.

The way people see changes in nature is different. Older people notice when things are getting worse, but younger ones might not realize it because they haven't seen the difference. The problems with nature are happening slowly, not suddenly like big disasters, so some people don't think it's urgent to fix them.

The news on TV and in newspapers doesn't talk much about the problems with the air and the environment. They mostly talk about other things, so many people don't know how serious the problems are. Even when doctors warn about the bad air, not much gets done to make it better. People care more about their daily routines than making sure the air is clean and healthy for everyone.

COP28 in Dubai: What to expect from climate meeting-Indian Express Explained

Environment

Key takeaways:

1. **Inadequate Climate Action:** Despite global efforts, current commitments to combat climate change fall short, with projections suggesting insufficient reductions in emissions and inadequate financial support for adaptation in developing countries.
2. **COP28 Expectations:** The upcoming climate conference, COP28 in Dubai, aims to address crucial climate issues by focusing on renewable energy expansion, financial commitments, creating loss and damage funds, conducting global assessments, and debating the phase-down of fossil fuels.
3. **Renewable Energy Goals:** Plans to triple renewable energy capacity by 2030 are endorsed by major nations. While this move might not drastically reduce emissions, it remains a significant step toward meeting climate goals, particularly considering other actions might only reduce emissions by a fraction.
4. **Financial Commitments:** Developed countries aim to meet their long-pending promise of mobilizing \$100 billion annually for climate finance. However, discussions focus on surpassing this amount to effectively address climate challenges.
5. **Loss and Damage Fund:** There's an anticipated flow of funds into the Loss and Damage Fund, meant to assist nations affected by climate impacts, signaling progress in addressing concerns of vulnerable countries.
6. **Global Stocktake:** Mandated by the Paris Agreement, this stocktake exercise assesses countries' progress in combating climate change and informs future actions, with findings to be presented at COP28.



| Clear your doubts now.



7. **Fossil Fuel Debate:** Disagreements persist regarding a scheduled phase-down or phase-out of fossil fuels, particularly coal, with no conclusive resolution expected at the Dubai meeting.

Mains easy language:

The world isn't doing enough to tackle climate change. A big meeting called COP28 is happening in Dubai soon to try and fix some of these problems. This year has been really hot, and experts say it's going to get worse. Right now, the plans countries made to fight climate change aren't good enough. They're not reducing pollution by much, and they're not giving enough money to help countries that are suffering because of climate change.

At this meeting, they want to make some important decisions. They're talking about making more clean energy like solar and wind power, which could help stop a lot of pollution. Also, rich countries promised to give \$100 billion every year for climate problems, but they haven't kept that promise yet. Now, they want to make a plan to get even more money to fix climate issues.

There's a fund called the Loss and Damage Fund meant to help countries affected by climate disasters, but until now, nobody has put money into it. They're hoping to change that at this meeting.

Another thing they're going to do is to look at how well countries are doing in fighting climate change. They'll talk about what needs to be done in the next few years to make things better.

However, one big problem they're not sure how to solve is using less coal and oil. Some countries disagree about reducing the use of these fossil fuels. It's a tricky issue that they probably won't solve at this meeting.

Proposed India-UKFTA, its politics, and why the UK may benefit more-Indian Express Explained

Economics

Key takeaways:

1. **India-UK Free Trade Agreement (FTA):** India and the UK are negotiating an FTA that could shape future trade deals for India, aiming to shift trade focus away from China and diversify toward Western nations.
2. **Impact of Brexit and China:** Post-Brexit, the UK seeks compensation for losing access to the European market by pursuing an FTA with India. Concerns over China's dominance prompt strategic shifts in trade discussions.
3. **Gains and Concerns for India:** An FTA might benefit India's labor-intensive sectors but raises worries about affecting Least Developed Countries like Bangladesh due to reduced tariffs on Indian exports.
4. **Potential Benefits for the UK:** Tariff reductions on UK exports to India could improve market access. However, Indian imports into the UK face lower average tariffs compared to UK exports to India.
5. **Non-Tariff Barriers (NTBs) and Regulatory Concerns:** Negotiations might address NTBs that hinder Indian exports, particularly in agriculture and manufacturing, related to standards and technical requirements.
6. **Carbon Tax Challenges:** The UK's proposed carbon tax on imports based on emissions might negatively affect India's exports, especially if significant tariff reductions are achieved, impacting various sectors.

Mains easy language:

India and the UK are talking about making a special trade deal called a Free Trade Agreement (FTA). This deal is important because it could set the pattern for how India makes deals with other countries in the future. They're doing this because they want to trade more with countries in the West and Africa and not rely too much on China for trade.

Brexit, which is when the UK left the European Union, made things tricky for them. Now, they're trying to find new places to sell their things and get things from. This agreement with India might help them do that. On the other side, India wants to sell more of their clothes and jewelry, but they're worried that this might hurt countries like Bangladesh.

The UK hopes to sell more cars, whisky, and other things to India by lowering taxes on these products. However, India doesn't have as high taxes on things coming from the UK. Both sides want to talk about rules that sometimes make it hard for things like food or gadgets from one country to be sold in the other.

But, there's a problem. The UK wants to put a tax on things coming from other countries based on how much pollution they make. This tax might make it hard for India to sell some things to the UK because they might be charged more. This makes the talks a bit tough because they need to figure out how to make this fair for everyone.

The new flare-up in Myanmar-Indian Express Explained

International relations



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Key takeaways:

1. **Growing Opposition:** There's a big challenge for Myanmar's leaders near India's border. A group called the National Unity Government, along with some other groups, is giving a hard time to the leaders who took control in 2021.
2. **Where It Started:** A group called the Three Brotherhood Alliance started it all with surprise attacks. Now, these fights have spread to different places in Myanmar and taken control of towns near India.
3. **Struggle for Control:** Those in charge in Myanmar are facing a lot of pressure because of these attacks. Although they control some places, these attacks are making it hard for them.
4. **Outside Influence:** Other countries, like China, are getting involved. This is making things complicated between Myanmar and India, making things tough for both countries.
5. **Worries for India:** India is worried because the fights are happening close to its border. If many people run away from Myanmar to India, it could cause problems in some Indian states.
6. **Rebel Actions and Area Impact:** The rebel groups are doing a lot together, and this could make things more unstable in the area. Leaders need to pay attention and talk carefully to handle the situation well.

Mains easy language:

In Myanmar, there's a big fight going on. A group of people are very upset with the leaders who took control in 2021. They've been fighting to change things, especially near India's border. These fighters have managed to take over some towns near India. This has made the situation very difficult for the leaders who are in charge of Myanmar.

This fight began when a group called the Three Brotherhood Alliance attacked unexpectedly. After that, the fighting spread to many places in Myanmar. The rebels were able to capture towns close to India. Even though the leaders in Myanmar have control over some areas, these attacks have made things hard for them.

Other countries, like China, are also getting involved in this fight. This is making things complicated for Myanmar and India. It's not good for both countries. India is worried because the fighting is happening near its border. If many people from Myanmar come to India, it could cause problems in some parts of India.

The rebel groups working together are causing a lot of trouble. This could make things more unstable in the area. Leaders need to pay attention and talk carefully to handle the situation well. The rebels are making things hard for the government in Myanmar, especially near the border with India.

Waiting their turn in MP-Indian Express Editorial

Sociology

Key takeaways:

1. **Tribal Influence in Madhya Pradesh:** In Madhya Pradesh, tribes are important in elections, making up 21% of the population. Both Congress and BJP are trying hard to win their votes.
2. **Political Battle for Tribal Votes:** Both Congress and BJP are fighting for the tribal votes by promising development and showing their support for tribal culture and heritage.
3. **Historical Shifts in Tribal Voting:** In the past, Congress had strong support from tribes, but things changed over time. Smaller tribal parties have emerged, altering the political landscape.
4. **Shifts in Tribal Vote Dynamics:** Tribal votes have moved between BJP and Congress in past elections. Different issues like job creation, autonomy in tribal areas, and land rights play a crucial role.
5. **Tribal Parties and Their Influence:** Smaller tribal parties like GGP and JAYS have gained some traction but couldn't make a significant impact overall.
6. **Current Scenario and Elections:** In the upcoming 2023 elections, BJP aims to regain the tribal votes it lost to Congress in 2018. Congress is also hopeful, aiming to increase its seats among the tribals.
7. **Political Future of Tribals in MP:** Despite growing awareness and tribal parties' formation, mainstream parties will likely keep dominating the political scene. Tribals might remain a 'third force' in MP politics.

Mains easy language:

In Madhya Pradesh, tribal communities, making up around 21% of the population, hold significant influence in elections. The recent political focus has been on Congress and the BJP attempting to secure their votes. They've been actively campaigning, showcasing support for tribal issues, culture, and development to gain the tribal population's support.





Over the years, there has been a shift in tribal voting patterns. Initially, Congress had a stronghold among tribal communities, but smaller tribal parties have emerged, changing the political dynamics. Various concerns like employment opportunities, tribal autonomy, and land rights have become crucial in influencing tribal votes.

Smaller tribal parties like Gondwana Gantantra Party (GGP) and Jai Adivasi Yuva Shakti (JAYS) have gained some foothold but haven't significantly altered the overall political scenario. The larger battle for tribal votes persists between the prominent parties - Congress and the BJP.

In the upcoming 2023 elections, the BJP aims to reclaim the tribal votes it lost to Congress in 2018. Conversely, Congress is also optimistic about increasing its tribal seats. Despite growing awareness and the emergence of tribal-centric parties, mainstream parties are expected to continue dominating the political landscape in Madhya Pradesh, with tribes potentially remaining a "third force" in state politics.

19th November.,2023

Modest Start to Big Strides, Space programme turns 60- The Hindu News

-Science Tech

Key takeaways:

1. **The Dawn of India's Space Era:** On November 21, 1963, India embarked on its space journey with the launch of a Nike Apache rocket from Thumba, marking a significant moment as it released a sodium vapor payload into the sky.
2. **Pioneering Achievements:** India's space exploration milestones include launching its first indigenous rocket in 1969 and the Satellite Launch Vehicle-3 (SLV3) in 1980, placing the Rohini satellite into orbit. This achievement placed India among a select group of countries with indigenous satellite launch capabilities.
3. **International Collaboration and Community Impact:** The Nike Apache launch, a collaborative effort involving the United States, France, and the Soviet Union, captured the public's imagination and inspired many to join ISRO.
4. **Advancements in Space Technology:** India's journey from the SLV3 to advanced vehicles like the ASLVs, PSLVs, and GSLVs showcases the evolution of its space technology.
5. **Overcoming Setbacks:** Despite initial failures in various missions, ISRO persevered, achieving significant success and establishing India as an influential spacefaring nation.
6. **Recent Milestones:** In 2023, the Launch Vehicle Mark 3 (LVM3) successfully placed Chandrayaan-3 into orbit, with the Vikram lander achieving a soft landing on the moon, highlighting India's advanced capabilities in space exploration.
7. **India's Role in Global Space Endeavors:** Today, ISRO is a key player in space technology with a wide range of satellite applications and contributions to global space missions, demonstrating India's assured access to space.

Mains in Easy language

The article describes India's space exploration journey, starting with its first rocket launch in 1963 and leading up to significant achievements in 2023. Initially, India launched the Nike Apache rocket from Thumba, creating a spectacle with an orange glow in the sky. This was followed by the launch of its first homemade rocket in 1969 and a landmark achievement in 1980 with the SLV3, which successfully placed a satellite in orbit.

The 1963 launch, a collaborative effort involving the United States, France, and the Soviet Union, drew widespread attention and inspired many to join ISRO, India's space agency. Thumba played a crucial role in these early missions, with a local church serving as the mission control center.

Over the years, India developed more advanced rockets, including the ASLVs, PSLVs, and GSLVs, despite facing several initial failures. These setbacks were viewed as learning opportunities, and ISRO eventually achieved significant successes.

In 2023, India's space capabilities were highlighted by the successful launch of the Launch Vehicle Mark 3 (LVM3), carrying the Chandrayaan-3 mission. The mission included the Vikram lander, which successfully landed on the moon, marking a significant achievement for India.

Today, India is recognized for its advanced space technology, having launched numerous satellites for various applications and assisting other countries with their satellite launches. The country is now actively involved in deep-space missions, exploring the moon, Mars, and beyond, solidifying its position as a significant player in the global space community.

AI powered chemist makes Oxygen from Martian meteorites- The Hindu Science

Science Tech



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Key Takeaway:

1. **Oxygen Production for Mars Missions:** Researchers have developed a way to produce oxygen on Mars using materials found on the planet. This innovation is crucial for future human activity on Mars, including rocket propellants and life-support systems.
2. **Cost-Effective and Sustainable Approach:** To make future Mars missions more feasible and less dependent on Earth resources, scientists are focusing on utilizing Martian resources. The discovery of water on Mars and the analysis of the planet's meteorites provide opportunities to create oxygen locally.
3. **Robotic AI-Chemist Innovation:** The team, led by Jun Jiang from the University of Science and Technology of China, developed a robotic AI-chemist. This robot can autonomously create catalysts from Martian materials, a task that would be immensely time-consuming for humans.
4. **Machine Learning Model:** The AI-chemist uses a machine-learning model that combines theoretical data and experimental measurements. This model can identify the optimal catalyst formula from millions of possibilities.
5. **Utilization of Martian Meteorites:** Five categories of meteorites, either from Mars or confirmed to exist on the planet, were used. The AI-chemist transformed these meteorites into chemical compounds to make catalysts.
6. **Efficient Oxygen Production Testing:** The robotic system tested the oxygen production capabilities of these catalysts, optimizing the process until the best catalyst was identified. This process would have taken an estimated 2,000 years of human labor.
7. **Successful Operation in Martian Conditions:** The synthesized catalyst was tested under simulated Martian conditions. It operated effectively for over 550,000 seconds, demonstrating the practicality of using AI to synthesize chemicals and materials for Mars exploration.
8. **Implications for Future Mars Exploration:** This technology paves the way for autonomous production of oxygen on Mars using local resources. It represents a significant step towards sustaining human life and activities on the Red Planet in the future.

Mains in Easy language

Scientists have figured out a way to make oxygen on Mars using rocks (meteorites) found on the planet. This is a big deal because if we ever send people to live on Mars, they will need oxygen for breathing and for fuel.

The scientists used a special robot that works with artificial intelligence (AI), kind of like a super-smart robot chemist, to do this. This robot can take Martian rocks and turn them into materials that produce oxygen. What's really amazing is that the robot uses AI to figure out the best way to do this all by itself, without humans having to tell it what to do.

Usually, figuring out the best material to use for making oxygen would take humans thousands of years, but this robot can do it much faster. It's like having a super-fast and smart assistant that can do a ton of work in a short amount of time.

They tested this oxygen-making material in conditions that are like what you'd find on Mars, and it worked really well. This means that in the future, when astronauts go to Mars, they might be able to use this technology to make their own oxygen right there on the planet. This is a big step forward because it would make living on Mars a lot more possible and maybe even cheaper, since we wouldn't have to send so much stuff from Earth.

In short, the article is about using advanced robot technology to make living on Mars more realistic by figuring out a way to produce oxygen from the planet's own resources.

Wuhan virus [COVID 19]: Brain damage mechanism uncovered- The Hindu Science

Science tech

Key takeaways:

1. **Long COVID Prevalence:** Despite the reduced severity of COVID-19 in many western countries, Long COVID remains a concern. It consists of long-term health problems persisting months after recovery from COVID-19 infection. A Harvard study found a 10% risk of developing Long COVID in infected individuals.
2. **Symptom of Brain Fog:** A significant symptom of Long COVID is 'brain fog', which includes difficulty focusing, memory impairment, and decision-making challenges.
3. **Intellectual Decline Study:** Research from Stony Brook University in the U.S. identified a significant intellectual decline in COVID-19 patients, especially those with Long COVID. U.K. Biobank MRI studies showed brain shrinkage after COVID-19 infection.



| Clear your doubts now.



4. **Australian and Finnish Research Findings:** Researchers from the University of Queensland, Macquarie University, and the University of Helsinki found that the SARS-CoV-2 virus can cause individual brain cells to fuse together. This fusion can occur between different types of brain cells and affect more than two cells.
5. **Impact on Neuron Function:** The fusion process affects cell function by altering how neurons fire. Instead of firing individually, fused neurons fire simultaneously, potentially disrupting nerve cell communication. However, these cells do not die.
6. **Discovery of New Disease State:** This research has uncovered a new disease state in the brain caused by COVID-19, where brain cells are structurally and functionally altered but remain alive, differing from typical viral infection outcomes of cell death and inflammation.
7. **Mechanism of Cell Fusion:** The virus induces expression of fusion proteins on cell surfaces, leading to the fusion of neighboring cells into a single entity. This process, known as syncytium formation, allows cellular components to intermix.
8. **Virus Transmission Strategy:** Viruses use cell fusion as a method for cell-to-cell spread while evading external antibodies. This mechanism is also observed in COVID-19's impact on lung cells.
9. **Spike Protein and Vaccine Safety:** The SARS-CoV-2 virus uses its spike protein for cell fusion. However, the spike protein in vaccines, being a modified version, is not fusogenic, eliminating concerns about vaccine-induced cell fusion.
10. **Long COVID Prognosis and Ongoing Research:** The prognosis for Long COVID varies; some individuals recover after several months, but others face a less optimistic outlook. As a new disease, understanding of COVID-19 continues to evolve.

Mains in Easy Language

The article is about Long COVID, which refers to the long-term health problems people experience after recovering from COVID-19. Long COVID is a big issue even though COVID-19 isn't as severe as it used to be. About 10% of people who get COVID-19 end up with Long COVID, where they continue to have health problems for months. A common problem with Long COVID is 'brain fog.' This means people have trouble thinking clearly, remembering things, and making decisions. Studies, including one from Stony Brook University in the U.S., have found that people with COVID-19, particularly those with Long COVID, suffer from a decline in their mental abilities. MRI scans from the U.K. even showed that parts of their brains had shrunk. Scientists from Australia and Finland discovered that the COVID-19 virus can cause brain cells to stick together, which can disrupt how they work. This could explain some of the brain fog symptoms. The virus uses a special method to spread inside the body, which avoids being detected by the immune system. The good news is that the vaccines, which use a modified version of the virus's spike protein, don't cause this issue. Finally, the recovery from Long COVID varies; some people get better after a few months, but for others, it's more difficult. Since COVID-19 is a new disease, there's still a lot to learn about it, including Long COVID.

Why are people fleeing Myanmar for Mizoram?- The Hindu FAQ

International Relations

Key takeaways:

1. **Refugee Crisis in Mizoram:** Following a gunfight between the Myanmar Army and pro-democracy militias in Myanmar's western Chin State, over 1,500 Myanmar nationals sought refuge in Mizoram's Champhai district in India.
2. **Conflict in Myanmar:** The conflict in Chin State was part of a series of attacks against the ruling military junta (Tatmadaw) by various ethnic armed groups, leading to significant setbacks for the junta's forces. This includes the capture of military bases by rebel groups like the Chin National Army (CNA) and the Chin Defense Force.
3. **Widespread Displacement:** The ongoing hostilities in Myanmar, including coordinated attacks by ethnic armed groups in Shan State, have led to the displacement of a large number of civilians, totaling over two million since the military coup.
4. **Background of the Civil War:** The current civil war in Myanmar stems from a military coup in February 2021 by the State Administration Council (SAC), which ousted the civilian government. The coup sparked nationwide protests and the formation of a new political body by the deposed National League for Democracy (NLD) and other ethnic lawmakers.
5. **Formation of the National Unity Government (NUG):** The resistance against the military junta led to the formation of the NUG, which announced the creation of People's Defense Forces (PDF) to combat the junta.
6. **Ethnic Organizations' Response:** Ethnic armed groups in Myanmar have had varied responses to the coup. While some support the NUG and have taken up arms against the Tatmadaw, others have retained their ceasefire status with the junta.
7. **Situation in Chin State:** The junta's actions against ethnic armed organizations in Chin State led to a refugee crisis, with many fleeing to India. The Mizoram government defied orders from the Indian Union government and provided shelter to these refugees.



| Clear your doubts now.



8. **China's Stance:** China, a close ally of Myanmar, has leverage over some northern ethnic armed forces now engaged against the junta. While Beijing has called for a cessation of hostilities, it appears tolerant of the rebels' actions, particularly in light of their efforts to control illicit activities in the region.

Mains in Easy Language

In Myanmar, there's been a lot of fighting recently because of a civil war. This started when Myanmar's military, known as the Tatmadaw, took over the government in a coup in February 2021. They kicked out the civilian government, which had been led by a group called the National League for Democracy, and arrested its leader, Aung San Suu Kyi. The military said they did this because they thought the elections in November 2020 weren't fair, but most people think the elections were okay.

After the coup, people all over Myanmar started protesting and resisting the new military government. This resistance got a name, the "Spring Revolution." Some of the people who were kicked out of the government and others who didn't like the military coup formed their own group called the National Unity Government (NUG). This group made a plan for how Myanmar could become a democratic country again.

But the military government didn't like this and started using violence against the protesters. In response, the NUG created their own military groups called People's Defense Forces (PDF) and started fighting back, which basically started a civil war.

There are also lots of different ethnic groups in Myanmar, and they have their own armies. Some of these groups have been fighting the Myanmar military for a long time because they want more rights and independence. After the coup, some of these groups started supporting the NUG and fighting against the military. But others decided not to get involved and kept their peace agreements with the military.

In one part of Myanmar called Chin State, there was a lot of fighting, and the military targeted some of these ethnic groups. Because of this, a lot of people from Chin State ran away to a place called Mizoram in India. The government in Mizoram decided to help these people, even though the Indian government didn't really want them to.

Meanwhile, China, which is a big and powerful country next to Myanmar, is kind of involved too. China has some influence over some of the ethnic groups in Myanmar. While China says they want the fighting to stop, they're also okay with some of the fighting because it's against things like illegal businesses and crime.

So, the situation in Myanmar is really complicated. There's a lot of fighting between different groups, people are running away to be safe, and big countries like China are also playing a part in what's happening.

Why has China Pakistan corridor stalled?- The Hindu FAQ

International Relations

Key takeaways:

Pakistan's Funding Request: Pakistan's caretaker Prime Minister Anwaarul Haq Kakar visited Beijing to seek \$65 billion in funding for infrastructure projects. The visit aimed to address issues and revive cooperation under the CPEC initiative.

CPEC Background: Launched in 2015, the CPEC is a major part of China's One Belt, One Road initiative. It involves over 50 projects worth \$45 billion, focused on creating a corridor linking Pakistan's Gwadar port in Balochistan to China's Kashgar in the Xinjiang region. The projects are financed by Chinese banks and involve collaboration between Chinese and Pakistani companies.

Project Delays and Issues: Since 2016, the CPEC has faced numerous challenges, including confusion over funding, contractor selection, and project delays. Specifically, the Gwadar port project encountered problems related to water supply and funding clarity. These projects, financed by commercial Chinese loans, pose a significant economic burden on Pakistan due to high costs and debt servicing fees.

Local Opposition in Balochistan: The Gwadar port project has faced intense local opposition in Balochistan. Residents fear loss of livelihoods and are against the use of Chinese labor over Pakistani workers. Additionally, the port's profits are predominantly reaped by China, causing anti-China sentiments among locals. Land grabbing by the Pakistani government for these projects has also led to increased insurgency and attacks on officials.

China-Pakistan Rift: China halted funding for several road projects over corruption concerns and insisted on using the Yuan as legal tender in the Gwadar region. In response, Pakistan's National Assembly called for an inquiry into the operations of the China Overseas Ports Holding Company. This conflict, along with local resistance, has significantly slowed down the port's construction.



| Clear your doubts now.



Future of CPEC: During Kakar's visit to Beijing, while progress on other projects was discussed, the development of the Gwadar port remains unresolved. Pakistan aims to restart funding and cooperation with China, particularly for key projects under the CPEC framework.

Mains in Easy Language

The article discusses Pakistan's efforts to secure funding for infrastructure projects under the China-Pakistan Economic Corridor (CPEC). Pakistan's caretaker Prime Minister, Anwaarul Haq Kakar, visited Beijing to request approximately \$65 billion from China. This visit aimed to address and resolve issues related to the CPEC, an initiative that began in 2015 as part of China's One Belt, One Road strategy. The CPEC's main goal is to create a trade route connecting Gwadar Port in Pakistan's Balochistan to Kashgar in China's Xinjiang region, encompassing various infrastructure projects, including roads, ports, and power plants.

However, the CPEC has encountered several problems since its start. There's been uncertainty about the funding mechanisms, leading to disagreements and delays. For instance, the Gwadar port project, a key component of CPEC, faced issues like confusion over whether the funding from China would be a grant, interest-free loan, or commercial loan, especially for a crucial water supply project. The financial burden of these projects on Pakistan's economy is significant, mainly because of the high costs and debt servicing associated with Chinese loans.

In Balochistan, local resistance to the Gwadar port project has been strong. Residents are concerned about losing traditional livelihoods, such as fishing, and the preference for Chinese labor over Pakistani workers. Additionally, the fact that China stands to gain a major share of the port's profits has fueled resentment and anti-China sentiments among the locals. This opposition has been further compounded by the Pakistani government's land acquisition practices in the region, leading to increased insurgency and attacks against officials and Chinese workers.

The relationship between China and Pakistan has also been strained due to these projects. China halted funding for several road projects amid corruption concerns and insisted on the use of the Yuan as legal tender in the Gwadar region. In response, Pakistan conducted investigations into the Chinese company operating the port, leading to a slowdown in construction.

Despite these challenges, Pakistan is striving to continue its collaboration with China on the CPEC projects. The future of some crucial projects, like the development of the Gwadar port, remains uncertain, with both countries attempting to navigate the complex financial and diplomatic landscape that surrounds these ambitious infrastructure endeavors.

In Dehradun, a lice of Afghanistan- Indian Express Opinion

History

Key takeaways:

1. **Dehradun's Historical Significance:** Dehradun, a city in India, holds numerous signs and recollections of its past, including its ties with Afghanistan. The city is known for its Dehraduni Basmati rice and the historic Kabul House.
2. **Afghanistan's Historical Rulers and Dehradun:** The story dates back to the 18th and 19th centuries. Ahmad Shah Durrani, the founder of modern Afghanistan, established the Durrani Empire in the mid-18th century. Later, in the early 19th century, rulers like Shah Shuja-ul-Mulk and Dost Mohammad Khan played significant roles during the Great Game, a period of geopolitical rivalry between the British and Russian Empires.
3. **The Anglo-Afghan War's Impact:** Shah Shuja sought British help to regain the Afghan throne, leading to the Anglo-Afghan War (1838-1842). Dost Mohammad Khan was captured by the British and exiled to India, eventually settling in Dehradun.
4. **Dost Mohammad Khan in Dehradun:** Dost Mohammad Khan chose Dehradun for its favorable climate and hunting opportunities. He brought Basmati rice from Kunar province in Afghanistan and introduced it to local farmers.
5. **Shah Shuja's Downfall and Dost Mohammad's Return:** Shah Shuja faced rebellion in Afghanistan and was viewed as a British puppet. The British eventually withdrew, leading to Dost Mohammad Khan's return to the Afghan throne.
6. **Yakub Khan's Exile in Dehradun:** Dost Mohammad Khan's grandson, Yakub Khan, also ended up in Dehradun after abdicating the Afghan throne. He acquired Kabul House and spent time in Dehradun and Mussoorie.
7. **Cultural Influence:** The Afghan royals influenced Dehradun culturally, introducing fruit trees and the rubab, a stringed instrument.
8. **Legacy of Afghan Royalty in India:** By the 1940s, India had over 500 descendants of Afghan royalty. After the Partition in 1947, most of them moved to Pakistan or Afghanistan.

Mains in Easy Language

The article is about the historical connection between Dehradun, a city in India, and Afghanistan. It all started back in the 18th and 19th centuries when rulers from Afghanistan played a big role in the area. One of the key figures was Ahmad Shah Durrani, who



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founded modern Afghanistan. Years later, during a time called the Great Game, when Britain and Russia were competing for influence in Central Asia, Afghanistan became a central focus.

One of Afghanistan's rulers, Shah Shuja, sought British help to get back his throne, which led to a war known as the Anglo-Afghan War. During this war, another Afghan ruler, Dost Mohammad Khan, was captured and sent to Dehradun in India. Dost Mohammad Khan liked Dehradun because of its cool weather and good hunting. He even brought Basmati rice from Afghanistan and started growing it there.

As time went on, Shah Shuja, who was backed by the British, lost his power due to a rebellion in Afghanistan. This allowed Dost Mohammad Khan to go back and become the ruler again. Later, Dost Mohammad Khan's grandson, Yakub Khan, also ended up in Dehradun. He bought a place called the Kabul House and spent his time between Dehradun and Mussoorie.

The Afghan rulers left a big mark on Dehradun. They introduced new kinds of fruit trees and a musical instrument called the rubab. These rulers and their families were a big part of Dehradun's history and culture. By the 1940s, there were many descendants of these Afghan rulers living in India. However, after India was divided in 1947, most of them moved to Pakistan or Afghanistan.

So, the article tells us about how Dehradun has a special connection with Afghanistan's history and how it was influenced by Afghan rulers who lived there during the 18th and 19th centuries.

20th November 2023

A plan to manage stubble-Indian Express Editorial

Environment

Key takeaways:

1. **Stubble Burning Surge:** Modern farming practices and the availability of free or subsidized power led to a rise in stubble burning, especially in northwestern India, due to excess stubble after harvest from advanced machinery.
2. **Stubble Management Challenges:** Paddy straw, high in silica content, poses difficulties for reuse. Governmental efforts, such as decomposers or new seeding techniques, have not effectively curbed stubble burning.
3. **Proposed Mitigation Strategies:** Reevaluating power supply policies by offering direct cash transfers instead of subsidies to encourage diversification away from paddy farming. Creating a market for stubble by compensating farmers and utilizing machinery for collection. Exploring stubble for biofuel or compressed biogas production.
4. **Urgent Need for Strict Measures:** Enforcing stringent laws against burning crop straw, establishing efficient market avenues, and providing immediate administrative support is crucial. Urgency stems from severe environmental and health risks.
5. **Impact on Farming Practices:** The surplus stubble left behind by modern machinery necessitates additional efforts and costs for its management, compelling farmers towards burning as a seemingly quick solution.
6. **Environmental and Health Concerns:** Stubble burning poses severe threats to the environment and public health due to the release of harmful pollutants into the atmosphere, necessitating urgent action to manage stubble effectively.

Mains easy language:

Stubble burning, mainly in northwestern India, has increased due to changes in farming methods and the availability of free or subsidized power. Modern farming machines, like the Combined Harvester, leave behind excess stubble after harvesting crops like paddy. This surplus stubble is challenging to manage, especially as it contains high silica content, making it unsuitable for various uses.

Despite government attempts to address the issue through techniques like decomposers or different seeding methods, stubble burning persists. To combat this problem, proposed solutions include reconsidering the way farmers receive power by offering them cash instead of free electricity. Creating a market for stubble, where farmers are compensated for collecting it, and finding ways to turn stubble into biofuel or compressed gas are also suggested.

The urgency to tackle stubble burning stems from its severe impact on the environment and public health. The burning of stubble releases harmful pollutants into the air, contributing to air pollution and health problems, especially respiratory issues. Strict enforcement of laws against burning and providing farmers with support and tools to manage stubble effectively are essential steps.

The excess stubble left in fields due to modern farming machines compels farmers to burn it for quick and easy disposal, further worsening air quality and health conditions. Finding sustainable ways to handle stubble is crucial to safeguard the environment and improve public health in affected regions.



| Clear your doubts now.



DRUG DETOX-Indian Express Editorial

Science and technology

Key takeaways:

1. **Regulatory Concerns in Pharma Industry:** Reports about Indian generic drugs raised questions about regulatory procedures. Concerns over substandard drugs flagged by global entities like WHO and the US FDA led to slow responses from Indian policymakers.
2. **IT-Enabled Solutions:** Initiatives like adhering to WHO standards and developing a drug monitoring portal aim to track drug-making processes. This portal will gather details about raw materials, distributors, and cases related to the pharmaceutical industry.
3. **Challenges in Oversight:** Major pharmaceutical companies often outsource production to smaller units, escaping regulatory oversight. This lack of transparency affects the quality of drug scrutiny and leads to concerns about substandard medicines.
4. **Importance of Strengthening Regulation:** To ensure effective oversight and quality control, there's a pressing need to enhance regulatory capacity. However, many states struggle to adopt recommended oversight measures due to unclear roles and responsibilities between regulatory agencies.
5. **Physicians' Trust in Unbranded Drugs:** A significant section of physicians lacks confidence in unbranded drugs, as evidenced by protests that led to the withdrawal of directives on prescribing generic medicines by the National Medical Commission.
6. **Portal for Monitoring and Challenges:** The proposed portal for drug control aims to improve transparency. Nevertheless, alongside technological advancements, efforts to enhance regulatory body capacity are crucial for effective monitoring and oversight.

Mains easy language:

There's growing concern about the quality of generic medicines manufactured in India. Global reports highlighted issues with these medicines, prompting the government to take steps towards better monitoring and regulation. They introduced technology-based solutions, like a monitoring portal, to oversee the drug production process and track raw materials and distribution.

However, challenges persist. Larger pharmaceutical companies often outsource production to smaller, less monitored units, making it difficult to ensure the quality of medicines. This lack of oversight raises concerns about the safety and effectiveness of these drugs.

Moreover, there's hesitancy among doctors regarding the prescription of generic drugs. Recent protests led to the withdrawal of directives mandating the use of these medicines. This indicates a lack of confidence among healthcare professionals in the quality and reliability of generic drugs.

One of the major obstacles to effective oversight is the confusion and overlap between different regulatory agencies. Many states struggle to implement consistent and robust regulations due to ambiguity in roles and responsibilities among these agencies.

While the government's efforts to utilize technology for monitoring are commendable, there remains a significant task ahead to ensure that all medications meet safety and efficacy standards. Addressing these challenges requires comprehensive solutions, improved coordination among regulatory bodies, and a concerted effort to establish clear and effective guidelines for drug quality and oversight.

Why HC struck down Haryana's private sector job quota-Indian Express Explained

Polity

Key takeaways:

1. **Haryana's Quota Law Struck Down:** The Punjab and Haryana High Court nullified the Haryana government's 2020 law reserving 75% of private sector jobs for state residents. The court deemed it a violation of fundamental rights.
2. **Legislation Details:** Enacted in March 2021, the law applied to private sector jobs offering a salary below Rs 30,000. Employers were obligated to hire through a designated online portal, employing the 'local candidate' after registration.
3. **Legal Challenges and Arguments:** The law faced opposition from various Haryana-based associations citing it as unconstitutional, infringing upon employers' rights, and emphasizing that private sector jobs must be skill-based and not region-specific.



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4. **Contentions on Constitutionality:** The government cited Article 16(4) of the Constitution, justifying the law by allowing reservations for underrepresented backward classes in public employment but encountered opposition for overreaching into the private sector.
5. **Provisions and Court's Ruling:** Sections requiring employers to submit quarterly reports and allowing officers to oversee implementation were labeled as intrusive by the court, highlighting it as 'Inspector Raj'. The High Court deemed the law as infringing on the private sector's autonomy.
6. **Ongoing Legal Action:** The Supreme Court overturned the High Court's stay order on the law, directing a decision within four weeks. Despite the setback, Deputy Chief Minister Dushyant Chautala expressed intentions to appeal in the Supreme Court.

Mains easy language:

The Punjab and Haryana High Court recently scrapped a Haryana government law from 2020 that reserved 75% of private jobs for people residing in the state. This law faced opposition and legal challenges, leading to its nullification by the court. The law was meant for jobs offering a monthly salary below Rs 30,000 and required employers to hire through a designated online portal.

However, this move faced opposition from various groups and associations, stating that it was unconstitutional and went against the rights of employers. They argued that private jobs should be based on skills rather than region-specific reservations. The court agreed, ruling that certain sections of the law were too intrusive and infringed on the private sector's independence in hiring practices.

Despite the setback in the High Court, the Haryana government plans to challenge this decision in the Supreme Court. The government is determined to pursue this reservation policy, which was initially promised before the 2019 Assembly elections.

This legal battle highlights a clash between state-centric job policies and individual rights within the private job market. It showcases the complexities in balancing regional representation in employment against the fundamental rights of individuals seeking jobs in the private sector.

The other oil imports-Indian Express Explained

Economics

Key takeaways:

1. **Edible Oil Imports Surge:** Over the last decade, India's edible oil imports have doubled in value and increased by 1.5 times in quantity.
2. **Import Reliance vs. Domestic Production:** Domestic production only covers about 38.6% of India's total edible oil availability, emphasizing heavy reliance on imports.
3. **Mixed Domestic Oil Production:** While mustard oil remains a significant contributor, other oils have experienced declines in domestic production.
4. **Major Imported Oils:** Palm, soyabean, and sunflower oils constitute the bulk of imports, sourced from countries like Indonesia, Malaysia, Thailand, Argentina, and Brazil.
5. **Vulnerability to Global Price Fluctuations:** Excessive dependence on imports exposes both producers and consumers to fluctuations in international prices.
6. **Import Price Impact:** Global oil price variations have a direct impact on India's retail edible oil inflation, notably reducing it during recent periods of falling global prices.
7. **Reducing Import Dependency:** To mitigate vulnerability, India needs technological advancements like genetically modified hybrids and government support mechanisms such as minimum support prices (MSP) for oilseed growers.
8. **Challenges in Agricultural Policy:** Current agricultural policies don't offer enough incentives for farmers to shift towards oilseed cultivation, posing a challenge in reducing import dependency.

Mains easy language:

India heavily relies on importing over 60% of its edible oil consumption. In the last decade, edible oil imports nearly doubled in value and increased by 1.5 times in quantity. The total availability of edible oils in India touched 26.8 million tonnes, with domestic production accounting for only 38.6% of it. The surge in imports raises concerns about reducing self-sufficiency.

Despite some increase in domestic oil production, India's reliance on imports is significant, leading to vulnerability to global price fluctuations. The country's domestic production has struggled to keep pace with growing demand, with only mustard oil retaining a strong position among conventional oilseeds.



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Imports primarily include palm, soyabean, and sunflower oils, majorly sourced from countries like Indonesia, Malaysia, Thailand, Argentina, and Brazil. The excessive dependence on imports makes both producers and consumers susceptible to international price variations.

The recent dip in global oil prices has temporarily decreased retail edible oil inflation in India. However, reducing import dependency requires significant technological advancements, such as genetically modified hybrids, and government support, like minimum support prices (MSP) for oilseed growers.

Encouraging domestic production through policy changes and support mechanisms could help India reduce its vulnerability to global price fluctuations in edible oils. Yet, the current agricultural policy landscape doesn't offer substantial incentives for farmers to shift to oilseed cultivation, posing a challenge to this objective.

Debate Over Appropriate Age of admission Class 1:rules India,world-Indian Express **Explained**

Sociology

Key takeaways:

1. **NEP 2020 and Age Criteria:** The National Education Policy (NEP) 2020 recommends a "5+3+3+4" schooling structure, urging admission to Class 1 at the age of 6, after completing three years of early childhood education (ages 3-5).
2. **Discrepancies in Admission Age:** There are disparities among Indian states regarding the age criteria for Class 1 admission, with some states admitting students at 5 years and others at 6 years.
3. **Union Education Ministry's Directive:** The Union Education Ministry has urged states to align the admission age to Class 1 at 6 years, but the Delhi government has decided to continue with its existing guidelines, allowing admission below the age of 6 for this academic year.
4. **Right to Education (RTE) Act:** The RTE Act guarantees education for children from 6 to 14 years, implying that elementary education or Class 1 should commence at the age of 6.
5. **Historical Perspective:** The age of 6 years for commencing formal education aligns with historical constitutional ideals, echoing Gandhi's basic education concept and recommendations from the Sargent Commission in the 1940s.
6. **Research Insights:** Studies suggest that an early start to formal literacy learning (at age 5) may not significantly improve reading development and could potentially impact children's attitudes towards reading compared to those who begin later (at age 7).
7. **International Standards:** In many East Asian and European nations, 6 years is the standard age for primary school entry. However, practices vary globally, with the US and UK often admitting children at age 5 and Scandinavian countries at age 7.

Mains easy language:

There's a big discussion about when kids should start Class 1 in schools. The new education policy in India says children should start when they're 6 years old. But different states have different rules. Some let kids start at 5 years old, while others prefer 6.

The national law for education says that kids should start school at 6 years old and continue till they're 14. This idea is based on old beliefs and historical suggestions by important people like Gandhi.

Studies show that starting school at 5 doesn't make kids better readers than starting at 7. Sometimes, it might even make kids less interested in reading.

Around the world, most countries in Asia and Europe start school at 6. But in places like the US and the UK, kids usually begin at 5. Scandinavian countries tend to start a bit later, at 7.

So, the debate is all about when it's best for kids to start school. Some believe starting earlier helps, while others think it's okay to start a bit later. It's a big discussion because it affects how kids learn and grow.

Steering road safety in India back onto the right lane-The Hindu Editorial

Economics

Key takeaways:

1. **Alarming Statistics:** India faces a significant road safety challenge with an estimated 3,00,000 deaths annually due to road accidents, costing the nation between 5% and 7% of its GDP.
2. **Global Context:** Road safety is a worldwide issue, but India accounts for nearly a quarter of global road crash deaths.



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3. **Immediate Action Needed:** Urgent, evidence-based interventions are necessary, requiring strategic investments, political will at all levels, and a shift in the collective mindset toward road safety.
4. **Government Initiatives:** The government has implemented the Motor Vehicles (Amendment) Act, 2019, and improved data collection methods to understand and reduce road crashes.
5. **Focus Areas for Safety:** Priority areas include enforcing seatbelt and helmet usage, especially for passengers, reducing speeding, improving road infrastructure, and launching public awareness campaigns.
6. **Vulnerable Road Users:** Vulnerable road users like pedestrians, cyclists, and two-wheeler riders contribute significantly to road fatalities, emphasizing the need for their protection.
7. **Adoption of Technology:** Adoption of modern technologies like intelligent traffic management systems by law enforcement aims to regulate traffic and minimize collisions.
8. **Global Campaigns and Partnerships:** Collaboration with international agencies, private sector companies, and celebrities for road safety initiatives like #MakeASafetyStatement indicates a collective effort.

Mains easy language:

India's roads are both a blessing and a danger. They help people travel and grow the economy, but they also cause a huge number of accidents, leading to about 3,00,000 deaths every year. This costs the country a lot of money and causes immense suffering.

It's not just India; road accidents are a big problem globally, but India has a disproportionately high number of deaths compared to other countries.

To solve this, the government has started some important steps like making new laws and collecting better data. But more needs to be done urgently.

We need to focus on making sure people wear seatbelts and helmets, especially passengers, and reduce speeding. Also, improving the roads and teaching people about safety are crucial.

To fix this, we should learn from other countries and work together with different groups like companies and international organizations. By doing this, we can save lives, make the economy stronger, and make life better for everyone in India. The fact that so many deaths happen in India means we really need to do something big to stop this silent problem.

The role of the Governor in legislature-The Hindu Text and Context

Polity

Key takeaways:

1. **Constitutional Provisions (Article 200):** Article 200 of the Constitution outlines the Governor's powers regarding Bills from the State Legislature, providing options like giving assent, withholding assent, returning for reconsideration, or reserving for the President's consideration.
2. **Governor's Limited Discretion:** While the Governor is generally expected to act on the advice of the Council of Ministers, they may exercise discretion in specific cases, especially when they perceive a Bill to be unconstitutional.
3. **Governor's Decision Making:** The Constitution does not specify a time limit for the Governor to make a decision upon receiving a Bill, leading to instances where Bills remain pending for long periods.
4. **Sarkaria and Punchhi Commission Recommendations:** Both commissions emphasized restricting the Governor's discretionary powers to rare cases where a Bill might violate the Constitution. They suggested time limits for decision-making and communication of reasons for withholding assent.
5. **Political Interference and Impasse Resolution:** The issue of politicization of the Governor's post has led to conflicts between State governments and Governors, creating an imbalance in the federal structure. Suggestions include involving Chief Ministers in Governor appointments and granting State Legislatures the power to impeach non-cooperative Governors.
6. **Maintaining Federal Balance:** While the Governor's role is crucial in the federal system, maintaining a balance where the Governor does not impede the functioning of elected governments in States is essential.
7. **Potential Constitutional Amendments:** Recommendations for constitutional amendments include ensuring responsible cooperation between the Centre and States, considering Chief Ministers' opinions in Governor appointments, and establishing mechanisms for removing non-cooperative Governors.

Mains easy language:

The Governor, upon receiving a Bill from the State Legislative Assembly, has specific choices: approving, rejecting, reconsidering, or reserving the Bill. While expected to follow ministerial advice, there are rare instances where the Governor might use discretion, especially if a Bill appears unconstitutional.



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The Sarkaria and Punchhi Commissions stressed limiting Governor's discretion to rare cases of unconstitutionality, recommending a time frame for decisions and sharing reasons for withholding assent.

The core issue lies in the political nature of the Governor's role, affecting federal balance. Suggestions for resolution include involving Chief Ministers in Governor appointments, empowering State Legislatures to impeach non-cooperative Governors, and fostering responsible cooperation between the Centre and States.

The Governor's role is vital in maintaining federal balance, but steps are needed to prevent its misuse or interference in State governance. Respecting the Constitution's spirit while ensuring mutual respect between the Centre and States is crucial for effective governance.

How Amazon is plumbing warehouses with robots amid worker safety concerns-The Hindu Text and Context

Science and technology

Key takeaways:

1. **Amazon's Embrace of Robotics:** Amazon is extensively employing robots in its warehouses to enhance efficiency. These robots assist in moving, grasping, and handling items, contributing to various tasks from picking and packing to product delivery.
2. **Robotics Integration:** The company is integrating various robots - from mobile autonomous vehicles to humanoid robots like Digit - to perform diverse tasks previously handled by humans. The aim is to streamline operations and improve mobility and manipulation within warehouses.
3. **Testing New Robots:** Amazon is experimenting with new robotic models like Digit, designed to mimic human tasks within warehouse environments. These robots are undergoing tests to assess their safety, efficiency, and interaction with warehouse employees.
4. **Worker Safety Measures:** Amid concerns about worker safety and health, Amazon is introducing ergonomic robotic assistance systems like Sequoia to aid employees in tasks, minimizing physical strain and the risk of injuries.
5. **Addressing Safety Concerns:** Following scrutiny and proposed penalties by authorities over worker safety, Amazon asserts its commitment to employee safety and denies allegations of knowingly jeopardizing worker well-being.
6. **Deployment in India:** While Amazon employs advanced technologies like computer vision and machine learning in Indian facilities, robotic systems like those present in other global warehouses have not been introduced yet due to various considerations, including local needs and industrial standards.

Mains easy language:

Amazon has adopted a significant reliance on robotics to streamline warehouse operations, emphasizing mobility and manipulation within its facilities. The company integrates various types of robots, from mobile vehicles to humanoid ones, aiming to optimize tasks traditionally performed by humans. Testing of new robotic models like Digit is underway to assess their efficiency and safety alongside employee interaction.

To address concerns about worker safety, Amazon introduces ergonomic assistive robots like Sequoia to minimize employee strain during warehouse tasks. Despite past scrutiny and proposed penalties regarding safety, Amazon denies compromising worker safety knowingly and claims to prioritize employee well-being.

While advanced technologies like computer vision and machine learning are utilized in Amazon's Indian facilities, the deployment of robotic systems akin to global warehouses has not occurred yet. The decision hinges on multiple factors, including local requirements and industrial standards.

Looking ahead, Amazon's focus remains on developing more efficient and smaller robotic systems capable of handling tasks effectively, primarily moving smaller objects swiftly. Additionally, the company invests in generative AI to enhance its robotics division, aiming for smarter systems that can communicate effectively and plan tasks optimally within warehouse environments.

Chimeras – hosts to multiple genotypes, and maybe human organs-The Hindu Science

Science

Key takeaways:

1. **Organ Shortage Solution:** Chimaeric research aims to grow human organs in animals using advanced iPSCs technology to address the critical scarcity of human organ donors.



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2. **Chimerism in Humans:** Natural chimerism in humans results from genetic cell changes or twin pregnancies merging into a single foetus, creating individuals with diverse genetic makeups within their bodies.
3. **Transplant-Induced Chimerism:** Procedures like bone marrow or solid organ transplants create chimeric individuals by merging genetic materials from donors and recipients into specific tissues or organs.
4. **Success with Primate Chimaeras:** Scientists achieved a milestone by generating live chimaeric monkeys, showcasing potential advancements in biomedical research.
5. **Biomedical Prospects and Ethical Concerns:** Chimaera research displays promise but raises ethical dilemmas, necessitating careful ethical considerations before contemplating human applications.
6. **Historical Significance:** Mythology and nature exhibit examples of chimerism across various species, reflecting instances of distinct genetic compositions coexisting within a single organism.
7. **Biomedical Research Implications:** The successful creation of live chimaeric monkeys marks a significant step toward using non-human primates as biomedical study models, requiring comprehensive ethical considerations for future human applications.

Mains easy language:

The concept of genetic chimaeras, organisms composed of cells with different genetic makeups, is not new and exists both in nature and human biology. Animals like birds and marine creatures display varying degrees of chimerism. In humans, chimerism arises from genetic changes in cells or complex pregnancy scenarios, resulting in individuals with dual genetic profiles.

Scientific advancements have attempted to harness chimerism for medical purposes, notably in creating animal models for organ generation. Recent breakthroughs involve inducing chimaeras in non-human primates, a closer evolutionary relative to humans. By modifying DNA in embryonic stem cells and observing chimerism in live infant monkeys, scientists open doors for potential biomedical applications.

However, while this scientific progress holds promise in addressing the global organ shortage, ethical concerns and limitations loom large. Before considering human applications, these breakthroughs prompt a critical examination of their ethical implications and limitations, highlighting the need for thoughtful considerations in biomedical research and application.

21st November 2023

Making sense of the employment challenge-The Hindu Editorial

Economics

Key takeaways:

1. **Output is Determined by Aggregate Demand:** The demand for goods and services influences the demand for labor. Simply working longer hours won't ensure employment if there's insufficient demand for products.
2. **Comparisons with Post-War Economies Might Not Apply:** Historical examples of Japan, Germany, and South Korea working longer hours post-WWII had unique circumstances like massive destruction, high labor demand, and external aid, making direct comparisons challenging.
3. **Strategies for Economic Growth:** India can focus on enhancing global competitiveness by improving workforce productivity and infrastructure, or expanding the domestic market by increasing real income, especially related to food production and consumption.
4. **Informal Sector Challenges:** While formal sectors have regulated work hours and minimum wages, the challenge lies in improving conditions for informal workers who often work long hours without legal protections and for low wages.
5. **Contextual Understanding is Vital:** While historical examples offer insights, applying those experiences directly to India's current situation might not be feasible due to differing circumstances.
6. **Holistic Economic Solutions:** Policymaking should prioritize comprehensive solutions that address productivity, infrastructure, competitiveness, and inclusive growth rather than solely advocating for longer work hours as a solution.
7. **Longer Hours Alone Aren't a Panacea:** Simply extending work hours doesn't necessarily solve economic challenges if not accompanied by measures to stimulate demand, improve workforce conditions, and enhance overall productivity.

Mains easy language:

In simple words, working more only helps if there's enough demand for what we're doing or making. It's like baking more cakes when people want to buy them – if no one wants cakes, baking more won't help.

When we look at other countries like Japan or Germany after a big war, it's a bit like comparing apples and oranges. Their situations were very different from ours, like when they had a lot of things to rebuild after the war, and that created more jobs.



| Clear your doubts now.



To make our country better, we can try making things that people really want to buy, like cool gadgets or good-quality stuff. Or we can try to make food cheaper for everyone, so people have more money to buy other things too.

But there's a problem: some people work really hard for very little money and don't have anyone looking out for them. Fixing this isn't easy, but it's really important.

Sometimes, what worked for other countries in the past might not work for us now. Each country's situation is kind of like its own story – what worked for someone else might not be the right solution for us.

If we want to make things better, it's not just about asking people to work longer hours. We need to make sure that what we're making is what people actually want, and we also need to take care of the people doing the work.

So, while working more hours might help a bit, it's not the only thing that will fix everything. We need to make sure that people want what we're making and that the workers are treated well too. That way, things can get better for everyone.

A renewed focus on emerging technologies-The Hindu Editorial

Science and Technology

Key takeaways:

1. **Military Embracing Emerging Technologies:** Indian armed forces are investing in advanced technologies like AI, cyber, and unmanned systems for military applications.
2. **Challenges in Implementation:** Efforts need creative thinking. Technology isn't a quick fix; it requires changes in practices, sharing data, and aligning with civilian expertise.
3. **Need for Collaboration:** Effective integration of these technologies demands closer collaboration between the military and civilian experts, which India is yet to fully achieve.
4. **Historical Perspective:** While traditional warfare remains prevalent, there's a need to adapt to change by integrating emerging technologies effectively.
5. **Past Initiatives and Current Gaps:** India has taken steps, like space programs and cyber agencies, but there are significant shortcomings in integrating these advancements.
6. **Critical Changes Required:** To succeed, there's a need for better jointness among armed forces, specialized training for technology, and more transparent data sharing.
7. **Reforming Organizational Approaches:** The Defence Ministry should include technocrats and talent from the private sector, while the military must open pathways for civilians to work alongside professionals.

Mains easy language:

The Indian military is actively adopting advanced technologies like Artificial Intelligence (AI), cyber systems, and unmanned technologies, recognizing their pivotal role in shaping modern warfare strategies. Notably, initiatives like identifying 45 niche technologies in military applications and employing AI, cyber, and virtual reality under 'UDAAN' showcase the military's intent to incorporate these cutting-edge innovations.

However, while the military displays enthusiasm in embracing these advancements, there are significant challenges in their effective implementation. It's critical to understand that technology integration isn't merely about incorporating gadgets; it necessitates fundamental organizational changes, doctrinal adaptations, and a transparent approach to sharing data with civilian sectors. These technologies demand a paradigm shift beyond 'plug and play' solutions.

Despite India's progress in space programs and cyber agencies, there are evident gaps in seamlessly integrating these technologies into actual military operations. To achieve success, there's an urgent need for enhanced jointness among armed forces, specialized training for technological expertise, and a more transparent approach to data sharing.

To address these gaps, the Defense Ministry needs to reform its approach by actively engaging technocrats and skilled personnel from the private sector. Concurrently, the military must create structured opportunities for civilian professionals to collaborate and contribute to technological advancements in defense.

This transformation underscores a crucial shift, emphasizing the necessity of harnessing external talent and expertise for effectively leveraging the full potential of emerging technologies in defense operations and strategies.

How free cancer care alone won't help the fight against cancer in India-The Hindu Text and context

Science



| Clear your doubts now.



Key takeaways:

1. **High Costs of Cancer Treatment:** Treating cancer in India is extremely expensive, especially in private hospitals. Patients have to pay a lot for consultations, tests, medicines, and even for travel and accommodation near the hospitals.
2. **Increasing Cancer Cases:** More and more people are getting diagnosed with cancer in India. Currently, it's the third most common cause of death, and it might become the leading cause in the near future.
3. **Financial Strain in Cancer Care:** Despite some government assistance, many families dealing with cancer face enormous expenses. A study revealed that over 80% of patients with health insurance still suffered financially due to high treatment costs.
4. **Expensive Private Healthcare:** Most of the money spent on cancer treatment goes to private hospitals. This happens because government hospitals are often overcrowded, leading people to opt for faster treatment at expensive private facilities.
5. **Challenges Accessing Timely Care:** Long waiting times at government hospitals drive patients to choose costly private hospitals for quicker treatment. This adds to the financial burden, forcing families to borrow money or sell assets to cover expenses.
6. **Impact on Employment and Livelihood:** Cancer patients often cannot work anymore, and many were the sole earners in their families. Caregivers also face job challenges as they spend considerable time looking after patients.
7. **Government Support Limitations:** While the government offers concessions for travel and treatment, many people remain unaware of these benefits. Additionally, these aids don't cover all expenses, leaving families struggling with the remaining costs.
8. **Need for Accessible Treatment:** To address these challenges, there's an urgent need for more hospitals across the country providing free or affordable cancer care. This would significantly ease the financial stress faced by families dealing with this illness.

Mains easy language:

Cancer treatment in India, especially in private healthcare, poses a significant financial challenge for families. Despite some government assistance, the costs involved, spanning medical procedures, travel, and accommodations, impose a heavy burden. The escalating cancer cases, projected to increase substantially by 2040, exacerbate this issue. Overcrowded government hospitals drive patients toward costly private care, amplifying financial strain. Families often resort to borrowing or selling assets to meet these expenses, reflecting the immense financial pressure in managing cancer treatment.

However, the financial impact isn't confined to healthcare expenses alone. Cancer often incapacitates patients, hindering their ability to work, thereby disrupting the primary source of family income. Caregivers also face job challenges due to the substantial time spent attending to the patient's needs. While the government extends support, such initiatives often fall short in covering comprehensive costs, leaving many uninformed or unable to afford essential care. Consequently, families grapple with significant financial burdens, impacting their overall quality of life.

Addressing this challenge necessitates urgent measures. Establishing accessible and affordable cancer treatment centers nationwide is imperative. Such facilities would alleviate the immense financial strain on affected families. These centers should offer comprehensive support, encompassing not only medical care but also reduced travel and accommodation expenses. A more robust government outreach to increase awareness about available aids and expanding coverage to ease the financial burden of cancer care is essential. This holistic approach would offer relief to families facing overwhelming financial challenges while coping with the demanding and emotionally taxing journey of cancer treatment.

Energy burst in distant galaxy disturbed ionosphere-The Hindu Science

Science

Key takeaways:

1. **Massive Cosmic Explosion:** A very distant star exploded billions of years ago, sending powerful gamma rays toward Earth. When these rays finally reached us, they caused a big disturbance in a part of our upper atmosphere called the ionosphere.
2. **What's the Ionosphere?:** It's like a protective layer high above us that shields the Earth from harmful space stuff. This recent cosmic burst shook it up, creating changes that lasted hours and even set off lightning detectors in India.
3. **Surprising Impact from Far Away:** Even though this explosion happened insanely far away, it still had a strong effect on our planet. This shows how events from outer space can reach us and influence things here on Earth.
4. **Learning from Space Explosions:** Scientists have been studying these kinds of cosmic bursts for a long time. This particular one, being the strongest ever observed, taught us a lot about how far-reaching these space events can be.



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5. **The Importance of the Ionosphere:** This layer way up high protects us from harmful space rays. While this distant explosion didn't cause any immediate danger, it reminds us how important it is to understand how space events might affect us here on Earth.

Mains easy language:

Billions of years ago, a massive star exploded in a faraway galaxy, sending incredibly powerful gamma rays hurtling through space. Recently, these cosmic waves reached Earth, causing a significant shake-up in a part of our atmosphere called the ionosphere, which acts like a protective shield high above us.

The ionosphere is crucial because it shields our planet from harmful space stuff. This distant explosion caused quite a stir there, leading to changes that lasted for hours. It even triggered lightning detectors in India, showing how impactful it was, despite being from so far away.

This event surprised scientists because even though it happened incredibly far from Earth, it still managed to affect our planet. It's a reminder of how connected things in space are to our lives here on Earth.

Scientists have been studying these kinds of cosmic explosions for a while. This recent burst, noted as the most potent one ever spotted, taught them a great deal about how much reach these space events can have.

While this faraway explosion didn't cause any immediate danger, it highlights how important it is to understand how space events might influence our lives on Earth. It also emphasizes the significance of the ionosphere, that invisible layer way up high that plays a vital role in keeping us safe from harmful space rays.

OF, FOR AND BY THE WEST-Indian Express Editorial

International relations

Key takeaways:

1. **Euromaidan Protests:** Questioning the portrayal of the Euromaidan protests in Ukraine as a democratic revolution, suggesting it was a violent coup orchestrated by the West.
2. **Neo-Nazi Elements:** Highlighting the rise of neo-Nazi elements within the Ukrainian leadership post-Euromaidan, allegedly involved in terror campaigns and violence against dissenters.
3. **Crimea's Referendum:** Framing Crimea's referendum to join Russia as a legitimate decision by its people, despite being contrary to US interests.
4. **Geopolitical Context:** Placing the Ukraine conflict within a broader geopolitical context, asserting that Western interference aims to target Russia, leading to a civil war due to Ukraine's significant Russian population.
5. **Minsk Agreements:** Criticizing the failure of the Minsk Agreements and alleging that the West used them to arm Ukraine for further confrontation with Russia.
6. **Russia's Involvement:** Justifying Russia's military involvement as a response to perceived injustices and citing Article 51 of the UN Charter.
7. **Historical Narratives:** Expressing concerns about the manipulation of historical narratives, particularly regarding World War II, and the glorification of Nazism in Ukraine and Canada.
8. **Failure of Western Approach:** Portraying Ukraine as an example of the failure of the West's neo-colonialist approach and social engineering, highlighting rejection by the Global South.

Mains easy language:

The text offers a critical viewpoint on the Euromaidan protests in Ukraine, challenging the conventional narrative that hailed it as a democratic revolution. It argues that the protests, far from being a spontaneous expression of democratic fervor, were orchestrated by Western powers, portraying it as a violent coup d'état. It sheds light on the emergence of neo-Nazi elements within Ukraine's post-Euromaidan leadership, accusing them of orchestrating terror campaigns and using violence as tools against dissenters, thereby undermining democratic principles.

Furthermore, it highlights the contentious nature of Crimea's referendum to join Russia in 2014, depicting it as a legitimate decision by its people but contrary to the interests of the United States. This event is situated within a larger geopolitical context, framing the Ukraine conflict as a consequence of Western interference aiming to target Russia. The text argues that Ukraine's sizable Russian population made it ripe for internal conflict, eventually leading to a civil war due to differing allegiances within the country.

Criticism is directed at the failure of the Minsk Agreements, suggesting they were used by the West to arm Ukraine and prepare for further confrontation with Russia. Russia's military involvement is justified as a response to perceived injustices, citing Article 51 of





the UN Charter as legal grounds. Additionally, concerns are raised about the manipulation of historical narratives, particularly regarding World War II, exemplified by instances of glorification of Nazism in Ukraine and Canada.

Ultimately, the text presents Ukraine as emblematic of the failure of the West's neo-colonialist strategies and social engineering. It highlights the rejection of such interventions by the Global South while cautioning against the imposition of a 'rules-based order' that could disregard universal international law in favor of maintaining the dominance of affluent nations in global affairs.

Before the next deluge-Indian Express Editorial

Key takeaways:

1. **Climate Impact on WASH Services:** Extreme weather events damage water and sanitation infrastructure in urban slums, affecting water quality and hygiene, especially during floods and droughts.
2. **Vulnerability of Marginalized Communities:** Communities in slums near water bodies face higher vulnerability due to factors like illiteracy, lack of amenities, and the presence of marginalized groups.
3. **Policy Framework and Urban Infrastructure:** Despite flagship missions, challenges persist in developing climate-resilient WASH infrastructure in informal settlements.
4. **Impact on Health and Livelihood:** Climate events lead to decreased access to water and sanitation, causing open defecation and the spread of diseases, especially affecting women and girls.
5. **Community Resilience:** Despite challenges, slum communities actively seek solutions, monitor water quality, and experiment with addressing challenges independently, displaying resilience.
6. **UN Recognition and COP Commitments:** The inclusion of water in COP27's final declaration highlights its growing importance in climate discussions. COP28 aims to address climate impacts on WASH.
7. **Responsibility and Devolution of Services:** Drinking water and sanitation services fall under state governments, but challenges remain in implementing climate-resilient infrastructure.
8. **Importance of Data and Assessments:** Reliable data and vulnerability assessments are crucial for understanding and improving resilience, as demonstrated by studies like CFAR's research supported by the Australian government.
9. **Impact of Climate Events on Infrastructure:** Adverse climate events disrupt WASH infrastructure, reducing access to tap connections and sanitation facilities, leading to increased dependence on alternative sources.
10. **Health and Socioeconomic Implications:** Inadequate WASH services during climate events result in higher waterborne diseases, affecting health and livelihoods, particularly for women and girls.
11. **Community Initiatives and Adaptability:** Despite challenges, slum communities show resilience by independently tackling water scarcity and sanitation issues during climate events.
12. **Need for Government Support and Sustainability:** Governments should enhance community-led initiatives for safe sanitation practices, alternative water sources, and regular water testing to ensure resilience and sustainability.

Mains easy language:

The article emphasizes the critical impact of extreme climate events on water, sanitation, and hygiene (WASH) services, particularly in vulnerable urban slum settlements in India. Vulnerability indicators such as illiteracy and lack of basic amenities compound the challenges faced by marginalized communities living near water bodies prone to flooding. Despite flagship programs like Swachh Bharat and Jal Jeevan, the study questions their efficacy in addressing climate-resilient infrastructure needs in informal settlements.

The research underscores the adverse effects of climate events on health and livelihoods, with increased waterborne diseases and challenges for women in maintaining hygiene. However, it also highlights the resilience of these communities, as they actively engage in monitoring water quality, repairing defunct water sources, and finding alternative solutions to combat challenges independently.

In essence, it revolves around the urgent need for a policy shift that considers climate impacts on WASH services, enhances community resilience, and incentivizes sustainable practices. Strengthening community capacity and incentivizing initiatives that support water conservation, alternative sources, and regular testing is crucial for a more resilient and sustainable future for these vulnerable communities.

Governor's role in passing Bills-Indian Express Explained

Polity

Key takeaways:

1. **Supreme Court Intervention:** The Supreme Court is examining delays by Governors in deciding on pending Bills, especially in Tamil Nadu, leading several Opposition-ruled states to seek the court's intervention.



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2. **Governor's Role in Lawmaking:** There's a debate regarding the powers of Governors in the legislative process, particularly concerning granting assent to Bills, which is crucial for them to become law.
3. **Delay in Governor's Decision:** The Supreme Court questioned the delayed action by the Governor of Tamil Nadu, noting that it occurred only after the court's intervention, raising concerns about a lack of action over three years.
4. **Constitutional Framework:** Article 200 outlines the Governor's options when presented with a Bill but lacks a specific timeframe for decision-making, leading to prolonged delays and impacting legislative functions.
5. **Consequences of Delay:** The prolonged delay in Governor's decisions could potentially paralyze elected governments, impacting administrative functions and creating an adversarial environment.
6. **Role of the Supreme Court:** The Supreme Court is exploring the possibility of setting timelines for Governors to decide on Bills, a relatively uncharted area regarding the imposition of limits on constitutional powers.
7. **Opposition States' Argument:** States like Kerala, Telangana, and Punjab have approached the Supreme Court, arguing that delayed decisions by Governors hinder administration and disrupt decision-making processes.
8. **Uncertain Constitutional Bounds:** While the Constitution uses "shall" in specifying Governor's actions on Bills, there's ambiguity regarding the timeframe for these actions, prompting legal scrutiny.
9. **Resolution of Ambiguity:** The court's intervention aims to resolve the ambiguity surrounding Governors' discretionary powers in dealing with pending Bills, potentially affecting legislative efficiency and government functionality.

Mains easy language:

The article focuses on the recent Supreme Court scrutiny regarding the delay in Governors' decisions on pending Bills, particularly in Tamil Nadu, prompting the Opposition-ruled states, including Kerala, Telangana, and Punjab, to seek the court's intervention. The contention revolves around the Governor's powers in the lawmaking process and the issue of granting assent to Bills.

The Supreme Court questioned the delay in the Governor's action concerning pending Bills, highlighting that the decision came after the court's intervention. It agreed to hear the case further on December 1, allowing time for fresh decisions on the re-adopted Bills by Governor Ravi.

Regarding the Governor's role, the Constitution outlines four options when presented with a Bill: to grant assent, withhold assent, return for reconsideration, or reserve for the President's consideration. However, ambiguity in the proviso of Article 200 allows Governors to sit indefinitely on Bills without a specified timeframe, causing concerns and impacting legislative functioning.

The article raises the concern that prolonged delays by Governors in deciding on Bills could potentially paralyze elected governments. The Constitution uses the term "shall," suggesting a mandatory tone for Governors' actions on Bills, emphasizing that discretion must align with Constitutional terms.

Opposition-ruled states argue in the Supreme Court that Governors' delays hinder administration, halt decision-making processes, and create an adversarial atmosphere.

The Supreme Court now faces the task of determining whether it can impose timelines for Governors to decide on Bills, an uncharted area regarding the prescription of limits to constitutional powers. While the court has addressed various aspects of Governors' powers before, fixing timelines for their actions is a novel and contentious issue.

The court's intervention aims to resolve the ambiguity surrounding Governors' discretionary powers, specifically regarding pending Bills, which have implications on legislative functions and government effectiveness.

In building Himalayan tunnels, support and monitoring key, say experts-Indian Express **Explained**

Economics (Infrastructure)

Key takeaways:

1. **Uttarkashi Tunnel Collapse:** Experts emphasize the importance of adequate support structures and monitoring during Himalayan tunnel construction, questioning if these factors contributed to the collapse in Uttarkashi where 41 workers are trapped since Diwali.
2. **Rock Shear Zones:** Weak rock collapse is common during tunnel construction in the Himalayas, often caused by shear zones, where movement and crushing of rocks occur due to various factors, impacting rock behavior under stress.
3. **Protection Measures:** Various methods, like forepoles and rock bolts, are used to protect weak sections based on the length and strata of shear zones, with decisions made during designing or as immediate protective measures.
4. **Data Gathering and Monitoring:** Construction data is crucial in determining the collapse triggers, emphasizing the need for continuous monitoring during construction to identify weak zones and ensure protection measures.



| Clear your doubts now.



5. **Expert Committee Investigation:** The Uttarakhand government formed an expert committee involving geologists and researchers to investigate the collapse, seeking to understand if proper measures were taken and if monitoring was adequate.
6. **Shear Zone Identification:** Identifying weak zones during geological mapping is crucial before excavation, and proper measures must be taken, emphasizing the importance of periodic monitoring and instrumentation.
7. **Escape Tunnel Necessity:** There's discussion about the necessity of having an escape tunnel simultaneous to main tunnel construction, citing the Chenani-Nashri tunnel in Jammu and Kashmir as an example where an escape tunnel was excavated alongside the main one.
8. **Safety Guidelines:** Safety guidelines emphasize the importance of marked escape routes in tunnel construction during emergencies, ensuring attention to means of escape.
9. **Geological Factors:** Presence of the Barkot thrust in the area and its impact on shear zones and safety measures are highlighted, indicating the need for emergency preparedness in risky tunnel ventures.

Mains easy language::

The tunnel collapse in Uttarkashi, where workers remain trapped, has brought attention to crucial aspects of tunnel construction in the Himalayas. Experts point out the significance of adequate support structures and continuous monitoring during excavation. Weak rock collapse, often triggered by shear zones, is common in Himalayan tunneling. Various protective measures, including forepoles and rock bolts, are employed based on shear zone characteristics, either as pre-planned design considerations or immediate responses during construction.

The need for thorough data gathering during construction is emphasized, with experts highlighting its critical role in identifying collapse triggers. An expert committee formed by the Uttarakhand government aims to investigate if proper measures were implemented and monitoring was sufficient. The discussion includes considerations for simultaneous construction of escape tunnels alongside main tunnels, following safety guidelines marking specific escape routes during emergencies.

The geological context, including factors like the Barkot thrust, underscores the importance of emergency preparedness and safety measures in tunnel construction. The collapse has raised questions about whether the excavation process was adequately monitored and whether safety protocols were followed, drawing attention to the need for rigorous safety practices and continuous monitoring in such projects.

22nd November 2023

Alarming countdown-The Hindu Editorial

Environment

Key takeaways:

1. **Urgency of Action:** Immediate global efforts are crucial to achieve net zero carbon emissions and mitigate the escalating threat of greenhouse gas emissions.
2. **Slow Progress Since Paris Agreement:** Despite the Paris Agreement's goals, the world is falling short in limiting temperature rise, projecting an overshoot of 2.5°C-2.9°C by the century's end.
3. **Emission Reduction Targets:** To meet the 2°C target, emissions must drop by 28% by 2030; for 1.5°C, a 42% reduction is necessary. Doubts linger over countries' 'net zero' commitments' credibility.
4. **Insufficient Efforts:** Even optimistic scenarios offer only a 14% chance of keeping emissions below 1.5°C, signaling insufficient progress to date.
5. **Limited Emission Reduction:** Though the increase in GHG emissions has slowed, the world emitted 57.4 billion tonnes in 2022, showing minimal reduction.
6. **Immediate Climate Impact:** Record temperatures, including September's 1.8°C rise above pre-industrial levels, highlight the urgency of the situation.
7. **Demand for Swift Commitments:** Urgent and substantial emission cuts are needed, especially from wealthy and historically high-emitting nations.
8. **Critical Timeframe:** Time is running out; swift and resolute global action is imperative as previous summits have been hindered by procedural issues.

Mains easy language:





The United Nations' "Broken Record" report highlights a pressing issue: the need to urgently tackle rising greenhouse gas emissions. It emphasizes that all countries must swiftly work towards achieving net zero carbon emissions to combat the severe impacts of climate change.

Since the Paris Agreement in 2015, progress has been slower than needed to limit the rise in global temperatures. The report warns that current efforts are insufficient, and there's a risk of temperatures soaring beyond safe limits, possibly reaching 2.5°C-2.9°C higher than pre-industrial levels by the end of this century. To prevent this, significant reductions in emissions are crucial. The targets set suggest a need to cut emissions by 28% by 2030 to limit temperature rise to 2°C and by 42% to reach the safer 1.5°C goal. However, doubts exist regarding whether countries can truly deliver on their promises to achieve 'net zero' carbon emissions.

While there has been a slight slowdown in the increase of greenhouse gas emissions, the overall reduction remains minimal. Record-breaking temperatures have already been observed, with September registering as the hottest month on record, indicating the urgency of the situation.

The report stresses the importance of immediate action, particularly from wealthier nations and those historically responsible for higher emissions. Time is running out, and urgent, decisive steps are needed globally to address climate change. It urges countries to move past bureaucratic hurdles and commit to substantial reductions in emissions to safeguard the planet from devastating consequences.

Recognising the impact of climate change on health-The Hindu Editorial

Sociology

Key takeaways:

1. **Vulnerability of India's Health System:** India's inadequate health infrastructure makes its population highly susceptible to the adverse effects of climate change on health, resulting in increased illness and mortality.
2. **Impact on Health:** Climate change directly causes health issues while also indirectly affecting nutrition, work hours, and escalating climate-induced stress levels among the populace.
3. **Unprecedented Climate Events:** India witnessed record-high temperatures and heatwaves in 2023, and future predictions indicate worsening climate emergencies such as extreme heat, cyclones, and floods, leading to food security, livelihood, and health challenges.
4. **Double Burden of Diseases:** Both communicable and non-communicable diseases in India face exacerbation due to climate change. Factors like altered seasonality of infections, growth of disease-carrying vectors, and reduced access to food and water contribute to this burden.
5. **Impact on Non-communicable Diseases and Mental Health:** Climate change intensifies non-communicable diseases like kidney injuries, pulmonary diseases, and mental health issues, amplifying risks of mortality, hospitalizations, and mental health disorders.
6. **Urban Challenges:** Rapid, unplanned urbanization aggravates the impact of climate change in urban areas due to the absence of green spaces, increased temperatures, and stress from urban living conditions.
7. **Need for Mitigation and Intervention:** Understanding the pathways through which climate change affects health, bolstering health information systems, socio-economic support, and implementing upstream interventions like better urban planning, green cover, and public health measures are essential to mitigate health impacts.

Mains easy language:

India's health infrastructure faces critical vulnerabilities due to climate change. This phenomenon directly leads to health crises while indirectly affecting various facets of daily life. Rising temperatures and extreme weather events threaten to worsen existing health challenges, especially in an environment burdened by both communicable and non-communicable diseases.

The impact extends beyond physical health, affecting mental well-being, exacerbating conditions like kidney injuries, pulmonary diseases, and mental health disorders. Urban areas suffer disproportionately due to unplanned development and lack of green spaces, amplifying the adverse effects of climate change on health.

To address these challenges, efforts are required at global, regional, and local levels. This includes recognizing the problem, generating policy options based on research, and governmental commitment to implement these policies. Only through a concerted effort across these areas can meaningful changes be made in mitigating the impacts of climate change on health in India.

India, Japan converge in Southeast Asia-The Hindu Editorial

International relations



| Clear your doubts now.



Key takeaways:

1. **Philippines' Shift:** Philippines moves away from Chinese-led projects, turning to Japan and India for development and security cooperation due to sustainability and geopolitical concerns.
2. **Sovereignty Protection:** Under President Marcos Jr., the Philippines focuses on safeguarding sovereignty in the West Philippine Sea and strengthening ties with Japan and India for economic and security partnerships.
3. **Japan-Philippines Relations:** Philippines and Japan build a strategic partnership, moving beyond traditional U.S.-centric relations, signaling increased independent security ties and closer cooperation.
4. **India-Philippines Partnership:** Philippines advances ties with India, emphasizing better strategic collaboration, including agreements on maritime security and potential military supply.
5. **Hedging Against China:** Southeast Asian nations, including the Philippines, seek to diversify partnerships away from China's influence, favoring Japan and India as strategic partners amidst U.S.-China competition.
6. **Japan-India Cooperation:** Both nations' engagement in Southeast Asia aligns with the region's strategy to strengthen ties with preferred partners, Japan and India, for strategic collaboration in the Indo-Pacific.

Mains easy language:

The Philippines' pivot away from Chinese-led projects towards Japan and India demonstrates its strategic shift due to sustainability concerns and geopolitical interests. Under President Marcos Jr., the nation prioritizes sovereignty protection in the West Philippine Sea and seeks enhanced economic and security ties with like-minded partners.

Japan emerges as a significant strategic ally, expanding beyond a traditional U.S.-centric framework. Japan's engagement in the Philippines includes security assistance and military cooperation, signaling an independent security posture.

Simultaneously, the Philippines is forging deeper ties with India, marked by agreements enhancing maritime security and potential military equipment supply, aiming to balance regional power dynamics.

Southeast Asian nations, including the Philippines, seek to reduce dependence on China's influence by strengthening alliances with Japan and India, seen as key partners for strategic collaboration in the Indo-Pacific. This shift aligns with their interests amid the escalating U.S.-China competition, creating opportunities for operationalizing a shared vision for the region between Japan and India.

The OECD report on climate finance-The Hindu Text and Context

Environment

Key takeaways:

1. **OECD's Climate Finance Report:** Developed nations missed their \$100 billion annual commitment for climate needs in 2021 by about \$10 billion, with a 14% decline in adaptation finance from 2020 levels.
2. **Importance of OECD Report:** Insights from leading developed countries like the US, UK, Germany, France, Switzerland, and Canada in the report set the agenda for discussions at COP28.
3. **Loans in Climate Finance:** Out of \$73.1 billion in public sector funds in 2021, \$49.6 billion was given as loans, raising concerns about increased debt stress in poorer countries.
4. **Additionality and UNFCCC:** Developed countries must provide separate "new and additional" financial resources for climate needs. However, unclear definitions raise issues of double-counting and fund misuse.
5. **Vague Definitions of Climate Finance:** Ambiguity in defining climate finance allows richer nations to potentially label unrelated funding as climate finance, impacting genuine climate adaptation and mitigation efforts.
6. **Financial Assistance Needs:** Despite the \$100 billion goal, developing countries require significantly more—estimated at \$1 trillion annually by 2025 and \$2.4 trillion yearly between 2026 and 2030, rendering the goal insufficient.
7. **Role of the Private Sector:** Despite advocacy by leaders like John Kerry, private sector involvement in climate financing hasn't surged as expected, especially in climate adaptation initiatives.
8. **Public Funding Dominance:** The report underscores the continued dominance of public funding and multilateral development banks in enabling climate action, highlighting limited impact from private sector contributions.

Mains easy language:

The OECD's report on climate finance exposes the failure of developed nations to meet their \$100 billion annual commitment for climate support in 2021. This shortfall and a decline in adaptation funding pose significant challenges ahead of COP28.

A major portion of the public sector's climate finance in 2021 (\$49.6 billion out of \$73.1 billion) was provided as loans, raising concerns about potential debt strain in recipient countries, especially the less affluent ones.



| Clear your doubts now.



The concept of "new and additional" finance under the UNFCCC seeks separate funding streams for climate needs, distinct from regular aid. However, ambiguity in defining climate finance leads to potential double-counting and misuse of funds by developed nations.

While the \$100 billion goal falls short of actual financial needs for climate action in developing nations, private sector involvement in climate financing remains limited. Adaptation initiatives particularly struggle to attract private investment compared to mitigation projects.

Ultimately, the OECD report emphasizes the continuing dominance of public funding and multilateral development banks in driving climate action, highlighting the limited impact of private sector contributions thus far.

Coal isn't easy to exclude from sustainable development-The Hindu Science

Economics

Key takeaways:

1. **Renewable Energy Challenges:** Transitioning to renewable energy offers investment and job opportunities but requires the electricity grid to meet consistent peak demands, necessitating efficient operation of thermal power plants (TPPs).
2. **Global Fossil Fuel Dependency:** Fossil fuels like coal, oil, and gas dominate global energy production, contributing 80%, while solar and wind energy combined contribute a mere 2.4%.
3. **India's Energy Scenario:** India's per capita energy supply lags behind the global average and China's, indicating a continuous increase in energy needs. Coal-fired TPPs generate 74.3% of India's electricity, demonstrating their significant role.
4. **Emission Responsibility:** Despite India's relatively low cumulative emissions (3.3% of the global total), catering to 17% of the world's population makes striking a balance between development and emissions reduction imperative.
5. **Strategies for Cleaner Coal Use:** Enhancing TPP efficiency, expanding nuclear energy, and integrating renewable energy sources into the grid are proposed as strategies to promote cleaner coal use in India.
6. **Coal Transportation and Desulphurization:** Recommending washed coal supply and employing cost-effective solutions to reduce emissions for transportation and sulfur dioxide issues in TPPs.
7. **Adopting Advanced Technologies:** Encouraging the use of advanced technologies like AUSC, IGCC, and small modular nuclear reactors to significantly cut emissions while meeting electricity demands.
8. **Global Cooperation for Sustainable Development:** Stressing the significance of TPPs in ensuring electricity security, acknowledging low-carbon development as a necessity, and urging developed nations to lead in providing resources and technology for combating climate change.

Mains easy language:

The use of coal in generating electricity is a big deal in India. While everyone's talking about renewable energy, it's not as simple as just flipping a switch. Coal power plants are crucial because they make sure we always have enough electricity, especially when everyone's using it the most. Fossil fuels like coal, oil, and gas make up a whopping 80% of the world's energy, while solar and wind only contribute around 2%. India doesn't have as much energy available per person compared to other countries, and our needs keep growing. This is why coal power plants produce about three-quarters of the electricity here.

Even though India has a lot of people, our emissions from using coal and other fuels are actually not as high as many other countries. But we still need to balance giving everyone the energy they need with not making things worse for the planet. That's where things get tricky. We're trying to find ways to use coal more efficiently and make it cleaner. There are ideas like using new technologies and adding more renewable energy to our electricity mix. But it's not easy, and it takes time and money to make big changes.

Another thing to consider is how we transport and burn coal. It creates a lot of ash that can damage the power plants and the environment. We're thinking of ways to clean coal before using it and trying to find better solutions to reduce pollution from burning it. Plus, we're looking into using different technologies that could help cut down on the bad stuff coming out of coal power plants.

Basically, we want to use coal better while also trying to use cleaner and greener energy. It's a big challenge, but it's important because we need to provide electricity to everyone without hurting the planet too much.

On our terms, in our time -Indian Express Editorial

International relations

Key takeaways:



| Clear your doubts now.



1. **Border Dispute Priority:** India has suspended political and economic dialogues with China since the Ladakh frontier confrontation in 2020. Resolving the border issues remains a prerequisite for normalizing relations.
2. **Quad Dynamics:** While India is a member of the Quad, its approach to China is not solely guided by Quad dynamics. India doesn't follow all steps taken by its Quad partners concerning China.
3. **Military Solutions for Peace:** India believes that credible military arrangements, not just political or economic engagement, are necessary to rebuild peace on the disputed frontier with China.
4. **US-China Relations:** Renewed engagement between the US and China might affect India's strategic significance for Washington. However, summit meetings between leaders do not necessarily indicate substantial shifts in rivalry dynamics.
5. **Foreign Policy Focus:** India should assess changes in global power dynamics but must not let apprehensions about shifts paralyze its foreign policy. Instead, it should focus on enhancing its global standing and military capabilities to negotiate with China effectively.
6. **Steadfast Approach:** India's current approach of withholding political and economic engagement with China offers a better chance of persuading Beijing to reconsider its policies rather than hastily altering the terms of engagement.

Mains easy language:

The synopsis of India's approach to engaging with China encapsulates a strategic stance pivoted on resolving the Ladakh frontier dispute. India has refrained from political and economic dialogues with China since the 2020 confrontation, asserting that restoring peace on the border is pivotal for normalizing relations. While India is a Quad member, its policy toward China remains independent, not entirely aligned with its Quad partners' actions. The nation emphasizes credible military arrangements over diplomatic or economic talks as crucial for rebuilding peace on the disputed frontier, rejecting China's proposition of separating the border issue from the broader relationship.

In the context of renewed US-China engagement, concerns arise regarding India's strategic significance to Washington. However, it's noted that high-level summits between US and Chinese leaders may not herald substantial shifts in their rivalry dynamics. India must vigilantly analyze global power shifts but should not let apprehensions paralyze its foreign policy. Instead, India aims to leverage its increasing global influence and military capabilities to enhance its position vis-a-vis China, prioritizing its national interest.

The present strategy aligns with India's endeavor to persuade Beijing to reconsider its policies by withholding political and economic engagement, as Beijing's emphasis on decoupling the border issue from overall relations remains unacceptable. Therefore, India emphasizes a steady approach, underscoring the importance of resolving the border dispute before normalizing ties, rather than hastily altering engagement terms. This strategic stance aligns with India's pursuit of its national interest amid evolving global power dynamics.

Fight against climate change-Indian Express Explained

Environment

Key takeaways:

1. **Escalating Climate Crisis:** Global temperatures have exceeded pre-industrial levels by over 2 degrees Celsius, presenting a critical challenge to meeting climate targets.
2. **Persistent Emissions Increase:** Despite IPCC targets to reduce greenhouse gas emissions by 43% from 2019 levels by 2030, emissions continue to rise, except for a brief decline during the 2020 COVID-19 pandemic.
3. **Adaptation Financial Gap:** Developing nations anticipated financial aid under the Paris Agreement, but current support is far from meeting the over \$215 billion annual requirement for climate adaptation.
4. **Empty 'Loss and Damage' Fund:** Although established to aid climate-affected nations, the 'Loss and Damage' fund remains empty, unable to address the projected \$400 billion annual need.
5. **Financial Hurdles:** Wealthy nations' reluctance to allocate necessary funds to developing countries impedes global climate action, posing a significant barrier in addressing climate challenges.
6. **Doubtful Target Achievement:** Meeting emission reduction goals by 2030 seems highly unlikely, casting doubts on the feasibility of meeting set climate targets.
7. **Socio-economic Impact:** While immediate drastic changes may not be imminent, recurrent disruptions and socio-economic challenges are inevitable, especially for vulnerable communities, necessitating swift and impactful climate action.

Mains easy language:





The battle against climate change has become increasingly challenging as global temperatures have surged by more than 2 degrees Celsius from pre-industrial times due to pollution from industries and vehicles. Countries are struggling to reduce this pollution, and the emissions of harmful gases are still rising, except for a slight decrease during the COVID-19 pandemic in 2020.

Adapting to these changes in climate is tough for many countries. Some places might experience more floods or storms, while others face extreme heat or less rainfall. To prepare for these challenges, countries need a lot of money. Wealthier nations promised to help poorer ones deal with these problems, but they haven't given enough money yet.

There's a special fund created to aid nations affected by climate issues, but currently, it doesn't have any money to offer. Despite promises by richer countries to increase funding for this cause, they haven't fulfilled these commitments. Consequently, many developing countries aren't receiving the necessary support.

Meeting the targets set to reduce pollution by 2030 seems nearly impossible. This suggests that Earth will continue to get hotter. This year is expected to set a new record as the hottest ever. While immediate changes might not be noticeable, there will likely be increased challenges such as floods or damage to crops, particularly affecting vulnerable communities.

Though facing tough circumstances, there's hope in technology. Ideas to remove harmful gases from the air exist, but they're currently expensive and not easily applicable. While it's challenging to prevent a significant rise in temperature, humans have proven resilient and adaptable. Yet, collective efforts are essential to mitigate further damage and work towards solutions for this critical global issue.

Rare metal found in Sutlej sands: What is tantalum, what it is used for-Indian Express Explained

Science

Key takeaways:

1. **Discovery in Sutlej Sands:** Researchers from IIT Ropar discovered tantalum, a rare metal, in Punjab's Sutlej river sands, which holds significance for the state and India due to its widespread use in electronics and semiconductors.
2. **Properties of Tantalum:** Tantalum, with atomic number 73, is a grey, dense, and highly corrosion-resistant metal. It forms an oxide layer upon exposure to air, making it resistant to acids and possessing exceptional ductility.
3. **Unique Characteristics:** It is highly resistant to chemical attack below 150°C, has a very high melting point (exceeded only by tungsten and rhenium), and is used for its strength and corrosion resistance.
4. **Historical Discovery:** Discovered in 1802 by Swedish chemist Anders Gustaf Ekenberg, it was initially confused with niobium until Jean Charles Galissard de Marignac differentiated them in 1866.
5. **Name Origin:** Named after Tantalus, a figure from Greek mythology known for eternal punishment, symbolizing tantalum's insolubility in acids.
6. **Application:** Tantalum is widely used in capacitors for electronics due to its ability to store more electricity in smaller sizes, making it ideal for smartphones, laptops, and cameras. It's also used in chemical plants, aerospace technology, and medical implants due to its non-reactive nature.
7. **Tantalum Carbide:** A composite of tantalum carbide and graphite is among the hardest materials and is employed in high-speed machining tools.

Mains easy language:

Researchers from IIT Ropar have discovered tantalum, an important and rare metal, in Punjab's Sutlej river sands. This discovery carries significant implications, particularly in the realm of electronics and semiconductor industries where tantalum is extensively utilized.

Tantalum, a grey, dense, and exceptionally corrosion-resistant metal, holds unique properties, including high ductility, corrosion resistance, and an extremely high melting point. Discovered in 1802 by a Swedish chemist, it was initially mistaken for niobium until distinguished as a separate element later in history.

Named after the mythological figure Tantalus due to its insolubility in acids, tantalum finds widespread applications in various industries. Its use in capacitors for electronic devices owing to its ability to store more electricity efficiently, along with its non-reactive nature suitable for medical implants, chemical plants, and aerospace technology, highlights its versatility and importance in diverse fields.

The discovery of tantalum in the Sutlej sands not only marks a scientific achievement but also holds promising prospects for future technological advancements and industrial applications.



| Clear your doubts now.



23rd November 2023

Listen to the people, not the numbers-The Hindu Editorial

Economics

Key takeaways:

1. **Income Disparity, Not Growth:** The Indian economy suffers from an income problem rather than a growth problem. Despite overall GDP growth, there's insufficient and unsustainable income growth for a significant portion of the population.
2. **Debate on Job Creation:** There's a debate among economists regarding whether the economy is creating enough jobs. The accuracy of government data is questioned, and some attribute the issue of insufficient jobs to current government policies.
3. **Perception vs. Reality in the U.S. Economy:** Despite positive economic numbers in the U.S., there's widespread dissatisfaction among citizens regarding fair wages, job security, and coping with inflation.
4. **Shift in Indian Job Structure:** The transition from agriculture to services without a focus on manufacturing has resulted in limited job opportunities, especially in rural areas lacking education for high-end services. Jobs created often lack security and opportunities for skill development.
5. **Rethinking Economic Measures:** There's a need to rethink economic concepts for a more sustainable future, focusing on local, environmentally friendly enterprises rather than large-scale global production.
6. **Valuing Caregivers and Unpaid Work:** Recognition is needed for the economic value of informal work done by women in families and communities, which is often overlooked in traditional economic measures.
7. **Policymaking Shift:** Policymaking should prioritize marginalized voices like workers, small farmers, entrepreneurs, and women, rather than relying solely on historical statistics, to shape more inclusive and sustainable economic policies.

Mains easy language:

In both India and the United States, discrepancies between economic statistics and the actual experiences of citizens underscore critical issues. India's robust GDP growth contrasts starkly with inadequate and unsustainable income growth for a significant part of its population, sparking debates among economists about job scarcity and the accuracy of government data. Similarly, despite positive economic indicators in the United States, there's widespread dissatisfaction due to concerns about fair wages, job security, and coping with inflation, highlighting a disconnect between statistics and real economic conditions.

The Indian economy's structural problem lies in the leap from agriculture to services, skipping the vital manufacturing-led growth phase. This results in a dearth of jobs, especially in rural areas where skills for high-end services are lacking. Consequently, created jobs often lack security and pathways for skill development, deepening income inequalities.

Addressing these challenges demands a rethinking of economic measures. Recognizing the economic value of informal work, such as caregiving, is crucial. Policymakers need to prioritize marginalized voices and move away from relying solely on historical statistics to craft inclusive, equitable, and sustainable economic policies aligned with the population's actual needs and aspirations.

Reporting animal cruelty makes children safer-The Hindu Editorial

Key takeaways:

1. **High Prevalence of Child Abuse in India:** Child abuse in India is a widespread concern, with studies showing alarming rates of physical, sexual, and emotional abuse among children.
2. **Correlation Between Animal Cruelty and Human Violence:** Research from different countries demonstrates a clear link between animal abuse and subsequent human violence, especially in households where animal cruelty exists.
3. **Impact on Reporting Child Abuse:** Animal abuse can coerce children into silence in cases of domestic violence, posing challenges to reporting, but it can also serve as an early indicator of potential household abuse.
4. **Need for Research in India:** Despite international studies highlighting the connection between animal cruelty and child abuse, empirical studies on this correlation within the Indian context are insufficient.
5. **Enforcement of Anti-Cruelty Laws:** Effective enforcement of anti-cruelty laws not only protects animals but also acts as a deterrent against further violence, benefiting both animal and human victims. Collaboration between child protection and animal welfare groups could be instrumental in addressing this correlation.

Mains easy language:



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India grapples with a significant yet unaddressed issue of child abuse, citing factors like family dynamics, law enforcement, and cultural influences. Globally, studies highlight a critical correlation between animal cruelty and subsequent human violence, notably child abuse, showcasing a dire need for empirical studies in India to explore this link.

Instances where animal abuse is used to silence children regarding domestic violence hinder the reporting of child abuse, emphasizing the importance of recognizing this connection. Despite its prevalence, there's a lack of data collection and enforcement under anti-cruelty laws in India, impacting the understanding of overlapping crimes and preventive measures.

Empirical evidence suggests that enforcing anti-cruelty laws not only protects animals but also acts as a deterrent against further violence, benefiting both animal and human victims. Collaborative efforts between child protection and animal welfare groups could pave the way to reduce abuse collectively, offering a brighter and safer future for children by breaking the cycle of violence at its source. Understanding and addressing this crucial link can help safeguard both animals and children from violence perpetrated by the same individuals.

Haryana's employment reservation law-The Hindu Text and Context

Polity

Key takeaways:

1. **Haryana's Reservation Law:** Enacted in 2020, the law mandated a 75% job reservation in private sector jobs paying less than ₹30,000 monthly for individuals domiciled in Haryana for the past five years.
2. **Legal Challenges:** The law faced legal opposition primarily on grounds of violating fundamental rights (Articles 19, 14, and 15) by creating discrimination among states and impinging on the freedom to reside and work across India.
3. **State Justification:** Haryana defended the law, asserting its intent to safeguard the livelihoods of local residents and address the increasing unemployment within the state. The state government cited Article 16(4) of the Constitution, allowing reservations in public employment for underrepresented groups, to support the law's implementation.
4. **High Court Ruling:** The Punjab and Haryana High Court declared the law unconstitutional, specifically noting its infringement upon Article 19(1)(g) and encroachment on legislative powers related to Article 16(3). The court criticized the law's provisions that seemed to enhance state control over private employers and their hiring processes.
5. **Wider Impact:** Similar laws have been enacted in various states like Maharashtra, Karnataka, Andhra Pradesh, and Madhya Pradesh, yet the legal challenges and court interventions in Haryana could have implications for the implementation and legality of such reservation laws in other states across India.

Mains easy language:

The Punjab and Haryana High Court recently invalidated Haryana's contentious employment reservation law, marking a significant clash between regional policies and constitutional rights. The law, enacted in 2020, aimed to reserve 75% of private sector jobs paying under ₹30,000 monthly for individuals domiciled in Haryana for at least five years. However, this legislation faced legal challenges that argued it infringed upon fundamental rights guaranteed by the Indian Constitution. Critics contended that such a provision fostered discrimination among states and curtailed the freedom to settle and work anywhere in India, raising profound constitutional concerns.

In defense of the law, the Haryana government emphasized its intent to safeguard the livelihoods of local residents and address escalating unemployment within the state. The government cited Article 16(4) of the Constitution, which allows reservations in public employment for underrepresented groups, to justify the legislation. However, the court's ruling centered on the law's perceived conflict with Article 19(1)(g), which guarantees the right to engage in trade, occupation, or business without undue interference. Moreover, the court raised objections to aspects of the law that appeared to grant excessive control to the state over the hiring practices of private employers.

This ruling's broader implications extend beyond Haryana, potentially influencing similar legislation in other Indian states such as Maharashtra, Karnataka, Andhra Pradesh, and Madhya Pradesh. It underscores the delicate balance between regional employment preferences and upholding constitutional principles of equality and freedom. The court's decision serves as a critical precedent, emphasizing the necessity for legislative measures that align with constitutional provisions, ensuring equal opportunities for all citizens throughout the country. Ultimately, this ruling accentuates the fine line between regional policymaking autonomy and the imperative to uphold fundamental rights enshrined in the Indian Constitution, setting a significant precedent for future legislative actions and legal disputes.

'Lower oxygen at high altitudes increases lifespan in ageing mice'-The Hindu Science

Science



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Key takeaways:

1. **Hypoxia and Lifespan:** Research on ageing mice suggests that exposure to lower oxygen levels at high altitudes can significantly increase their lifespan, marking the first demonstration of oxygen restriction extending lifespan in an ageing mammal.
2. **Study Design:** The study involved placing mutant mice, prone to accelerated ageing and a shorter lifespan, in hypoxic chambers mimicking oxygen levels similar to those at Mt. Everest's base camp. Mice in low-oxygen conditions exhibited a 50% longer lifespan compared to those in normal oxygen conditions.
3. **Neurological Function:** Animals in hypoxic conditions displayed better neurological function than those in normal oxygen conditions, showcasing potential benefits beyond just lifespan extension.
4. **Uncertain Mechanisms:** Despite the positive outcomes, the study failed to identify the specific mechanisms by which hypoxia extends lifespan. Researchers ruled out dietary restriction as the underlying cause and found no definitive clues in gene expression or signaling pathways.
5. **Human Implications:** While intriguing, caution is advised in directly translating these findings to human populations. Further research is essential to determine applicability, considering species variations, environmental factors, and broader health outcomes.

Mains easy language::

The study delves into the impact of hypoxia, or oxygen restriction, on ageing mice, demonstrating that exposure to lower oxygen levels, akin to high-altitude environments, significantly lengthens lifespan. Notably, this marks the first instance where oxygen restriction has been shown to extend the lifespan of an ageing mammal.

Employing mutant mice models prone to accelerated ageing, researchers subjected them to low-oxygen conditions similar to those at Mt. Everest's base camp. Surprisingly, mice exposed to hypoxic chambers exhibited a striking 50% longer lifespan compared to their counterparts in normal oxygen conditions.

Additionally, beyond longevity, animals housed in hypoxic conditions displayed enhanced neurological function, contrasting with neurologic debility observed in their counterparts under normal oxygen levels. However, despite these encouraging outcomes, the study fell short in pinpointing the precise mechanisms by which hypoxia influences lifespan extension, ruling out dietary restriction and yielding no concrete leads from gene expression or signaling pathways.

While these findings are intriguing, caution is urged in directly applying them to human scenarios. Further research is crucial to ascertain their relevance, considering species-specific variations, environmental factors, and broader health implications before making any direct implications or recommendations for human health based on these preliminary findings.

CoP28 turns attention to potent methane emissions-The Hindu Science

Environment

Key takeaways:

1. **Potent Climate Influence:** Methane, while having a relatively short atmospheric life of around 10 years, possesses a significant warming impact, approximately 28 times greater than CO₂ over a 100-year timescale.
2. **Emission Sources:** Human-related activities contribute around 60% of methane emissions, with agriculture, particularly livestock and rice cultivation, and the energy sector (coal, oil, and gas) being the primary sources.
3. **Mitigation Strategies:** Curbing methane involves repairing leaky energy infrastructure, adjusting animal diets in agriculture, and implementing water management changes in rice fields.
4. **Climate Impact Potential:** Swift reductions in methane emissions, particularly from the fossil fuel sector, could prevent a notable temperature rise by mid-century, equivalent to removing all cars and trucks globally from the roads.
5. **Urgency in Methane Reduction:** Despite its relatively short lifespan compared to CO₂, focusing on reducing methane emissions is crucial alongside CO₂ reduction efforts to effectively mitigate climate change.
6. **Challenges and Solutions:** Addressing methane leaks in infrastructure, modifying agricultural practices, and adopting efficient waste management techniques are pivotal steps in combating methane emissions and their impact on global warming.

Mains easy language:

As the focus intensifies on mitigating climate change, discussions at the upcoming CoP28 meeting in Dubai are expected to target methane emissions, recognizing their substantial role alongside CO₂ in driving global warming. Despite its shorter lifespan compared to CO₂, methane holds significant climate-warming potential, being about 28 times more impactful over a century.



| Clear your doubts now.



Human activities contribute significantly to methane emissions, primarily from agriculture (specifically livestock and rice cultivation) and the energy sector (coal, oil, and gas). Efforts to curb these emissions involve repairing infrastructure, modifying animal diets, and implementing changes in water management practices.

Reports suggest that rapid reductions in methane emissions, especially from the fossil fuel sector, could prevent a considerable temperature increase by mid-century, equivalent to the impact of removing all cars and trucks worldwide from the roads. These findings underscore the urgency to address methane emissions as a critical component of mitigating climate change and highlight the achievable steps in reducing this potent greenhouse gas.

A way out of the dark-Indian Express Editorial

Disaster Management

Key takeaways:

1. **Shift in Perception:** India's response to disasters has changed, evident in the unified effort involving multiple agencies to rescue 41 workers trapped in Uttarakhand's Silkyara Tunnel. Advanced technology and coordination are crucial in this operation.
2. **Diverse Representation and Infrastructure:** The trapped workers represent different states and play a vital role in regional development through their labor. Constructing tunnels in the Himalayas is critical for remote areas' logistics and economic growth.
3. **Challenges and Response:** The collapse in the Himalayas poses geological challenges. However, government, public, private sectors, and international expertise collaborate to overcome these challenges using technology and collective effort.
4. **Rescue Operation Details:** Due to uncertainties akin to anti-terrorist or war operations, fixed timelines are not feasible. The workers have access to light and essential supplies via a pipeline. Psycho-social support is provided, and multiple rescue approaches are pursued concurrently.
5. **Current Strategies:** Various methods, including auger and drift technologies, are being used despite encountering geological obstacles. Collaboration among competent agencies is crucial for a successful rescue, focusing on converging capabilities.

Mains easy language:

The Silkyara Tunnel crisis in Uttarakhand marks a pivotal shift in India's disaster response, showcasing a united front involving diverse governmental and private entities to rescue 41 trapped workers. This incident highlights the fusion of advanced technology, coordinated action, and multi-agency collaboration, redefining India's approach to managing such emergencies. The episode underscores the significance of collective efforts and technological advancements in effective disaster response.

The trapped workers, representing various states, play a crucial role in regional development through their labor. Constructing tunnels in the Himalayas holds immense importance for remote areas, emphasizing infrastructural growth and connectivity in challenging terrains.

Challenges posed by the region's unpredictable geology prompt a collaborative effort involving governmental bodies, the private sector, and international expertise. Despite hurdles, the application of cutting-edge technology and collective expertise reflects a proactive stance in overcoming the unique geological challenges.

The complex rescue operation, similar to anti-terrorist operations, precludes fixed timelines. However, measures ensure the workers have light and essential supplies through a pipeline, while multiple rescue strategies, including advanced technologies, are concurrently pursued to expedite operations while minimizing risks. Collaboration among competent agencies becomes imperative, setting a precedent for future disaster management strategies, emphasizing readiness, collaboration, and technological innovation in safeguarding lives during crises.

Kerala nurse facing death penalty in Yemen: the case of Nimisha Priya-Indian Express Explained

Polity

Key takeaways:

1. **Legal Status:** Yemen's Supreme Court dismissed the appeal of Nimisha Priya, an Indian nurse facing the death penalty for the murder of a Yemeni citizen in 2017.



| Clear your doubts now.



2. **Background:** Priya, a nurse from Kerala, married and moved to Yemen in 2008. She and her husband planned to start a clinic but faced challenges with their Yemeni business partner.
3. **Clinic Troubles:** Priya and her partner's business dispute led to a criminal case and a short jail term. Allegations arose concerning forged documents, ownership conflicts, abuse, and torture against Priya.
4. **Murder and Aftermath:** Priya, facing abuse and coercion, injected her partner with sedatives, leading to his death. She, with an accomplice, disposed of the body. Both were arrested, tried, and Priya received a death sentence.
5. **Campaign for Release:** Efforts have been made by the "Save Nimisha Priya International Action Council" to seek support for her release. The Indian government sought consular access and provided legal aid.
6. **Family's Appeal:** Priya's family seeks permission to go to Yemen, intending to meet the victim's family, seek pardon, and explore the option of payment under Islamic law to secure her release.

Mains easy language:

Nimisha Priya, an Indian nurse, faces a death sentence in Yemen for her involvement in the murder of a Yemeni citizen in 2017. Priya's journey from Kerala to Yemen with her husband, envisioning a better life by starting a clinic, turned tumultuous due to conflicts with their Yemeni partner, accusations of forged documents, and abusive circumstances. Her case has drawn international attention, prompting efforts, including a campaign by the "Save Nimisha Priya International Action Council," seeking support for her release.

The Indian government's involvement, seeking consular access and legal aid, highlights the official attempts to assist Priya. However, her family now aims to personally appeal for pardon and explore potential options under Islamic law by traveling to Yemen, seeking exemption from India's travel ban to the country.

Amidst legal complexities, abuse allegations, and the tragic turn of events leading to Priya's sentencing, the case reflects broader implications regarding legal rights, abuse, and complexities faced by expatriates. The family's plea for pardon and exploration of potential pathways for her release underscores the ongoing international attention and efforts towards reconsidering her fate amidst the stark legal circumstances.

GHOL FISH-Indian Express Explained

Key takeaways:

1. **State Fish Declaration:** Gujarat declared the ghol fish, also known as the black-spotted croaker, as its official state fish. This decision was based on its economic value, uniqueness, and significance to local fishermen.
2. **Reasons for Selection:** The ghol fish was chosen due to its scarcity, economic importance, and the need for its conservation. It's primarily found in the region stretching from the Persian Gulf to the Pacific Ocean.
3. **Selection Process:** The selection of the state fish involved a consultative process with representatives from various districts. Other species considered included ribbon fish, pomfret, and Bombay duck.
4. **Economic Significance:** The ghol fish holds high commercial value, especially in international markets like China and other Asian countries. Its meat is exported as frozen fillet or whole fish, while its dried air bladder is highly prized for medicinal purposes.
5. **Market Value:** Ghol fish fetches a considerable price, with a kilogram ranging from Rs 5,000 to Rs 15,000 in Gujarat. The dried air bladder is the most expensive part, selling for up to Rs 25,000 per kilogram in export markets.

Mains easy language:

Gujarat recently designated the ghol fish, also known as the black-spotted croaker, as its official state fish, citing its rarity, economic value, and the necessity for conservation. This decision follows a consultative process involving various districts and considering species like ribbon fish, pomfret, and Bombay duck. The ghol fish, primarily found in the region spanning from the Persian Gulf to the Pacific Ocean, stood out for its scarcity and economic significance.

Renowned for its high commercial worth, particularly in international markets like China and other Asian countries, the ghol fish's meat and dried air bladder are prized commodities. Despite limited local consumption, this species significantly contributes to Gujarat's fish export industry, fetching substantial prices, with a kilogram ranging from Rs 5,000 to Rs 15,000, and its dried bladder commanding an exceptional Rs 25,000 per kilogram in export markets. The designation aims to underscore the fish's importance, boosting conservation efforts and acknowledging its significant economic impact on Gujarat's fishing industry, emphasizing its role in the state's overall fish production and export earnings.





24th November 2023

End the secrecy-The Hindu Editorial

International Relations

Key takeaways:

Diplomatic Standoff: India and Canada faced a diplomatic standoff following Canadian Prime Minister Justin Trudeau's allegations against Indian government agents for orchestrating the assassination of a Khalistani leader.

Visa Suspension: In response to security threats from Khalistani groups, India suspended e-visas and tourist visas for Canadian citizens, impacting travel ties and leading to a reduction in diplomatic staff from Canada.

Partial Restoration: India's recent decision to resume e-visas for Canadian citizens signifies a step towards restoring travel ties, although it doesn't imply a complete normalization of relations.

Impact on Relations: Strained political ties have adversely affected business and investment discussions between India and Canada. Canada had also suspended talks for a Free Trade Agreement after the Khalistani leader's killing.

U.S. Allegations: Recent reports from the U.S. allege Indian government agencies planning against another Khalistani leader, adding to the ongoing controversy despite India's diplomatic efforts with western partners.

Shift in India's Response: Initially rejecting Canadian allegations as "absurd and motivated," India has shown a more accommodating stance towards U.S. inputs regarding the Khalistani issue, indicating a change in approach.

Call for Transparency: The article advocates for increased transparency from the Indian government concerning its responses to these allegations and the formulation of a coherent strategy moving forward, especially in matters of national security.

Mains easy language:

The diplomatic rift between India and Canada stemmed from allegations made by Canadian Prime Minister Justin Trudeau, accusing Indian government agents of orchestrating the assassination of a Khalistani leader. This led to a suspension of travel visas, creating a deadlock in bilateral relations. India's recent decision to reinstate e-visas for Canadian citizens signifies a step towards easing tensions; however, it falls short of complete normalization between the nations.

Complicating matters, the United States raised concerns about Indian government agencies planning against another Khalistani leader. This development added layers to the ongoing controversy, extending the challenges faced in resolving the issue through diplomatic channels. India's shifting response—from initially dismissing claims as baseless to adopting a more receptive stance towards U.S. inputs—reflects the intricate nature of these allegations and their geopolitical implications.

Pressure mounts on India to exhibit greater transparency in handling these sensitive national security matters. It's imperative for the Indian government to chart a well-defined and coherent course of action. This strategy must delicately balance security imperatives with diplomatic engagement, not only to address the complexities of the accusations but also to restore stability in relations not just with Canada but with its broader international partners.

The current situation highlights the critical necessity for India to proceed cautiously, ensuring transparency and coherence in its response to these allegations. Such an approach becomes pivotal in rebuilding trust and stability in diplomatic ties, emphasizing the need for a nuanced and strategic approach to navigate through these intricate international challenges.

The impact of violence on a child's mind-The Hindu Editorial

Sociology

Key takeaways:

1. **Montessori's Perspective:** Maria Montessori highlighted the link between childhood exposure to violence and the perpetuation of cycles of revenge and conflict. She emphasized the vital role of peaceful environments in shaping a child's development.
2. **Impact on Children:** Violence experienced during childhood can instill notions of revenge and resistance, evolving into violent behavior in adulthood. Poverty and historical circumstances exacerbate children's susceptibility to adopting violent roles.
3. **Psychological Fallout of Conflicts:** Israel's actions in Gaza are predicted to profoundly affect Palestinian children, leading to trauma, loss of childhood, and potential perpetuation of violence.



| Clear your doubts now.



4. **Education for Peace:** Despite Montessori's emphasis on education, doubts arise about its effectiveness in countering violence, given global conflicts and education's failure to foster peace-oriented ideologies.
5. **Challenges in Education:** Conflicting historical narratives and educational curricula in hostile regions perpetuate divisive ideologies, hindering efforts toward reconciliation and peace-building.
6. **Missed Opportunities:** Peace education initiatives often face obstacles due to political tensions and security concerns, impeding meaningful exchanges between conflicting groups.
7. **Reconsidering Education's Role:** There's a critical need to reassess educational approaches in conflict zones like Gaza and Israel, encouraging discussions on education's impact in shaping perspectives and fostering peace amid historical conflicts.

Mains easy language:

The discussion revolves around the profound impact of violence on a child's psyche, drawing upon the perspectives of renowned figures like Maria Montessori and philosopher Elias Canetti. Montessori emphasized the critical link between childhood exposure to violence, both personal and collective, and the perpetuation of cycles of vengeance and conflict. Similarly, Canetti highlighted how such experiences plant seeds of resistance and revenge in young minds, often manifesting as rebellion or violent behavior in adulthood, exacerbated by poverty and historical circumstances.

The recent conflicts, specifically Israel's actions in Gaza, are predicted to have severe psychological repercussions, especially among Palestinian children, potentially perpetuating a cycle of violence. The discourse underscores Montessori's belief in peaceful environments as pivotal in shaping a child's development. Despite this, doubts arise about the efficacy of education in countering violence, given the failure of education systems to foster peace-oriented ideologies in regions marred by historical conflict and divergent narratives.

The article calls for a critical reassessment of educational strategies, stressing the need to reevaluate how education can shape perspectives and foster peace, particularly in conflict zones like Gaza and Israel. It highlights missed opportunities in peace education due to political tensions, urging a reconsideration of education's role in promoting reconciliation and peace-building in the face of historical animosities.

COP 28: India's equity demand-The Hindu Text and Context

Environment

Key takeaways:

1. **Climate Policies & Historical Impact:** The 'common but differentiated responsibilities' principle since 1992 acknowledges varied duties among nations regarding climate change, shaped by their historical carbon emissions.
2. **Global Carbon Budget Significance:** India seeks fair acknowledgment of its depleted carbon share or equivalent reparations at COP 28, as it grapples with impeded development due to addressing global environmental issues caused by developed nations' emissions.
3. **Challenges & Unmet Commitments:** Despite lower per capita emissions, India faces obstacles in development due to addressing global environmental issues caused by higher emissions from developed nations. Moreover, unfulfilled financial commitments for climate mitigation hinder progress.
4. **Development against Climate Change:** India prioritizes development as its main defense, advocating equitable treatment and highlighting initiatives like the International Solar Alliance and sustainable lifestyles.
5. **Equity Demands & COP 28 Stance:** India presses for fair carbon budget recognition or equivalent reparations, emphasizing the need for more financial support and fewer rhetorical commitments from developed nations to address historical emission imbalances.
6. **COP 28 Position:** India's COP 28 stance urges fair carbon budget recognition, pushing for equitable treatment and financial aid from developed nations while stressing development's role in countering global environmental challenges.

Mains easy language:

The principle of 'common but differentiated responsibilities' in climate policies acknowledges varying responsibilities among nations, mainly due to historical emissions. This principle aims for equitable distribution of the global carbon budget while recognizing the developmental needs of nations. India, with a comparatively lower per capita carbon footprint, faces challenges posed by the depletion of the global carbon budget, hindering its developmental goals.

At COP 28, India advocates for fair recognition of its share of the carbon budget or equivalent reparations. It emphasizes the urgency of development in combatting climate change and cites initiatives like the International Solar Alliance and sustainable





lifestyle missions as proactive steps. Despite these efforts, India faces obstacles in fulfilling its developmental objectives due to the pressure to address global environmental issues, primarily caused by disproportionate emissions from developed nations.

The unmet financial commitments from developed countries further exacerbate climate mitigation efforts in developing nations. India's stance at COP 28 demands equitable treatment, stressing the need for more financial support and less rhetorical commitments from developed nations to address the imbalances and challenges posed by historical emissions on a global scale.

Deepfake alarm: challenges as AI's shadow looms over the entertainment industry-The Hindu Text and Context

Science and Technology

Key takeaways:

1. **Deepfake Impact:** Recent deepfake controversies involving Indian celebrities underscore the pressing need for AI regulations. The incidents highlight the risks posed by technological advancements and emphasize the demand for legal protection and AI-based solutions to combat such threats.
2. **AI's Dual Nature:** AI discussions often revolve around its direct benefits or drawbacks, but incidents like the Rashmika Mandanna deepfake stir attention beyond this norm. These occurrences prompt a wider audience to engage with global discussions on AI and its responsible use.
3. **Entertainment and AI:** The entertainment industry's encounter with AI, exemplified by deepfake controversies, exposes the technology's significant influence. However, the concern lies not just in present debates but in the rapid advancement of AI technology, particularly generative AI.
4. **AI's Threat Evolution:** Beyond typical cybercrimes, generative AI's evolution presents unprecedented challenges, surpassing existing norms and potentially creating severe future implications.
5. **Legal Frameworks:** Combatting deepfake victimization in India currently relies on utilizing existing legal provisions, yet the absence of specific legislation targeting deepfakes necessitates more comprehensive regulatory frameworks and protective measures.
6. **Technological Solutions:** Efforts to counter deepfake threats involve developing AI-based tools and global standards for content authentication and detection. However, a lack of robust support systems for those affected by AI-based attacks remains a significant gap, demanding urgent legislative and technological interventions.

Mains easy language:

Recent deepfake controversies involving Indian celebrities have amplified the urgency for robust regulations and safeguards concerning Artificial Intelligence (AI). These incidents have expanded discussions beyond the conventional discourse on AI's merits and risks, highlighting significant disparities in people's involvement with AI-related issues.

A prominent case involved a deepfake video featuring Rashmika Mandanna's likeness transposed onto another person, sparking widespread concern. These occurrences, alongside AI's growing impact in the entertainment industry, underscore the technology's expanding influence.

However, the principal worry stems from the progression of deepfake technology, surpassing conventional cybercrimes and posing unforeseen challenges. As generative AI rapidly evolves, the threat landscape is poised to outpace current controversies.

Addressing deepfake victimization in India relies on leveraging existing legal frameworks. While victims can seek legal recourse and report incidents to social media platforms, the absence of specific legislation targeting deepfakes necessitates comprehensive regulatory frameworks and technological countermeasures.

Resilience amid turmoil-Indian Express Editorial

Economics

Key takeaways:

1. **Macroeconomic Stability:** India's global standing has been strengthened due to its macroeconomic and financial stability. Recent economic indicators such as inflation rates, GDP growth, and fiscal discipline contribute to this stability.
2. **Global Geopolitical Developments:** Positive signs have emerged from West Asia, with reported agreements between Israel and Hamas, along with significant discussions between US President Joe Biden and Chinese President Xi Jinping on various global issues. This signals potential cooperation in a nervous global environment.
3. **Inflation Trends:** Both in India and globally, there have been positive shifts in inflation rates. This has led to eased bond yields and a rise in equities, indicating hope that the fight against inflation might be making progress.



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4. **Economic Indicators:** Several economic indicators in India, such as retail and core inflation, wholesale price index, global oil prices, and festive season trading figures, point towards positive trends and potential growth.
5. **Government Policy and Fiscal Discipline:** India's government and financial institutions have navigated challenges carefully, managing global risks and inflation threats while aiming to achieve fiscal deficit targets and sustain economic growth.
6. **Upcoming Challenges:** Despite the positive indicators, certain challenges loom, such as closely monitoring oil prices, the fragile external demand environment, and the impact of upcoming elections on government policies and private sector activity.
7. **Need for Continued Policy Coordination:** The coordination between monetary and fiscal policies is crucial for maintaining stability, especially amidst a global environment fraught with risks.
8. **Preserving Economic Resilience:** India's relative global standing and economic resilience need to be preserved at all costs to sustain growth momentum in a world where many parts are experiencing sluggish growth.

Mains easy language:

India's global standing has been reinforced by its economic resilience and stable macroeconomic performance. Recent positive indicators, including reduced inflation rates domestically and globally, reflect a favorable economic landscape. Geopolitical developments, like Israel-Hamas agreements and discussions between US and Chinese leaders, signal potential cooperation in an uncertain world.

Despite these positives, challenges persist. Careful monitoring of oil prices, the fragile global demand scenario, and the impact of upcoming elections on economic policies are crucial. The coordination between monetary and fiscal policies has been commendable, essential for managing risks and inflation threats.

The government's adherence to fiscal targets and proactive economic policies has sustained growth momentum, seen in high-frequency indicators and impressive festive season trade figures. Preserving India's economic resilience is imperative, especially in a world witnessing sluggish growth elsewhere. Continued vigilance, policy coherence, and maintenance of macroeconomic stability are pivotal to upholding India's global status and ensuring sustained growth amidst uncertainties.

ENGAGING WITH APEC-Indian Express Editorial

International relations

Key takeaways:

1. **APEC Summit Dynamics:** The recent APEC summit in San Francisco witnessed the resumption of dialogue between the US and China after a long hiatus, signaling a thaw in relations despite underlying tensions.
2. **Strategic Outcomes:** Disagreements among certain countries on including references to Ukraine and Israel in the Golden Gate Declaration led to compromises, reflecting strategic differences and power rivalries.
3. **US-China Relations:** While the summit restored communications between the US and China, disagreements persist, particularly on China's approach to global affairs. The US aims for a balance against China's growing influence.
4. **Regional Dynamics:** Surrounding the APEC summit, engagements between Japan, China, Korea, and the Quad leaders without India highlight geopolitical realignments and efforts to establish new dialogue frameworks.
5. **Taiwan's Role:** Taiwan's presence at APEC was notable, emphasizing its aspirations for inclusion in economic agreements like the CPTPP. Discussions focused on economic expansion and countering Chinese coercion.
6. **Supply Chain Initiatives:** Efforts like the Indo-Pacific Economic Framework (IPEF) and the trade pillar face challenges, impacting Biden's attempts to position the US as a robust economic partner in the region.
7. **India's Position:** India's absence from regional trading arrangements in the Indo-Pacific requires reconsideration, particularly concerning supply chain initiatives and enhancing export resilience.
8. **APEC's Focus:** APEC emphasizes sustainability, inclusion, resilience, and innovation, aligning with India's objectives. India's peaceful engagement and involvement in APEC discussions can benefit its economic goals and offer an alternative to FDI in China.

Mains easy language:

The 2023 APEC summit witnessed the reengagement between the US and China but revealed persisting tensions over strategic differences, notably evident in disagreements regarding the Golden Gate Declaration. Taiwan's active presence emphasized its economic aspirations amid challenges posed by Chinese coercion.



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India's absence from key regional trade pacts like the CPTPP necessitates reconsideration for its economic interests and resilience. APEC's focus on sustainability aligns with India's goals, urging its active participation for mutual benefits. Such engagement could position India as an alternative to new FDI destinations beyond China.

The summit highlighted geopolitical realignments in the Indo-Pacific, seen in engagements between regional powers. India's strategic involvement in APEC discussions holds potential for enhancing its economic positioning and contributing to sustainable growth in the region.

How the new IRRA platform, a 'trapeze net' for investors, will work-Indian Express Explained

Economics

Key takeaways:

1. **IRRA Platform Launch:** SEBI chairperson launched the Investor Risk Reduction Access (IRRA) platform, developed collaboratively by Indian stock exchanges, as a safety measure for investors in cases of technical glitches faced by trading members or brokers.
2. **Purpose of IRRA:** The platform aims to mitigate risks for investors when trading member systems face technical issues, allowing investors to square off/close open positions and cancel pending orders during unforeseen disruptions.
3. **Need for the Platform:** With increasing reliance on technology in securities markets, glitches in trading systems have been reported, leading to disruptions in trading services and causing concerns for investors with open positions, especially during volatile market conditions.
4. **Functionality of IRRA:** IRRA can be activated by trading members experiencing technical glitches impacting client services across exchanges. It enables investors to manage positions, cancel orders, but not place new trades.
5. **Investor Access:** Investors authorized to access IRRA can utilize the platform via a new Internet-based Trading (IBT) web URL and a mobile application to view and manage their positions across segments and exchanges.
6. **Platform Limitations:** IRRA excludes algo trading and institutional clients. Additionally, securities under Trade-for-Trade settlement may not be available for square-off.
7. **Migration Process:** Before migrating to IRRA, trading members need to restore primary and disaster recovery sites. Reverse migration from IRRA to the original trading system is permitted with specific timelines and procedural guidelines.

Mains easy language:

The launch of SEBI's IRRA platform by Indian stock exchanges aims to provide a safety net for investors during technical glitches faced by trading members. It addresses concerns arising from disruptions in trading services due to technological failures. IRRA enables investors to manage existing positions and orders, assuring a means to close positions in unforeseen circumstances.

The platform's introduction aligns with the escalating technological dependency in the securities market, offering a recourse for investors when faced with trading system disruptions. Its functionality, accessible via an Internet-based Trading (IBT) web URL and mobile application, allows authorized investors to handle positions across exchanges.

However, IRRA has certain limitations, excluding algorithmic trading and institutional clients, and restricting certain securities from square-off. The migration process to and from IRRA involves specific timelines and procedures for trading members, aiming for a seamless transition and restoration of regular trading operations. Overall, IRRA signifies a proactive step towards safeguarding investor interests during technical contingencies in the Indian securities market.

How farm fires are counted-Indian Express Explained

Key takeaways:

1. **Farm Fire Data Collection:** Satellites equipped with sensors monitor farm fires across six North Indian states from September 15 to November 23, recording incidents of burning crop residue, predominantly in Punjab, among other states.
2. **Data Collection Process:** The Indian Agricultural Research Institute's (IARI) CREAMS Laboratory utilizes sensors on NASA satellites like VIIRS, MODIS aboard Terra and Aqua satellites, and European Space Agency's Sentinel-2 to collect and monitor land surface temperatures to identify farm fires.
3. **Protocols and Monitoring:** Standard protocols for monitoring farm fires were established in 2021 by the Commission for Air Quality Management (CAQM) to ensure consistent and accurate data collection, improving comparisons across years and states.



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4. **Identification of Paddy Fires:** Differentiating paddy crop residue fires from other fires (forest, industrial) involves observing distinct reflectance signatures of paddy fields over time and identifying specific temperature increases indicative of active fires.
5. **Data Limitations:** Challenges include limited satellite passes affecting event capture frequency, atmospheric conditions impacting signal absorption, and occasional satellite calibration issues affecting data retrieval and accuracy.

Mains Synopsis:

Satellite monitoring serves as the primary method to collect and monitor farm fire incidents across North Indian states during the crop residue burning season. The process involves sophisticated sensors on NASA and European Space Agency satellites that analyze land surface temperatures, identifying distinct signatures of paddy crop residue fires and differentiating them from other fire sources.

The standardized protocols established in 2021 by the Commission for Air Quality Management aimed to streamline data collection methods and promote consistency across monitoring agencies. However, limitations such as satellite pass frequency, atmospheric interference, and occasional technical glitches challenge the accuracy and promptness of data retrieval.

The collected data assists central and state-level agencies in formulating targeted measures and strategies to address hotspots of farm fires, aiding in the reduction of burning incidents. Despite advancements in satellite technology, improvements in satellite constellations and frequent passes are necessary to enhance the accuracy and timeliness of farm fire monitoring, ensuring more comprehensive coverage and improved decision-making for mitigating air quality concerns associated with crop residue burning.

How suicide of farmer in Kuttanad frames the crisis of paddy in Kerala-Indian Express Explained

Economics

Key takeaways:

1. **Kuttanad Farmer's Suicide:** The suicide of KG Prasad in Kuttanad, Kerala, highlighted the crisis in paddy cultivation. Banks' refusal of credit due to unpaid paddy-related loans led to this tragic event.
2. **Government Incentives:** Kerala offers various incentives to promote paddy cultivation, but cultivation costs have risen sharply, outpacing profits for farmers.
3. **Rising Cultivation Costs:** Paddy cultivation costs per hectare have surged in Kerala, particularly in labor and chemicals, resulting in minimal profits.
4. **Labour Shortage and Mechanization Challenges:** Shortage of labor, disagreements among farmers, and dependence on migrant workers hinder mechanization efforts.
5. **Unpredictable Monsoon and Wildlife Menace:** Unpredictable rains and wildlife threats disrupt the crop cycle, impacting yields.
6. **PRS Procurement System Issues:** Delays and defaults in repaying Paddy Receipt Sheet (PRS) loans affect farmers' credit scores, impacting their access to loans.
7. **Current Year Challenges:** Disputes between Supplyco and rice mills, financial crises, and procurement terms affect this year's harvesting and procurement processes, leaving farmers in distress.

Mains easy language:

The suicide of a Kerala farmer underscores the multifaceted challenges gripping the paddy cultivation sector. Despite the state's concerted efforts to incentivize paddy cultivation through additional support, the surging cost of cultivation, labor shortages, mechanization hurdles, and unpredictable factors like erratic monsoons and wildlife menace continue to plague farmers.

The State Civil Supplies Corporation's procurement system, meant to assist farmers by lifting paddy against PRS loans, faces delays and defaults in repayment, adversely impacting farmers' creditworthiness for future loans. Current-year challenges, including disputes between authorities and rice mills over procurement terms and financial constraints, aggravate the distress of farmers, particularly in regions like Kuttanad, where storage facilities are limited, compelling farmers to leave harvested crops unattended.

The situation demands holistic intervention addressing cost concerns, labor availability, mechanization facilitation, and mitigation of unpredictable environmental challenges to revive Kerala's paddy cultivation sector and alleviate the hardships faced by distressed farmers.





25th November 2023

Need for climate-smart agriculture in India-The Hindu Editorial

Environment

Key takeaways:

1. **Challenges:** The 21st century confronts humanity with critical issues—climate change causing adverse effects and increased food demand due to population growth. Climate change-induced disasters affect agriculture, calling for a radical reform to sustainably enhance productivity and adapt to climate shifts.
2. **Climate-Smart Agriculture (CSA):** CSA offers a holistic approach, aiming to increase productivity, build resilience to climate change, and reduce greenhouse gas emissions. It employs various techniques like water-smart and carbon-smart practices to improve productivity and soil health.
3. **India's Scenario:** Climate change threatens India's crop yields. To combat this, a shift towards climate-resilient agriculture is necessary. Government initiatives and schemes focusing on climate-resilient agriculture and soil health aim to support this transition.
4. **Community Efforts and Benefits:** Globally, community-supported agriculture promotes resilient and eco-friendly systems, encouraging crop diversification and efficient resource usage to ensure long-term food security.
5. **CSA's Role in Mitigating Climate Change:** CSA not only enhances agricultural output but also aids in reducing greenhouse gas emissions from the agricultural sector, aligning with global efforts to combat climate change.
6. **India's Unique Position:** Given India's agricultural significance and climate vulnerability, CSA adoption becomes imperative. Several government initiatives and partnerships aim to promote CSA and support farmers in transitioning to climate-resilient agriculture.
7. **Empowerment and Security:** CSA has the potential to uplift small farmers, ensuring their profits and food security. By merging innovation, resilience, and sustainability, it offers a pathway to address climate challenges and secure a sustainable future.

Mains easy language:

In today's world, we're facing big problems: climate change is making farming harder, and more people need food. Floods, heatwaves, and other extreme weather hurt farmers, so we need to change how we farm. There's a solution called Climate-Smart Agriculture (CSA), which helps us grow more food while taking care of the environment. It uses smart ways to manage water and soil to make farms healthier and more productive.

In India, climate change is making it tough for crops to grow. To help farmers and protect our food, we must change how we farm. The government is working on plans to make farming better for the environment and help farmers grow more food. CSA is super important for India because it helps farmers cope with changes in the weather and grow food more effectively.

Around the world, groups are working together to help farmers grow different crops and use resources wisely. CSA not only helps us grow more food but also reduces bad gases in the air, which is good for the planet. It's like using smart ideas to make farming better for everyone.

Overall, CSA is a cool way that mixes smart ideas, helps farmers grow more food, and takes care of our planet. It's like a good plan to make sure we have enough food now and in the future.

No vote for veto-The Hindu Editorial

Polity

Key takeaways:

1. **Governors' Role Limited:** In a democracy, Governors cannot independently reject bills passed by lawmakers. This decision clarifies that their authority has boundaries, and they can't act solely based on their own preferences.
2. **Governor's Decision Options:** Governors now have two choices when presented with bills: either agree with the bills passed by lawmakers or let these bills become laws after they are reviewed again. They can't simply reject bills without a valid and justifiable reason.
3. **Quick Decision Required:** This decision also mandates that Governors can't delay bills for extended periods just because they disagree with them. They need to make their decisions within a reasonable timeframe.



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4. **Assembly Session Validated:** The Court's decision confirmed that the Assembly session, which was questioned for being conducted improperly, was actually conducted within legal boundaries. This clarification ensures that the session followed all the rules and procedures correctly.
5. **Avoiding Arguments:** By setting clear guidelines on Governors' roles in passing bills, this decision aims to prevent conflicts or disputes regarding their powers. It establishes a framework everyone should follow.
6. **Clearer Governance:** Overall, this decision helps in explaining how the government functions and aims to prevent disagreements between elected officials and Governors appointed by the Central government. It ensures smoother decision-making processes and governance.

Mains easy language:

The recent decision by the Supreme Court changed how Governors in our country can handle bills passed by lawmakers. Before, Governors had the power to say "no" to bills on their own. But now, the Court said they can't do this all by themselves anymore. They must either agree with the bills passed by lawmakers or let these bills become laws after being looked at again.

This decision also made it clear that Governors cannot delay these bills for a long time just because they don't like them. They have to make decisions about bills fairly quickly. The Court also confirmed that a questioned session of the Assembly, where laws are made, was done properly within the rules.

The main aim of this decision is to stop arguments about the power of Governors in making laws. It sets clear rules so that everyone understands what Governors can and cannot do when it comes to making laws.

Overall, this decision helps explain how the government works and tries to prevent fights or disagreements between elected leaders and Governors chosen by the Central government. It ensures that the process of making decisions and laws runs more smoothly.

The inhumane decision to expel Afghan refugees-The Hindu Editorial

International Relations

Key takeaways:

1. **Expulsion of Afghan Refugees:** Pakistan decided to send away about 1.5 million Afghan refugees who were living in Pakistan without proper documents. This decision worries people because it's happening during the cold winter, and it might create problems for these refugees.
2. **Hardships for Refugees:** Many of these refugees have lived in Pakistan for their entire lives. Now, they are being forced to sell their businesses at very low prices and stop going to school, especially girls.
3. **Pakistan's Frustration:** Pakistan is upset because the Afghan Taliban (a group in charge of Afghanistan) hasn't stopped another group called Tehreek-e-Taliban-Pakistan (TTP) from attacking Pakistan. This made Pakistan angry, leading to this decision.
4. **History of Relations:** Pakistan helped the Afghan Taliban in the past, hoping they would help Pakistan back. But things didn't go as planned, causing disagreements and anger between the two sides.
5. **Complex Situation:** Pakistan expelling these refugees might not make the Afghan Taliban do what Pakistan wants. This decision might create even more problems between Pakistan and the Afghan Taliban.
6. **Potential Divisions:** This action by Pakistan might create arguments or divisions within the Afghan Taliban, causing more issues between Afghanistan and Pakistan, making the situation more complicated.

Mains easy language:

Pakistan's recent decision to expel a vast number of Afghan refugees, drawing less global attention than other crises, raises ethical concerns. Amidst harsh winter conditions, this decision creates uncertainty and potential suffering for these vulnerable individuals. Many refugees, deeply integrated into Pakistani society, face distressing situations, including forced sale of their businesses and interruption of educational pursuits, particularly impacting young girls.

This expulsion stems from Pakistan's dissatisfaction with the Afghan Taliban's failure to control the TTP, leading to increased attacks within Pakistan. However, Pakistan's support for the Afghan Taliban over decades has not guaranteed compliance with its expectations, causing frustrations and escalating tensions.

The historical backdrop of Pakistan's involvement in Afghan affairs, from supporting the Afghan jihad to backing different factions, highlights a tumultuous relationship. Despite Pakistan's assistance, the Afghan Taliban's governance in Kabul doesn't ensure alignment with Pakistan's interests.





Ultimately, this decision risks creating fissures within the Afghan Taliban and reflects a complex relationship, marked by interventions and differing objectives. Pakistan's actions may not yield the influence it desires over the Afghan Taliban, especially concerning its stance towards India, exacerbating existing tensions and sentiments among Afghan Pashtuns against Pakistan.

The forgotten citizens-Indian Express Editorial

Sociology

Key takeaways:

1. **Overlooked Migrant Workers:** Migrant workers, crucial in building infrastructure and industries, often go unnoticed in national consciousness, remembered only in tragic news.
2. **Invisible Contribution:** Despite shaping national development through their labor, these workers lack recognition and care in policies and societal acknowledgment.
3. **Extent of Migration:** Roughly 35-40% of India's population migrates for jobs, mostly from poorer states to wealthier, industrialized ones, facing hardships and outsider treatment.
4. **Lack of Legal Protection:** Existing laws inadequately protect migrant workers' rights, focusing on one act from 1979, leaving many aspects of their lives unaddressed.
5. **Hostile Living Conditions:** Urban planning neglects the basic needs of migrant workers, offering no healthcare, safety, or humane living conditions, leaving them to fend for themselves.
6. **Urgent Need for Considerate Cities:** Rather than "smart cities," thoughtful urban planning should prioritize the dignity and well-being of these marginalized workers.

Mains easy language:

Migrant workers, pivotal in constructing national infrastructure, remain unseen in the societal narrative, surfacing only in tragic events or headlines. While their labor builds the nation's pride with new roads and structures, these workers are denied basic human dignity and care in policies and society.

Internal migration, involving millions seeking livelihoods, highlights a huge population moving across boundaries, facing hardships, and often treated as outsiders. Current laws inadequately protect their rights, with limited consideration for their human needs and complexities.

Urban environments, reliant on migrant labor, fail to offer essential healthcare, safety, or decent living conditions, leaving workers to struggle and fend for themselves. Meaningful urban planning should prioritize their well-being over flashy "smart cities."

Instead of media hype or nationalist narratives, sustained attention and policies addressing the complex lives of mobile laborers are crucial. National greatness lies in limiting the impact of tragedies faced by these workers, who often appear only in personal or familial disasters, seeking recognition and respect for their immense contributions.

NOT GREEN VS POOR-Indian Express Editorial

Environment

Key takeaways:

1. **Climate Change and Cost-of-Living Crisis:** There's a misconception that climate action is unaffordable and hurts regular people. However, transitioning to climate-friendly practices is essential for a sustainable future, energy security, and economic resilience.
2. **Impact of Fossil Fuels:** Coal, oil, and gas significantly contribute to the cost-of-living crisis, elevating prices for essential needs like transport, food, and electricity. Higher energy costs disproportionately affect the poorest households.
3. **Climate Disasters and Economic Strain:** Worsening climate-related disasters cause economic damage, impacting millions and jeopardizing livelihoods. These events result in economic losses and hinder growth, particularly affecting vulnerable communities.
4. **Actionable Opportunities:** Governments' massive spending on fossil fuel subsidies in 2022 diverted funds that could've supported renewable energy, healthcare, and poverty alleviation. Responsibly phasing out these subsidies can benefit the poor and improve economies.
5. **Slow Progress in Climate Action:** Despite tools available for faster climate action and economic improvement, progress remains sluggish. Shifting investments from fossil fuel production to renewable energy can boost economies and ensure stable, affordable energy.

Mains easy language:



| Clear your doubts now.



The current global cost-of-living crisis, largely fueled by soaring fossil fuel prices, emphasizes the urgency of addressing climate change. This crisis also highlights the need for decisive action to tackle climate-related disasters, which increasingly affect economies and communities. Enormous government spending on fossil fuel subsidies in 2022 redirected funds away from crucial areas like renewable energy and poverty alleviation. This misalignment hampers economic growth and disproportionately burdens vulnerable households.

Despite significant challenges, immediate opportunities for action exist. Governments must redirect investments from fossil fuels to renewable energy, ensuring sustainable growth and dependable energy access. The upcoming UN Climate Change Conference (COP28) in Dubai presents a crucial moment to focus on actionable solutions. Commitments made during this conference can significantly drive the transition to renewable energy, enhance energy efficiency, and boost financing to aid countries in adapting to climate impacts. While one event might not immediately transform the situation, it sets the course for future commitments and actions that can shape a more sustainable and resilient future. Refusing to be swayed by misleading narratives and embracing concrete solutions can lead to a more climate-resilient and economically stable world.

A NEW CURE-Indian Express Editorial

Science and Technology

Key takeaways:

1. **Gene-Editing Therapy's Potential:** A groundbreaking gene-editing therapy named Casgevy shows promise for sickle cell anaemia patients, significantly reducing painful inflammatory attacks in over 90% of trial participants.
2. **Challenges in Accessibility:** Despite its remarkable results, the therapy's accessibility remains a challenge due to its complex procedure and high estimated treatment costs, currently estimated at around \$2 million per patient in the UK and the US.
3. **Nature of Sickle Cell Disease:** Sickle cell disease affects the shape and function of red blood cells due to compromised haemoglobin, leading to blockages in blood vessels, life-threatening conditions, and chronic anaemia. Casgevy aims to revive fetal haemoglobin to compensate for the mutated haemoglobin.
4. **Impact in India:** India faces a significant burden of sickle cell disease, especially among tribal populations. The country introduced the National Sickle Cell Anaemia Elimination Programme in the 2023 Union Budget to address these challenges, aiming for elimination by 2047.
5. **Cost Barrier in India:** Casgevy's current cost poses a considerable barrier to accessibility in India. However, it highlights the need for further research to develop more affordable therapies utilizing gene editing techniques.
6. **Call for Research Investment:** The success of Casgevy underscores the importance of investing in research institutions in India to explore the potential of gene editing therapies, similar to the pivotal role played in managing COVID-19, to develop accessible treatments for sickle cell anaemia.

Mains easy language:

A new treatment called Casgevy has shown promise in helping people with sickle cell anaemia, a genetic blood disorder causing severe pain and life-threatening complications. This treatment works by changing how blood cells behave, reducing the painful episodes experienced by many patients. While this breakthrough offers hope, it's currently very expensive, making it difficult for most people to afford. In India, where many people suffer from this disorder, the cost makes it even harder for those in need to access this treatment.

Sickle cell anaemia affects the body's ability to carry oxygen in the blood, causing cells to become stuck in blood vessels and leading to severe health issues. Casgevy aims to alleviate these problems by modifying the blood cells, although it doesn't completely cure the underlying genetic issue. India has a significant number of people affected by this disorder, especially among certain tribal groups. To address this health challenge, the country has launched a program aiming to eliminate the disease by 2047, but the current cost of treatment with Casgevy is a major hurdle in achieving this goal.

The success of Casgevy highlights the need for more affordable options and increased research in India. This treatment has the potential to change the lives of those suffering from sickle cell anaemia, but efforts are required to make it more accessible to those who need it the most. Investing in research could lead to the development of more affordable therapies, providing hope for a better future for those affected by this condition in India and around the world.

Sickle cell breakthrough-Indian Express Explained

Science and Technology



| Clear your doubts now.



Key takeaways:

1. **Landmark Approval:** The UK's approval of Casgevy, a gene-editing therapy using Crispr-Cas9, marks a significant milestone in treating sickle cell disease and thalassaemia, potentially providing a lifelong cure.
2. **Genetic Underpinnings:** Sickle cell disease and thalassaemia stem from genetic errors affecting haemoglobin, causing severe health complications due to abnormal red blood cells or low haemoglobin levels.
3. **Therapeutic Mechanism:** Casgevy targets the BCL11A gene, encouraging the production of foetal haemoglobin, which lacks the abnormalities found in adult haemoglobin, aiming to alleviate the symptoms associated with these conditions.
4. **Promising Outcomes:** Interim trial results of Casgevy in sickle cell disease and thalassaemia showcased promising reductions in severe pain crises and transfusion needs among patients, offering hope for improved treatment outcomes.
5. **Challenges of Accessibility:** The therapy's high cost, estimated at around \$2 million per patient, and the lack of local manufacturing facilities pose significant barriers, hindering accessibility, especially in less affluent countries where these conditions are prevalent.
6. **Research and Hope:** Scientists in India are exploring gene therapy for sickle cell disease, with ongoing efforts to advance research and potentially develop more affordable treatments, offering a ray of hope for affected individuals.

Mains easy language:

The recent approval of Casgevy, a gene-editing therapy, in the UK has brought immense hope for individuals dealing with sickle cell disease and thalassaemia. This groundbreaking treatment works by targeting genetic issues related to these blood disorders, aiming to provide a long-lasting cure. Essentially, it focuses on fixing the problematic genes that cause these conditions, potentially changing the way these diseases are treated.

These disorders, sickle cell disease, and thalassaemia, arise due to problems in the genes responsible for making haemoglobin, the protein in red blood cells carrying oxygen throughout the body. The therapy, Casgevy, intends to adjust these faulty genes, aiming to enable the body to produce a different type of haemoglobin, one that can potentially relieve the symptoms and complications linked with these conditions.

The therapy's success is based on trials that showed encouraging outcomes, reducing severe pain crises and transfusion requirements in a significant number of trial participants. However, despite its promising potential, the therapy faces significant challenges in terms of cost and accessibility. Estimated to cost around \$2 million per patient and the lack of local manufacturing facilities, it poses hurdles, especially in less affluent regions where the diseases are more common.

Nevertheless, scientists in India are also actively exploring gene therapy for sickle cell disease, offering a glimmer of hope for more accessible and affordable treatments in the future. Their efforts and ongoing research may pave the way for improved therapies that could positively impact the lives of individuals affected by these challenging blood disorders.

Why a NASA spacecraft fired a laser at Earth, and why it's a big deal-Indian Express **Explained**

Science and technology

Key takeaways:

1. **Breakthrough Laser Signal:** NASA's Psyche spacecraft accomplished a significant milestone by transmitting a laser signal to Earth from a distance of over 16 million kilometers.
2. **Deep Space Communication Innovation:** This laser signal transmission showcases the pioneering technology of Deep Space Optical Communications (DSOC), which has the potential to revolutionize space communication.
3. **Higher Data Rates with Laser Signals:** DSOC employs near-infrared laser signals that offer data rates at least ten times higher than conventional radio waves, enabling more extensive data transmission, including high-definition video streaming.
4. **Precision-Pointing Laser Technology:** DSOC utilizes extreme precision in pointing the laser signals, akin to hitting a moving dime from a mile away, to ensure accurate communication over vast distances.
5. **Future Implications for Space Exploration:** The success of DSOC on the Psyche spacecraft signifies a crucial step forward in enhancing communication between deep space missions and Earth, holding significant promise for future missions, including human exploration beyond the Moon and potentially to Mars.
6. **Advancement in Space Communication:** This breakthrough technology paves the way for transformative developments in space communication, overcoming limitations of radio waves and opening new avenues for transmitting large volumes of data across immense cosmic distances.

Mains easy language:



| Clear your doubts now.



NASA's Psyche spacecraft has made a groundbreaking achievement by beaming a laser signal back to Earth from an incredible distance of over 16 million kilometers. This incredible feat is significant because it utilizes new technology called Deep Space Optical Communications (DSOC), which has the potential to change the way we communicate across vast cosmic distances. Instead of traditional radio waves, this technology uses near-infrared laser signals that can transfer data at speeds at least ten times faster, allowing for the transmission of larger volumes of data, including high-definition video.

What's fascinating about DSOC is its precision. To communicate effectively, the laser signals need to be aimed with extreme accuracy, akin to hitting a moving dime from a mile away. Achieving this level of precision involves isolating the transceiver from the spacecraft's vibrations, adjusting for the constantly changing positions of the spacecraft and Earth, and using advanced signal-processing techniques to extract information from weak laser signals. This technology's success opens up new possibilities for deep space exploration, especially as humanity looks to venture beyond the Moon and potentially to Mars.

This milestone signifies a significant leap in space communication, overcoming the limitations of radio waves and introducing an innovative method for transmitting vast amounts of data across immense cosmic distances. The success of this laser signal transmission from the Psyche spacecraft marks a pivotal moment in space exploration, offering potential advancements for future missions and human expeditions into deep space.

26th November., 2023

A visually striking milestone of our Constitutional History- Indian Express Opinion

Polity

Key takeaways:

1. **Historical Significance of November 26:** November 26 marks a pivotal day in our democratic history, being the date when the Constituent Assembly adopted our Constitution in 1949. This day was declared as "Constitution Day" in 2015 to promote constitutional values, coinciding with the 125th birth anniversary of B R Ambedkar, the architect of our Constitution.
2. **Influence of Parliamentarians:** Parliamentarians played a crucial role in shaping the Constitution. A significant suggestion was to have a handwritten copy of the document, emphasizing the symbolic importance as the nation embarked on its journey as a republic.
3. **The Challenge of Handwriting the Constitution:** Handwriting the Constitution, one of the longest in the world, was a daunting task. The process involved meticulous calligraphy and artistry, undertaken in a tight timeline during the harsh winter of 1949-1950.
4. **Artistic Embellishment by Nandalal Bose:** Renowned artist Nandalal Bose was tasked with decorating the pages of the calligraphed Constitution, adding artistic value to the document and making it a symbol of the nation's artistic achievements.
5. **Logistical Challenges and Incompleteness at Signing:** The process of calligraphy and decoration faced logistical challenges, resulting in an incomplete document at the time of signing by the Constituent Assembly members.
6. **Financial Implications and Parliamentary Independence:** The financial aspects of preparing the written Constitution highlighted the principle of parliamentary independence. The expenses for the calligraphy, art, printing, and binding were significant and were managed within the Parliament Secretariat's budget.
7. **Controversy and Interpretative Value:** The decorative copy of the Constitution has been a subject of controversy, particularly in its interpretative value. However, it is primarily a visually striking representation of the Constitution, commemorating a historic moment.

Easy Explanation

On November 26, 1949, a significant day in our country's history, our Constitution was officially adopted, making it a day worth celebrating as "Constitution Day" since 2015. This date also honors B R Ambedkar, the principal architect of our Constitution. The lawmakers played a pivotal role in shaping the Constitution, suggesting a unique and symbolic gesture of having it handwritten, a fitting start for our nation's journey as a republic. Writing the entire Constitution by hand was an enormous challenge, especially as it's one of the longest in the world, and the task had to be completed in just two months during a particularly cold winter. The Constitution was transformed into a piece of art by the renowned artist Nandalal Bose, who added illustrations and decorations, elevating it beyond a simple document. Despite the rush to complete it, the Constitution was not fully ready when it was time for the lawmakers to sign it, necessitating additional work post-signature. The creation of this ornate version of the Constitution was costly, with expenses covered by the Parliament's budget, illustrating the principle of parliamentary financial independence.



| Clear your doubts now.



Although the decorated Constitution is visually striking and a symbol of a historic moment, it has been subject to controversy regarding its interpretative value. Ultimately, the Constitution is more than a set of rules; it's a piece of history and art, symbolizing our nation's unity despite various differences and a commitment to a set of agreed principles.

Eight months on, States wait for 3HP TB preventive drug

Science Tech Health

Key takeaways:

1. **3HP Regimen Introduction:** In March 2023, India welcomed the 3HP regimen, a new, shorter TB Preventive Treatment, as part of a nationwide initiative by Prime Minister Narendra Modi. Despite the rollout, states are awaiting the actual delivery of the 3HP combination drug.
2. **Existing TB Prevention Approach:** The present approach in combating TB involves testing all household contacts of pulmonary TB patients and administering a six-month course of isoniazid, amounting to 180 pills, for those without active TB disease.
3. **Benefits of 3HP:** The 3HP regimen, involving just 12 doses over three months, has shown superior outcomes in terms of compliance, fewer side effects, and improved completion rates compared to the isoniazid monotherapy.
4. **Treatment Eligibility and Success Rates:** All household contacts of TB patients are eligible for the 3HP therapy post clearance of active TB disease. This regimen has demonstrated higher completion rates across various demographics, including adults with or without HIV and children.
5. **Cost Efficiency and Resistance Concerns:** The 3HP treatment is not only more cost-effective than the traditional six-month therapy but also mitigates the risk of drug resistance, provided active TB is excluded before starting the therapy.
6. **Comparative Efficacy and Safety:** No direct comparative trials between the isoniazid and 3HP regimens have been conducted in India. However, international studies, such as those in South Africa, indicate similar efficacy in TB prevention with lower instances of severe adverse reactions in the 3HP group.
7. **Reinfection Risks in High TB Burden Countries:** Countries with high TB prevalence, like India, face the challenge of reinfection post-treatment. However, the WHO still advocates for TB preventive therapy, emphasizing its role in a comprehensive TB control strategy.
8. **WHO's Recommendations for TB Management:** The WHO recommends India prioritize advanced TB screening methods, such as digital chest X-rays and molecular testing, alongside TB preventive treatments like 3HP. This integrated approach promises a high return on investment by averting the costs and societal impacts of undetected TB.

Easy Explanation

The Indian government, under Prime Minister Narendra Modi, introduced a new way to prevent tuberculosis (TB) in March 2023. This method, called the 3HP regimen, is simpler and shorter than the previous treatment. It requires only 12 pills over three months compared to the old method of 180 pills over six months. Despite this introduction, many states in India are still waiting to receive the 3HP drugs. The 3HP treatment is designed for people who are close to someone with TB but don't have the disease themselves. Because it's shorter and has fewer pills, people are more likely to finish the treatment, reducing the chances of TB spreading. The treatment is cheaper and safer, with a lower risk of causing drug resistance. Studies from places like South Africa show that 3HP is just as effective as the older method but with fewer side effects. However, in countries like India where TB is widespread, there's a chance people could get TB again even after treatment. Still, organizations like the World Health Organization (WHO) recommend continuing with preventive treatments like 3HP. The WHO also suggests India should use more advanced TB testing methods and invest in preventive treatments to better control the spread of TB. They believe this approach will save more money and lives in the long run by catching and treating TB early.

Is India lagging in Measles Vaccination- The Hindu FAQ

Science Tech health

Key takeaways:

1. **Global Rise in Measles Cases and Deaths:** According to a report by the World Health Organization and the U.S. CDC, there has been an 18% increase in measles cases and a 43% rise in deaths globally in 2022 compared to 2021. The estimated numbers are nine million cases and 1,36,000 deaths, mainly among children.
2. **Union Health Ministry's Refutation:** The Union Health Ministry of India disputes a part of this report. The report claims that 22 million children globally missed their first measles shot in 2022, with India accounting for 1.1 million of these. However, the Ministry states that only about 21,000 Indian children missed the shot.



| Clear your doubts now.



3. **India's Vaccination Coverage:** India's Universal Immunisation Programme, one of the world's largest public health programs, targets nearly 2.67 crore newborns and 2.9 crore pregnant women annually. In 2022, a total of 2,63,63,270 children out of the eligible 2,63,84,580 received their first dose of the measles vaccine.
4. **Measles - A Contagious Disease:** Measles is a highly contagious virus, characterized by symptoms like cough, runny nose, red eyes, fever, and a rash. The WHO states that measles vaccinations averted 56 million deaths between 2000 and 2021.
5. **Effectiveness of the MMR Vaccine:** The MMR vaccine, which protects against measles, mumps, and rubella, is highly effective in preventing measles. Two doses are about 97% effective, and one dose is approximately 93% effective.
6. **Impact of COVID-19 on Measles Vaccination:** The COVID-19 pandemic has disrupted routine vaccination and surveillance efforts, increasing vulnerability to diseases like measles. In India, there were recent outbreaks in Maharashtra and Kerala, highlighting the need for catch-up vaccination campaigns.

Easy Explanation

Last year, the world saw a worrying increase in measles cases and deaths. The World Health Organization and the CDC found that cases went up by 18%, and deaths by 43% compared to the year before. This means around nine million people got measles, and over 1,36,000 people died from it, with children being the most affected.

In this context, there's been a bit of disagreement between the Union Health Ministry in India and the WHO. The WHO said that globally, 22 million kids didn't get their first measles shot last year, and about half of them are from 10 countries, including India. They estimated that 1.1 million Indian babies missed their first measles vaccine. But the Indian Health Ministry says that's not right; it's actually about 21,000 kids, not 1.1 million.

India tries to vaccinate a lot of kids and pregnant women every year through its Universal Immunisation Programme. Last year, almost all eligible kids got their first measles vaccine, which is great.

Measles itself is a super contagious virus. It starts with symptoms like a cough, runny nose, and fever, and then a rash appears. The good news is that there's a vaccine called MMR that's really effective in preventing measles, mumps, and rubella.

However, the COVID-19 pandemic messed up routine vaccinations, and lots of kids missed their measles shots. This has been a big problem, as seen in recent outbreaks in Maharashtra and Kerala in India. To fix this, health officials are pushing for more vaccination drives, especially for kids who missed their shots, to stop measles from spreading further.

28th November 2023

The many grave risks confronting the world today-The Hindu Editorial

International relations

Key takeaways:

1. **Geopolitical Instability:** Incompetence among nations leads to dissonance across Europe, Asia, Africa, and the Americas, resulting in a state of multi-polar disorder.
2. **Terrorism and Security:** Evolving terrorism threats from groups like al-Qaeda, Islamic State, and others pose significant dangers globally, impacting various regions and international relations.
3. **Conflicts and Tensions:** Ongoing conflicts like Russia's attack on Ukraine and the Israel-Hamas issue in West Asia raise concerns about wider conflicts and prolonged unrest.
4. **Indo-Pacific Rivalry:** The U.S.-China rivalry escalates tensions in the Indo-Pacific, posing risks of direct confrontation, particularly over issues like Taiwan.
5. **Technology Risks:** Artificial Intelligence (AI) poses security threats, especially in military use, while cyber-attacks, like ransomware and phishing, continue to grow exponentially, creating substantial risks.
6. **Health Challenges:** COVID-19 marked one of the worst global epidemics, with predictions of more health crises in the future, emphasizing the importance of global health management.
7. **Climate Change Impact:** Climate change and associated health issues emerge as significant global risks, demanding urgent attention and proactive measures for mitigation.

Mains easy language:

In the complex landscape of the 21st century, geopolitical incompetence has sparked disarray across continents, leading to a state of multi-polar disorder. Terrorism, evolving and diversifying through groups like al-Qaeda, Islamic State, and regional outfits like Hamas, poses significant threats globally. Conventional conflicts, such as Russia's attack on Ukraine and the ongoing Israel-Hamas tensions, suggest potential for prolonged instability and wider confrontations. The Indo-Pacific's focal point in the U.S.-China rivalry escalates tensions, raising concerns about direct confrontations and strategic conflicts. Technological advancements bring risks,



| Clear your doubts now.



particularly in AI's military use and the surging frequency of cyber-attacks like ransomware. Health crises, as witnessed with the COVID-19 pandemic, underscore the vulnerability to future epidemics, emphasizing the critical need for robust global health measures. Additionally, climate change compounds health concerns, emerging as a pressing global risk. Addressing these multifaceted challenges requires coordinated global strategies encompassing geopolitics, security, technology, health, and environmental policies to avert potential calamities and secure a more stable future for humanity.

Can dollarisation save an economy?-The Hindu Text and Context

Economy

Key takeaways:

1. **Argentina's Radical Proposal:** Javier Milei's plan involves replacing Argentina's peso with the dollar, abolishing the Central Bank, and reducing government spending.
2. **Dollarisation's Purpose:** As a solution to hyperinflation, dollarisation aims to break the link between rising prices and increased money supply, emphasizing stability, export-focused growth, and attracting foreign investment.
3. **Challenges and Limitations:** Adopting a foreign currency restricts policy flexibility, limiting control over money supply and devaluation tactics, relying solely on exports for growth, and constraining fiscal options.
4. **Ecuador's Success Story:** Among fully dollarised economies, Ecuador's positive outcomes post-dollarisation include improved growth, reduced poverty, controlled inflation, and decreased debt ratios.
5. **Policy's Role in Success:** While dollarisation contributed to stability, Ecuador's success was influenced by factors like oil reserves, favorable commodity prices, and government interventions.
6. **Cautionary Examples:** Greece's Euro adoption illustrates the limitations of adopting an external currency, which constrained policy tools during the Eurozone crisis, emphasizing the need for independent policy control.

Mains easy language:

The rise of Javier Milei in Argentina's recent presidential election, advocating for dollarisation and drastic economic changes, raises questions about the potential benefits and challenges of such a move. While Milei's proposal to replace the peso with the dollar and cut government spending grabbed attention, it echoes the experiences of other countries like Ecuador, Panama, and El Salvador, which have successfully implemented dollarisation.

Dollarisation, seen as a solution to hyperinflation, detaches the domestic currency from rising prices and encourages export-oriented growth. However, it restricts policy tools and monetary flexibility, posing challenges in economic management. Ecuador's post-dollarisation success reflects improved economic metrics, yet it was complemented by factors beyond currency change, including oil reserves and government interventions.

The cautionary tale of Greece's Euro adoption underscores the limitations of ceding policy control when adopting an external currency. Dollarisation can foster stability but necessitates prudent policy-making and adaptable fiscal strategies for sustained growth. Argentina's potential shift towards dollarisation under Milei's leadership raises uncertainties about policy autonomy and its impact on the populace. As the world observes this economic experiment, the balance between embracing dollarisation and maintaining policy agility remains a critical concern.

Fibre optic cables: its origins, working and different functions-The Hindu Text and Context

Science and technology

Key takeaways:

1. **Optical Fibres:** These thin glass strands, close to a human hair's diameter, transmit digital information like text, images, videos, and calls across long distances at nearly the speed of light.
2. **Working Principle:** Through total internal reflection, light travels within the glass, maintaining signals. An optical fibre system comprises a transmitter, fibre for signal transmission, and a receiver, enabling high-speed data transfer.
3. **Historical Development:** The idea of guiding light dates to the 19th century, evolving from experiments with water jets and glass rods to medical uses. Breakthroughs in the 1960s refined fibre optics for data transmission, resolving signal decay issues.
4. **Technical Advancements:** Modern fibre optic manufacturing uses high-purity glass rods, drawn into thin fibres at high temperatures, coated for durability, achieving minimal signal loss, less than 0.2 dB/km.
5. **Applications and Future:** Fibre optics find applications in telecommunications, medical science, lasers, and sensing. India's initiatives in quantum technology showcase the expanding potential of fibre optic networks.

Mains easy language:



| Clear your doubts now.



Fibre optic communication, relying on thin glass strands for high-speed data transmission, represents a groundbreaking technology. Optical fibres, as thin as human hair, enable rapid digital data transfer across extensive distances. Guiding light through glass, known as total internal reflection, forms the core principle of these fibres.

Historically, experiments with water jets and glass rods laid the foundation for light guidance. However, significant breakthroughs in the 1960s, such as high-purity glass fibres and laser technology, revolutionized fibre optics, resolving earlier signal loss issues.

Modern fibre optic manufacturing techniques involve drawing high-purity glass rods into thin fibres, coated for durability and minimal signal loss. Fibre optics, with applications in telecommunications, medicine, lasers, and sensing, continue to evolve. India's focus on quantum technology highlights the expanding possibilities of fibre optic networks, placing it on the brink of a new era in communication technology.

Webb space telescope spots 'teenage' galaxies-The Hindu Science

Science and technology

Key takeaways:

1. **Unique Galactic Phase:** The James Webb Space Telescope studies galaxies formed around 2-3 billion years post-Big Bang, termed "teenage" galaxies due to their distinct evolutionary stage and characteristics.
2. **Growth and Immaturity:** These galaxies mirror human teenagers, experiencing growth spurts but displaying traits indicative of immaturity, setting the stage for future development.
3. **Chemical DNA and Growth:** Analyzing light from 23 galaxies reveals a distinct "chemical DNA," signifying active star formation and rapid growth in these celestial bodies.
4. **Temperature Anomalies:** Star-forming zones in these galaxies exhibit much higher temperatures (around 13,350 degrees Celsius) than current galaxies, implying different stellar and gaseous characteristics.
5. **Elemental Composition:** Glowing with hydrogen, helium, oxygen, nitrogen, sulfur, argon, nickel, and silicon, these galaxies' chemical makeup, especially oxygen, is crucial for tracking their past growth.
6. **Unexpected Insights:** Surprising discoveries, like the glowing presence of nickel, hint at unique properties within massive stars and gas, differentiating these teenage galaxies from modern ones.

Mains easy language:

The James Webb Space Telescope has unveiled a cosmic wonder, exploring galaxies that emerged 2-3 billion years post-Big Bang, termed "teenage" galaxies due to their unique evolutionary stage. These galaxies, akin to human adolescents, exhibit growth surges and a hint of immaturity. Studying the light from 23 such galaxies, astronomers discerned a distinctive "chemical DNA," indicating active star formation and rapid growth.

However, these celestial teenagers diverge significantly from contemporary galaxies. Their star-forming zones exude exceptionally high temperatures, around 13,350 degrees Celsius, suggesting distinct stellar and gaseous traits. Elemental analysis reveals a luminescent ensemble of hydrogen, helium, oxygen, nitrogen, sulfur, argon, nickel, and silicon. Notably, oxygen's prominence in these galaxies' chemical composition is crucial for tracing their historical growth. Unexpectedly, the presence of glowing nickel in these cosmic formations bewilders astronomers, hinting at unique characteristics within massive stars and gases, setting these galaxies apart from their modern counterparts. This study represents a thrilling celestial revelation, offering profound insights into the intriguing evolutionary phases of galaxies within the universe.

The diplomat's challenge-Indian Express Editorial

International relations

Key takeaways:

1. **Diplomatic Responses:** India reacted differently to allegations involving Nijjar and Pannun, displaying distinct approaches in addressing accusations from Canada and the US.
2. **Security Priorities:** Both Canada and the US emphasized the protection of their citizens in their respective charges against India, employing varied strategies.
3. **India's Reactions:** India firmly dismissed Canada's accusations, citing lack of evidence. Conversely, it cautiously acknowledged the US claims, pledging follow-up action based on discussions.
4. **US vs. Canada Claims:** While Canada's allegations relied on intelligence, the US purportedly possesses stronger 'evidence,' prompting a more measured response from India.
5. **Khalistani Concerns:** India raises concerns over the West's indifferent attitude toward Khalistani separatism, citing Nijjar and Pannun's affiliations as potential threats due to their ties with Khalistani groups.



| Clear your doubts now.



6. **Diplomatic Vigilance:** India must diplomatically monitor Khalistani activities, especially their interference in India's internal affairs, conveying a clear message that tolerating such activities won't be acceptable.

Mains easy language:

India's responses to accusations involving Hardeep Singh Nijjar and Gurpatwant Singh Pannun diverged significantly between Canada and the United States. The rejection of Canada's allegations by India, terming them 'absurd,' was emphatic and outright, citing a lack of substantiating evidence. Conversely, India's approach toward the US's claims about a potential plot against Pannun was notably more cautious. India acknowledged the received 'inputs' from the US at the highest levels and emphasized a serious examination of these claims. While Canada's assertions were intelligence-based, the US reportedly possessed more tangible 'evidence,' possibly indicating a graver situation.

India stressed the Khalistani connections of both Nijjar and Pannun, justifying charges of terrorism against them. This underscores India's commitment to combat separatist movements and those who propagate them, whether foreign or domestic. The nuanced diplomatic approach India adopts aims to address Khalistani activities abroad while preserving internal harmony, necessitating vigilant and strategic engagement with Western nations that extends beyond mere rhetorical posturing. Such careful handling seeks to protect national interests while navigating the complexities of international diplomacy.

In DBT, D is for dignity

Economy

Key takeaways:

1. **DBT Transformation:** India's Direct Benefit Transfer (DBT) system revolutionized government benefit delivery through digital infrastructure, significantly reducing corruption and expanding coverage.
2. **Dignity Preservation:** DBT's less-discussed but crucial impact lies in upholding the dignity of the poor by enabling direct benefit transfer, eliminating the need for them to navigate intermediaries for entitlements.
3. **Perspectives on Poverty:** The essay contrasts views on poverty; one blames individuals in a merit-based society, while the rights-based approach acknowledges systemic factors and societal responsibilities.
4. **Rights-Based Approach:** Recognizing poverty from an individual rights perspective and advocating for equitable institutional designs to provide security for all citizens.
5. **DBT's Contribution:** Beyond reducing corruption, DBT's significance lies in changing dynamics, ensuring beneficiaries receive entitlements directly, preserving their dignity.
6. **Replicating DBT's Success:** Proposing the extension of DBT principles to sectors like the judiciary to ensure efficient and equitable access to justice for the economically disadvantaged.

Mains easy language:

The essay delineates India's Direct Benefit Transfer (DBT) system's transformative impact, emphasizing its overlooked yet pivotal role in preserving the dignity of the poor. DBT's digital infrastructure revolutionized government benefit disbursement, significantly reducing corruption and broadening coverage across various schemes. Beyond these common discussions, the essay highlights DBT's profound implication: eliminating the demeaning process that the poor previously endured to access their entitlements. It contrasts differing perspectives on poverty, advocating for a rights-based approach that acknowledges systemic factors and societal obligations in addressing poverty.

The core argument revolves around the crucial shift in dynamics brought by DBT: instead of the poor seeking government benefits through intermediaries, DBT ensures direct benefit delivery, thereby safeguarding their dignity. The essay proposes extending DBT's principles to other sectors, notably the judiciary, to ensure equitable access to justice for the economically disadvantaged. It underscores the need for systemic changes, leveraging technology and revising institutional mechanisms, to preserve the dignity of the underprivileged. Ultimately, it advocates for replicating DBT's success across various domains, emphasizing the importance of ensuring not just benefit provision but also dignity preservation for marginalized communities.

Rat-hole mining: risky practice being used in tunnel rescue-Indian Express Explained

Geography

Key takeaways:

1. **Tunnel Rescue Complications:** Efforts to rescue 41 trapped workers in the Silkyara-Barkot tunnel faced setbacks due to technical issues. Rescuers had to resort to rat-hole mining after machinery failure hindered progress.
2. **Rat-Hole Mining Practice:** Rat-hole mining, common in Meghalaya, involves extracting coal from narrow horizontal seams. Workers descend through small pits using ropes or ladders, manually extracting coal using basic tools.



| Clear your doubts now.



3. **Two Types of Rat-Hole Mining:** Side-cutting involves narrow tunnels on hillsides, while box-cutting includes a rectangular opening leading to a vertical pit, from where horizontal tunnels are dug to access coal seams.
4. **Safety and Environmental Hazards:** Rat-hole mining lacks safety measures, leading to accidents and fatalities. Additionally, it causes environmental degradation, deforestation, and water pollution.
5. **Regulatory Actions:** The National Green Tribunal (NGT) banned rat-hole mining due to its hazardous nature, citing incidents of flooding and fatalities. Although the ban was lifted in 2019, concerns about safety and environmental damage persist.

Mains easy language:

Rescue operations for trapped workers in the Silkyara-Barkot tunnel faced challenges, prompting the use of rat-hole mining, a hazardous method for coal extraction prevalent in Meghalaya. Rat-hole mining involves narrow pits where workers manually extract coal using rudimentary tools after descending through small openings. The technique comprises side-cutting tunnels on hillsides and box-cutting methods involving vertical pits leading to horizontal passages for coal extraction.

However, rat-hole mining poses significant safety risks and environmental damage, lacking safety measures and causing land degradation, deforestation, and water contamination. The National Green Tribunal previously banned this practice due to its dangers, including incidents of flooding and fatalities. Despite the Supreme Court lifting the ban in 2019, concerns persist regarding safety and environmental impact. The ongoing rescue operations highlight the risks associated with rat-hole mining, emphasizing the urgent need for stringent regulations and safety measures in such mining practices.

Growing more from less-Indian Express Explained

Economy(Agriculture)

Key takeaways:

1. **Factors of Agricultural Production:** Agriculture relies on four primary factors—land, water, labor, and energy. The output in agriculture largely depends on the quantity of these inputs used, and historically, production was constrained by land availability.
2. **Quality of Agricultural Land:** Soil fertility and water availability significantly impact agricultural productivity. Alluvial soils and fertile deltas yield more crops per acre compared to other soil types.
3. **Role of Labor and Energy:** Traditional agriculture heavily depended on labor and bullocks for farming activities, where bullocks served as the primary energy source.
4. **Factors of Technology:** Four critical factors of technology in agriculture are genetics, crop nutrition, crop protection, and agronomic interventions. These factors enable more efficient use of inputs and lead to higher yields and better resource utilization.
5. **Genetics and Crop Nutrition:** High-yielding crop varieties and synthetic fertilizers revolutionized agriculture, enhancing nutrient absorption and crop yield.
6. **Crop Protection and Mechanization:** Technologies for defending plants against pests, pathogens, and weeds, coupled with mechanization and agronomic interventions, have significantly increased productivity.
7. **Increased Productivity:** Factors of technology have boosted agricultural productivity, enabling more output from the same or fewer inputs, resulting in higher crop yield per acre, labor, and water.
8. **Growth Trends:** The growth in agricultural production over the past few decades has primarily been driven by advancements in technology rather than an expansion of cultivated land.

Mains easy language:

Agricultural growth in India has seen a shift from primarily relying on expanding cultivable land to leveraging technological advancements. Traditionally, land availability dictated agricultural production. However, advancements in four key factors of technology—genetics, crop nutrition, crop protection, and agronomic interventions—have played pivotal roles in boosting agricultural productivity.

Genetics, primarily through high-yielding crop varieties, and improved crop nutrition with the use of synthetic fertilizers, have significantly increased crop yields. Additionally, crop protection measures against pests, pathogens, and weeds, coupled with mechanization and agronomic interventions, have revolutionized farming techniques, resulting in higher productivity.

This shift to technological advancements has led to increased output without a proportional increase in inputs, highlighting the efficiency and productivity gains in agriculture. Factors of technology have superseded traditional factors of production like land and labor, leading to a remarkable increase in agricultural productivity, making it the driving force behind agricultural growth in recent years.





Kambala comes to Bengaluru:How buffalorace's popularity outran bans-Indian Express Explained

Culture

Key takeaways:

1. **Kambala in Bengaluru:** Bengaluru hosted its first Kambala race featuring 159 pairs of buffaloes and jockeys racing through slush tracks at Palace Grounds, attracting a large audience.
2. **Kambala Origins and Significance:** Originating in coastal Karnataka, especially among Tulu-speaking communities, Kambala is a prestigious folk sport, where buffaloes' pairs race through slushy fields.
3. **Race Categories:** Kambala features four categories - Negilu, Hagga, Adda Halage, and Kane Halage, each with different race conditions and methods of buffalo handling.
4. **Popularity and Outreach:** While traditionally popular in coastal regions, the sport gained broader attention due to movies like Kanthara, piquing interest beyond Karnataka.
5. **Ban and Legal Challenges:** Animal rights organizations, including PETA, filed complaints of animal abuse during Kambala races, leading to a Supreme Court ban in 2014.
6. **Lifting the Ban:** In 2016, an exception was made in the Prevention of Cruelty to Animals Act, allowing certain traditional sports like Kambala, subject to conditions aimed at reducing animal suffering. Karnataka, Tamil Nadu, and Maharashtra amended laws to permit these events.

Mains easy language:

Bengaluru recently hosted its inaugural Kambala race, where 159 pairs of buffaloes raced through specially designed slush tracks. Kambala, a revered folk sport in coastal Karnataka, historically features buffalo pairs racing in muddy fields, with various categories like Negilu, Hagga, Adda Halage, and Kane Halage, each presenting distinct race conditions.

Traditionally confined to coastal regions, Kambala garnered broader attention partly due to cinematic representations. However, it faced legal challenges, primarily regarding animal cruelty. Animal rights groups filed complaints against Kambala races, leading to a Supreme Court ban in 2014. This ban was eventually lifted in 2016, subject to conditions aimed at mitigating animal suffering.

Bengaluru's hosting of Kambala, despite the prior ban, exemplifies the sport's enduring popularity and cultural significance. The event drew substantial crowds, signifying its resonance beyond its traditional strongholds. The lifting of the ban followed amendments to laws by Karnataka, Tamil Nadu, and Maharashtra, permitting such traditional sporting events under specified conditions, highlighting the evolving dynamics between traditional practices, cultural heritage, and animal welfare concerns in India.

29thNovember2023

COMBATING FRAUD-Indian Express Editorial

Science and technology

Key takeaways:

1. **UPI's Transformative Impact:** Since its 2016 launch, UPI has reshaped India's payments, witnessing a surge due to widespread smartphone usage and affordable internet access.
2. **Rising Fraud Concerns:** Despite UPI's success, reported digital fraud cases have sharply increased annually, posing significant financial security challenges.
3. **Government's Proposed Action:** To combat fraud, the government is considering time thresholds for larger transactions, potentially affecting about 22.5% of such transactions.
4. **Fraud Complexity:** Cybersecurity risks, including sophisticated fraud techniques like phishing, necessitate prompt and effective countermeasures.
5. **Global Trend:** A worldwide rise in suspected digital frauds underscores the need for a comprehensive, multi-layered approach.
6. **Mitigating Fraud:** Strategies involve continual IT infrastructure upgrades and educating consumers about evolving fraud methods.
7. **Government's Vigilance:** The finance ministry actively addresses the surge in digital payment frauds, striving for a balanced solution without disrupting the efficiency of the payments ecosystem.

Mains easy language:



| Clear your doubts now.



The Unified Payments Interface (UPI) has significantly transformed India's payment landscape, witnessing an exponential rise in digital transactions. However, this surge has also led to a sharp increase in digital and financial frauds. In response, the government is considering measures like imposing a minimum time threshold for first-time transactions above a certain amount, aiming to curb cyber threats.

This proposed measure, while addressing cybersecurity concerns, may introduce friction in payments, affecting a considerable portion of transactions. Nonetheless, combating digital frauds necessitates a multi-pronged approach involving continual upgrading of IT infrastructure, enhancing protocols, and importantly, raising consumer awareness about evolving fraud techniques.

The global rise in suspected fraudulent digital transactions underscores the urgency for a comprehensive strategy. Government discussions aim to strike a balance between minimizing fraud risks and ensuring the smooth functioning of the payments system. Addressing this challenge demands a delicate equilibrium between strengthening security measures and maintaining seamless payment experiences.

After 26/11, a new terror-Indian Express Editorial

Internal security

Key takeaways:

1. **Mumbai's History of Terror:** Mumbai has faced numerous terror attacks, with 26/11 being the most devastating and impactful in recent memory.
2. **Previous Intelligence on 26/11:** There was specific intelligence available months before the 26/11 attacks regarding the vulnerability of Mumbai to a sea-bound terror attack.
3. **Post-26/11 Measures:** After the 26/11 attacks, the government undertook significant reforms in the police department, upgraded equipment, and enhanced training to prevent similar incidents.
4. **Shift to Cyber Warfare:** The nature of warfare has shifted from physical attacks to online, making cyber threats more prevalent and dangerous.
5. **Rise in Cyberattacks:** India has witnessed a substantial increase in state-sponsored cyberattacks, posing a severe threat to national security.
6. **Urgent Need for Cybersecurity:** Robust cybersecurity measures are crucial, spanning government agencies, the private sector, and individual citizens.
7. **Importance of Education and Training:** Educating people, especially children in schools, and providing training to government agencies and citizens, is vital in combatting cyber threats.
8. **Future Preparedness:** India cannot afford weak cybersecurity; it needs to invest heavily in cybersecurity measures to prevent the possibility of a cyber 26/11.

Mains easy language:

The article delves into India's historical vulnerability to terror attacks, particularly in Mumbai, emphasizing the devastating impact of the 26/11 attacks. It highlights the intelligence available prior to the attacks and subsequent reforms made in the police department to prevent future incidents. However, the focus shifts to the evolving landscape of warfare, specifically the transition from physical to cyber threats, which poses a significant risk to national security.

The narrative underscores the rising frequency of cyberattacks against India, revealing the urgent need for robust cybersecurity measures across governmental sectors, the private industry, and among individual citizens. The author stresses the importance of education and training, especially for children in schools, to enhance awareness and preparedness against cyber threats.

Overall, the article warns against the potential of a cyber 26/11 and urges India to invest extensively in advanced cybersecurity to safeguard against online attacks, emphasizing that weak cybersecurity could leave the country vulnerable to severe cyber threats.

Who's Milei, what's dollarisation-Indian Express Explained

Economy

Key takeaways:

1. **Milei's Unconventional Policies:** Javier Milei, a self-proclaimed libertarian and President-elect of Argentina, proposes radical economic changes, including adopting the US dollar as Argentina's official currency and dissolving the central bank.
2. **Dollarisation Concept:** Milei advocates for dollarisation, relinquishing Argentina's control over its monetary policy by adopting the US dollar, aiming to tackle the country's severe inflation crisis, which is around 110% to 150%.



| Clear your doubts now.



3. **Causes of Inflation:** Argentina's inflation is attributed to excessive government spending, persistent fiscal deficits, and continuous printing of currency by the central bank without a corresponding increase in economic output.
4. **Milei's Solutions:** Milei's plan entails substantial cuts in government spending, eliminating several departments, and adopting the US dollar to stabilize prices and curb government influence on monetary policy.
5. **Challenges and Doubts:** Critics raise concerns about Milei's political inexperience, potential fiscal irresponsibility post-dollarisation, and the significant financial requirements (around \$40 billion) needed for such a transition.
6. **Support for Dollarisation:** Proponents argue that dollarisation could protect purchasing power from government fiscal mismanagement and point to other Latin American countries that have experienced lower inflation after adopting the US dollar.
7. **Potential for Success:** The Cato Institute suggests that the hoarded US dollars among Argentinians could help mitigate the government's lack of dollars, potentially aiding in a successful shift to the US dollar.

Mains easy language:

The article discusses Javier Milei's unconventional policies as the President-elect of Argentina, focusing on his proposal to disband the peso and central bank in favor of adopting the US dollar. Milei's stance, termed dollarisation, aims to address Argentina's rampant inflation by relinquishing control over monetary policy.

Argentina grapples with soaring inflation rates, largely due to excessive government spending and continuous currency printing. Milei's plan seeks to curtail government expenditure, disband the central bank, and adopt the US dollar to stabilize prices and limit government interference in monetary matters.

However, critics doubt the feasibility of Milei's plan, citing his political inexperience, potential fiscal risks post-dollarisation, and the substantial financial requirements for such a transition. Nevertheless, proponents argue that dollarisation could protect citizens' purchasing power from governmental fiscal mismanagement and point to other Latin American countries that experienced lower inflation post-adoption of the US dollar.

The article presents both skepticism and support for Milei's proposal, highlighting the potential challenges and benefits associated with Argentina's possible shift to dollarisation.

Behind unseasonal rain&lightning strikes in Gujarat-Indian Express Explained

Geography

Key takeaways:

1. **Unseasonal Weather:** Unusual heavy rainfall, thunderstorms, and lightning struck Gujarat, claiming 27 lives. The disaster management system in place was not fully equipped to handle lightning-related events.
2. **Weather Systems Involved:** The weather anomalies were attributed to three systems: cyclonic circulation over the Northeast Arabian Sea, Western Disturbances, and an easterly trough.
3. **Contributing Factors:** Multiple weather systems coincided, with Western Disturbances moving from west to east, leading to unforeseen rainfall in Gujarat and Madhya Pradesh.
4. **Lightning Causes:** Lightning resulted from interactions between various weather systems, especially when dry periods are followed by convective activity.
5. **Warnings and Disaster Preparedness:** While warnings for heavy rainfall and earthquakes are established in Gujarat, mechanisms for lightning-specific alerts are lacking in the disaster management system.
6. **IMD Warnings:** The India Meteorological Department issued specific warnings for lightning strikes in advance, yet the disaster management system wasn't fully equipped for such events.
7. **Response and Nodal Agency:** Gujarat State Disaster Management Authority (GSDMA) lacks a specific mechanism for lightning warnings but acts as a nodal agency for pre-disaster preparedness and mitigation.

Mains easy language:

Unanticipated heavy rainfall, thunderstorms, and lightning strikes in Gujarat claimed 27 lives, prompting scrutiny of the disaster management system's inadequacies in handling lightning-related events. The incident, primarily attributed to multiple weather systems, involved cyclonic circulation over the Northeast Arabian Sea, Western Disturbances, and an easterly trough.

The India Meteorological Department (IMD) identified the interaction between weather systems, especially the convergence of Western Disturbances, as the cause of lightning. Additionally, the absence of lightning-specific alerts in the disaster management system highlighted the lack of preparedness for such events, despite prior warnings issued by the IMD.





Gujarat's disaster management apparatus, established after the 2001 earthquake, primarily focuses on pre-disaster preparedness and mitigation but lacks a dedicated mechanism for lightning warnings. While warnings for heavy rainfall and earthquakes exist, specific protocols for lightning strikes are absent.

This unprecedented weather event underscores the necessity for disaster management systems to adapt and include provisions for unforeseen weather anomalies, such as lightning strikes, in their preparedness strategies. The IMD's proactive warnings serve as a crucial reminder to enhance disaster response mechanisms to effectively mitigate the impact of unpredictable weather events.

[As COP28 approaches, six key climate change terms you should know-Indian Express Explained](#)

Environment

Key takeaways:

- 1. COP (Conference of the Parties):** An annual UN-organized international climate meeting where representatives from 197 countries convene to discuss strategies for reducing greenhouse gas emissions and addressing climate issues.
- 2. Paris Agreement:** Adopted during COP21 in 2015, this global treaty unites countries to collectively reduce greenhouse gas emissions, replacing the Kyoto Protocol and guiding international climate action.
- 3. 1.5 Degree Limit:** Nations aim to limit global warming to "well below" 2 degrees Celsius, targeting a cap of 1.5 degrees Celsius compared to pre-industrial levels, as crossing this threshold could result in severe climate impacts.
- 4. Net-Zero:** It refers to balancing a country's greenhouse gas emissions with the removal of equivalent emissions from the atmosphere through carbon sinks or technologies like carbon dioxide removal (CDR).
- 5. Nationally Determined Contributions (NDCs):** Each country submits plans outlining their strategies to mitigate emissions and adapt to climate change impacts, revising these commitments every five years to increase ambition.
- 6. Loss and Damage:** This term refers to unavoidable socio-economic impacts resulting from extreme weather events. Efforts at COP meetings focus on establishing funds to assist affected nations, though existing funds remain empty awaiting allocation agreements.
- 7. Main focus:** At COP28, discussions will center on addressing climate action gaps, particularly in emission reduction targets and financing for loss and damage. The focus will be on fostering global cooperation for more ambitious climate commitments.

Mains easy language:

COP28, the annual climate summit, gathers nearly 200 countries to address pressing environmental issues. Originating from the UN Framework Convention on Climate Change, COP sessions steer global efforts to combat climate change. The Paris Agreement, a landmark accord, set ambitious goals to limit global warming below 2 degrees Celsius, aiming for 1.5 degrees compared to pre-industrial levels. However, current trends predict a worrying 3-degree Celsius rise by century's end, highlighting the urgency for robust climate action.

Net-zero emissions, where emissions balance with removal from the atmosphere, remain a crucial focus. Nations outline their climate plans through Nationally Determined Contributions (NDCs), subject to periodic revision for increased ambition. "Loss and damage" denote socio-economic impacts from extreme weather events. COP27 initiated a fund for affected nations, but funding remains inadequate, prompting discussions on financial contributions.

COP28 aims to accelerate climate action, emphasizing collaboration, heightened ambitions in commitments, and financial aid for vulnerable nations facing climate adversities.

[Time for action-The Hindu Editorial](#)

Environment

Key takeaways:

- 1. COP28 Urges Action:** The 28th Conference of the Parties (COP28) aims to push world leaders to take definitive action on climate change, emphasizing the urgency to limit global temperature rise.
- 2. Emission Trends are Worrying:** Despite global commitments made in Paris, emissions have continued to rise, potentially leading to a 2.5-3°C temperature increase by the end of the century, far beyond the targeted limit of 1.5°C.
- 3. Principles vs. Action:** While countries have agreed on principles regarding carbon emissions, transitioning from these principles to actual implementation faces significant challenges due to mutual distrust, geopolitical complexities, and domestic political pressures.



| Clear your doubts now.



4. **Focus Areas at COP28:** The conference's key areas of focus include concluding the Global Stocktake and implementing the Loss and Damage Fund, yet uncertainties persist regarding fund size and individual country contributions.
5. **Call for Tangible Action:** COP28 is urged to go beyond previous conferences and deliver concrete actions rather than agreements laden with caveats, fulfilling its role in compelling signatories to take effective measures against climate change.

Mains easy language:

COP28, a pivotal conference bringing together global leaders, activists, and stakeholders, aims to address the urgent need for decisive action on climate change. Despite unanimous global consensus to limit temperature rise to 1.5°C above pre-industrial levels, current emission trends indicate a deviation from this target, with temperatures expected to rise by 2.5-3°C by the century's end.

Over nearly three decades of COP meetings, major economies agreed on fundamental principles: acknowledging disproportionate carbon emissions by rapidly industrialized nations, the need to shift away from fossil fuel-dependent economies, and compensating developing countries for adopting cleaner energy sources. However, translating these principles into tangible action faces hurdles due to mutual distrust, geopolitical complexities, and political pressures faced by world leaders.

Amidst these challenges, two major focal points at COP28 are the conclusion of the Global Stocktake and the operationalization of the Loss and Damage Fund. Nevertheless, uncertainties loom over the fund's size and individual country contributions. While previous COPs have often yielded agreements laden with caveats, COP28 must rise to its intended goal of compelling its signatories into concrete action toward combating climate change.

The challenge of maritime security in the Global South-The Hindu Editorial

Internal security

Key takeaways:

1. **Evolution of Threats:** Maritime security threats have evolved beyond traditional concerns like illegal fishing and pollution to include unconventional tactics like grey-zone warfare, land attack missiles, and combat drones.
2. **Non-Traditional Challenges:** Developing nations face various non-traditional security threats in the maritime domain, including human trafficking, drug trafficking, natural disasters, and climate change impacts.
3. **Lack of Unified Approach:** Littoral states in Asia and Africa often lack unified law enforcement capabilities and willingness to collaborate in combating maritime threats, leading to security gaps and vulnerabilities.
4. **Global South's Vulnerability:** Less developed states in the Global South bear a disproportionate impact from rising sea levels, marine pollution, and climate change, heightening their vulnerability.
5. **Creative Approaches:** Nations like India and Bangladesh are adopting creative models for maritime security, focusing on economic development, marine resource protection, and sustainable practices through initiatives like Maritime Vision 2030 and the Blue Economy concept.
6. **Need for Collaboration:** The article highlights the necessity for collaborative solutions and regional cooperation among littoral states to effectively address shared maritime challenges like piracy, terrorism, and illegal fishing.
7. **Challenges in Implementation:** Implementing collaborative strategies faces hurdles due to conflicting priorities, struggles for sovereignty, and the need for improved interoperability and intelligence sharing among maritime agencies.

Mains easy language::

The article delves into the evolving landscape of maritime security in the Global South, emphasizing the need for adaptive strategies to address a diverse array of challenges. Highlighting Charles Darwin's concept of adaptability, the piece asserts that the maritime domain faces new and multifaceted security threats that demand flexibility and resilience.

Recent years have witnessed an emergence of unconventional maritime threats such as grey-zone warfare tactics, land attack missiles, and drones. Moreover, there's a growing demand for maritime security, especially from states confronting non-traditional challenges like illegal fishing, climate change impacts, natural disasters, and marine pollution. However, addressing these issues solely through military means is insufficient. States need to invest capital, resources, and specialized personnel for extended periods to tackle these threats effectively.

Despite the focus on hard security, there is a failure to acknowledge the security concerns of developing countries in the maritime domain. Littoral states in the Global South face vulnerabilities due to rising sea levels, marine pollution, and climate change impacts. However, there's a perception that the zero-sum competition among powerful nations in regions like the Indo-Pacific sidelines the developmental aspirations of these states.





The article underscores the interconnectedness of security objectives encompassing environmental, economic, and human security. It emphasizes that maritime security is not solely about military actions but also involves generating prosperity and meeting societal aspirations. Nations like India, Bangladesh, and various African states have initiated creative models like Maritime Vision 2030 and the Blue Economy to blend economic development with sustainable maritime practices.

Collaborative strategies are essential to address collective maritime challenges. However, achieving consensus and implementing unified solutions pose significant challenges. Littoral states often prioritize sovereignty over collective action, hindering effective regional cooperation. Despite the need for collective approaches, conflicts of interest and autonomy concerns continue to impede collaborative security initiatives in the Global South.

The need to disclose political donations-The Hindu Text and Context

Polity

Key takeaways:

1. **Global Disclosure Norms:** Countries worldwide generally demand full disclosure of political donations above specific thresholds and impose limits on contributions to ensure transparency and combat corruption.
2. **U.S. and EU Practices:** The U.S. and European Union exemplify this approach, with the U.S. upholding disclosure since the 1970s and the EU enforcing regulations on disclosed donations above certain thresholds.
3. **UK's Regulations:** The UK restricts political party donations and requires declaration of donation sources under the Political Parties, Elections and Referendums Act 2000.
4. **Purpose of Disclosure:** Publicly revealing political funding is vital to maintain trust in parties, ensure transparent governance, and counter electoral corruption.
5. **Limits on Donations:** Capping donations is crucial to prevent undue influence, ensuring fair electoral outcomes based on policies rather than financial power.
6. **Electoral Justice:** Upholding electoral justice protects rights, ensures fair elections, and upholds democratic principles through lawful conduct.
7. **Concerns with Electoral Bonds:** Anonymity in electoral bonds undermines transparency, demanding stronger legislation for a fairer electoral system beyond mere constitutional challenges.

Mains easy language:

India's current political funding mechanism, especially the usage of electoral bonds that ensure anonymity for donors, deviates significantly from global standards emphasizing transparency and regulated contributions. Urgent legislative action is crucial to fortify democratic principles and rebuild public confidence in the political process. This essential legislation must mandate the disclosure of donors surpassing specific thresholds, immediate reporting of substantial donations to election authorities, public unveiling of party financial records, independent audits, and strict enforcement of funding limitations.

These proactive measures hold immense significance in ensuring transparency, upholding the rule of law, and harmonizing India's practices with global norms, thereby revitalizing trust in the nation's political landscape. Implementing these reforms becomes paramount in curbing corruption risks, mitigating the undue influence of money in elections, and re-establishing the foundation of a transparent, accountable, and equitable democratic framework in India.

By enacting such crucial reforms, India can reinforce the essence of integrity and fairness in its political system, fostering a space where electoral processes are transparent, citizens' trust is restored, and the democratic spirit flourishes. This transformative step would not only align India's practices with international standards but also solidify the pillars of democracy, ensuring that the nation's political landscape is characterized by transparency, accountability, and integrity, ultimately leading to a more robust and equitable democratic system for all its citizens.

In Gaza, Israel is waging an invisible environmental war-The Hindu Science

Environment

Key takeaways:

1. **Environmental Devastation:** Israel's actions in Gaza have led to severe environmental harm. Bombs containing toxic substances like tritonal have contaminated soil and water, posing risks to ecosystems and public health.
2. **Continual Bombardment:** Relentless Israel-Hamas conflict has seen the use of various munitions, including white phosphorus, violating international law banning such compounds in densely populated areas.
3. **Impact of Explosives:** Bombs like the 2,000-pound Mk-84 filled with tritonal have caused significant environmental damage, affecting soil, water, and air in the blast radius with long-term consequences.



| Clear your doubts now.



4. **Ecological Blockade:** Israel's control over Palestinian lands led to the destruction of farmlands and olive trees, replaced by pine trees making the land unsuitable for cultivation. Herbicidal warfare and ecological damage have been reported in Gaza.
5. **Water Supply Control:** Israel's control over water resources limits Palestinians' access to clean water. Deliberate damage to Water, Sanitation, and Hygiene (WASH) infrastructure worsens Gaza's challenges.
6. **Colonial Occupation Impact:** Environmental destruction serves as a tool in the ongoing occupation, affecting biodiversity, livelihoods, and health, creating dire conditions and disrupting shared resources.
7. **Widespread Consequences:** The environmental fallout, including pollution and contaminants, extends beyond Gaza, impacting shared resources like coastal aquifers, posing broader regional implications.

Mains easy language:

The ongoing conflict between Israel and Hamas in Gaza has left behind a trail of severe environmental devastation. Israel's military actions, marked by continuous bombardment, have resulted in significant ecological damage. The use of banned compounds like white phosphorus and bombs containing toxic substances such as tritonal has contaminated the soil, water, and air, posing critical risks to both the environment and public health.

Additionally, Israel's control over Palestinian territories has led to the destruction of farmlands, with olive trees replaced by pine trees that render the land unsuitable for cultivation. Reports also indicate instances of herbicidal warfare, further deteriorating the ecological balance in Gaza.

The manipulation of water resources by Israel has exacerbated the crisis, restricting Palestinians' access to clean water. The deliberate damage to Water, Sanitation, and Hygiene (WASH) infrastructure has worsened living conditions in Gaza.

This environmental devastation is not just a consequence of the conflict but is used as a strategic tool in the ongoing occupation. It impacts not only the immediate environment and livelihoods but also shared resources, presenting broader regional implications. The ramifications of this environmental degradation extend beyond Gaza, affecting neighboring areas and highlighting the far-reaching impact of the conflict on the environment and communities in the region.

30th November 2023

Social justice, sexual education, the need of our times-The Hindu Editorial

Sociology

Key takeaways:

1. **Impact of Caste and Gender:** Caste and gender significantly impact the lives of young individuals in Indian schools, often leading to conflicts and legal complexities in relationships across different castes.
2. **Need for Social Change Education:** Teaching critical thinking and social justice is essential to create a healthier society and uphold the foundations of democracy.
3. **Education's Role in Democracy:** Education plays a pivotal role in nurturing empathy, critical thinking, and respectful discourse, all fundamental for a robust democratic setup.
4. **Crucial Role of Teachers:** Teachers are pivotal in effectively imparting social justice education to students, shaping their perspectives and understanding.
5. **Expanding Sexual Education:** Beyond health, sexual education reshapes gender dynamics, emphasizing respect, consent, and understanding diverse identities.
6. **Governmental Support Required:** A strong government backing is necessary to seamlessly integrate social and sexual education into school curricula, fostering inclusivity and understanding.
7. **Combatting Discrimination:** Overcoming discrimination demands the recognition of equality and the willingness to embrace differences for a harmonious and fair society.

Mains easy language:

The synopsis highlights the urgent need to incorporate social justice and sexual education into the Indian school system. It emphasizes the profound impact of caste and gender divisions on the lives of young individuals, leading to conflicts and legal issues in relationships across different castes. Education aimed at nurturing critical thinking, empathy, and social justice consciousness is essential to foster a healthier society and sustain democratic institutions.



| Clear your doubts now.



The role of teachers emerges as crucial in effectively imparting social justice education, shaping students' perspectives, and promoting respectful discourse. Additionally, sexual education is depicted not merely as a tool for imparting knowledge about sexual health but as a transformative force in reshaping gender relationships, emphasizing respect, consent, and understanding diverse identities.

Governmental support is identified as a critical factor in seamlessly integrating social and sexual education into school curricula. Initiatives like Adolescent Reproductive and Sexual Health Strategy (ARSH) and National Adolescent Health Programme (RKSK) are acknowledged but deemed in need of wider implementation and support.

Lastly, the necessity to combat discrimination based on caste and gender is highlighted, emphasizing the importance of recognizing equality and fostering an environment that embraces differences for a more harmonious and just society.

How universities and industry can collaborate-The Hindu Editorial

Sociology

Key takeaways:

1. **Mutual Benefits:** Collaborations between industry and academia can yield mutual benefits, but Indian higher education institutions (HEIs) haven't capitalized on these partnerships for intellectual property (IP) and technology transfers.
2. **Hurdles in Collaboration:** HEIs and industries must align shared goals, despite differing approaches towards theoretical knowledge and practical applications.
3. **Cultural Differences:** Bridging the gap in how HEIs and industrial partners approach research is essential; balancing academic rigor with practical implementation is crucial for successful collaborations.
4. **Communication Channels:** Establishing effective communication between universities and industries is vital to familiarize each side with the other's language, processes, and expectations.
5. **Trust-building:** Building trust through transparent agreements, IP arrangements, and confidentiality agreements is key to resolving fears and ensuring mutual respect in collaborations.
6. **Types of Collaborations:** HEIs with varying research capabilities can engage in short-term problem-solving partnerships with local industries or long-term research collaborations for technological advancements.
7. **Symbiotic Relationship:** Encouraging a symbiotic relationship between HEIs and industries is crucial; fostering partnerships across universities and domains can be facilitated by government funding and expert reviews.

Mains easy language:

Collaboration between academia and industry in India faces several challenges and requires a multifaceted approach to overcome them. The prevalent hurdles include differing goals, cultural disparities in research approaches, communication gaps, and a lack of trust. To foster successful partnerships, shared goals must be established, merging theoretical knowledge with practical applications.

Cultural differences often arise between academic and industrial perspectives regarding research quality and practical implementation. Bridging this gap necessitates refining academic findings into practical recommendations while providing more context to the data for industry understanding.

Effective communication channels and understanding industry norms and regulations are crucial. Establishing trust is pivotal; both parties must agree on IP arrangements, confidentiality agreements, and publications, ensuring transparent collaborations and alleviating fears of data misuse.

The collaboration spectrum ranges from short-term associations addressing immediate industry issues to long-term partnerships for cutting-edge research, benefitting both parties. Government funding support, including research grants and joint project calls, combined with regular expert reviews, can significantly facilitate these collaborations, fostering a mutually beneficial academia-industry relationship.

Understanding rathole mining-The Hindu Text and Context

Geography

Key takeaways:

1. **Rat-Hole Mining Definition:** Rat-hole mining involves tunnels about 3-4 feet deep where workers extract coal using pickaxes, often resulting in hazardous working conditions.



| Clear your doubts now.



2. **NGT Ban in Meghalaya:** The National Green Tribunal (NGT) banned rat-hole mining in Meghalaya in 2014 due to severe environmental degradation, safety hazards, and recurring fatalities.
3. **Health Hazards:** Workers faced risks like asphyxiation, mine collapses, and flooding due to poor ventilation and lack of structural support. Unregulated mining also led to land degradation and contaminated water sources.
4. **Impact on Environment:** Rat-hole mining caused deforestation, acidic river waters, high concentrations of toxic heavy metals, and loss of aquatic life in rivers like Lukha and Myntdu.
5. **Child Labor Concerns:** Reports estimated about 70,000 children, mainly from Bangladesh and Nepal, were employed in these mines, sparking concerns about human trafficking and child labor.
6. **Government Measures:** Despite the ban, illegal mining and coal transportation continued, leading to numerous accidents and fatalities. Recent government approvals for "scientific" mining aim to resume operations with minimal environmental impact.

Mains easy language:

Rat-hole mining, involving hazardous tunneling methods to extract coal, faced a ban in Meghalaya by the NGT due to its adverse impacts. The ban stemmed from severe environmental degradation, recurrent accidents, and safety hazards, including mine collapses and toxic water sources.

This mining method resulted in health risks for workers and environmental degradation, causing acidic river waters and loss of aquatic life. Concerns about child labor and human trafficking were raised, estimating a significant number of children working in these hazardous mines.

Recent government approvals aim to resume mining operations using "scientific" methods, emphasizing minimal environmental impact. However, skepticism remains about the efficacy of such measures in a region where profit-driven coal mining practices have been prevalent. Rat-hole mining's economic viability, especially due to thin coal seams, poses a challenge in transitioning to safer mining practices in Meghalaya.

Could dead stars crash with the light of 500 million suns?-The Hindu Science

Science

Key takeaways:

1. **Understanding Fast Radio Bursts (FRBs):**Fast Radio Bursts (FRBs) are powerful radio emissions from distant galaxies, releasing energy equivalent to 500 million suns in a brief, millisecond duration, making their tracking challenging.
2. **Magnetars and Their Role in FRBs:**Magnetars, known for their strong magnetic fields, were previously considered as potential sources of FRBs, yet solid evidence confirming their connection was lacking.
3. **Neutron Star Collisions and FRBs:**Recent studies propose that FRBs could be triggered just before the collision of neutron stars, producing both radio waves and gravitational waves.
4. **Observational Confirmation:**The observation of a neutron star collision in 2017 provided significant support for this theory, as it emitted detectable gravitational and electromagnetic signals.
5. **Insights from Neutron Star Collisions:**These studies delve into the behavior of neutron stars prior to collision, explaining the release of electromagnetic energy and gravitational waves during this cosmic event.
6. **Implications for Astronomy:**The discovery opens new avenues for advanced studies on gravitational waves, leveraging upcoming projects like the Square Kilometer Array and NASA's Laser Interferometer Space Antenna (LISA).

Mains easy language:

The study of Fast Radio Bursts (FRBs) has long puzzled astrophysicists due to their immense power and brief, millisecond-long durations, originating from deep space. Although magnetars, neutron stars known for their powerful magnetic fields, were considered potential sources, conclusive evidence linking them to FRBs was missing.

Recent research suggests that FRBs might arise just before the collision of neutron stars, producing both radio waves and gravitational waves. This theory gained credibility following the observation of a neutron star collision in 2017, emitting detectable gravitational and electromagnetic signals.

The proposed model explains how a neutron star binary system behaves during the lead-up to a collision, expelling electromagnetic energy and gravitational waves shortly before impact. These emissions share similarities with FRBs and offer valuable insights into the behavior of neutron stars before merging.





This discovery presents new avenues for gravitational wave studies, particularly with the upcoming Square Kilometer Array and NASA's Laser Interferometer Space Antenna (LISA). These advancements could revolutionize our understanding of cosmic phenomena, enabling deeper exploration into the universe's workings through gravitational wave astronomy.

We moved a mountain-Indian Express Editorial

Disaster Management

Key takeaways:

1. **Persistence and Teamwork:** The successful rescue of 41 workers trapped in the Silkyara tunnel was a testament to unwavering determination and a united front presented by various agencies, such as the NDRF, BRO, and local miners, working in tandem.
2. **Diverse Approaches:** A multitude of strategies, ranging from drilling techniques to establishing communication systems and creating alternative escape routes, were simultaneously employed to navigate the complexities posed by the collapsed tunnel.
3. **Government-Led Collaboration:** A cohesive effort led by governmental bodies ensured the rapid mobilization of resources from both national and international domains, showcasing an impressive level of coordination.
4. **Adaptability and Ingenuity:** The rescue team showcased adaptability by sourcing equipment and expertise globally, constantly adjusting plans to effectively address the evolving challenges encountered during the operation.
5. **Exemplary Courage:** The trapped workers, alongside the miners and the entire rescue team, displayed exceptional bravery and unyielding determination throughout the ordeal.
6. **Embracing Nature's Forces:** The incident underscored the significance of respecting and harmonizing with the forces of nature, teaching a valuable lesson in humility and cooperation.
7. **Unity Triumphs Over Adversity:** The successful resolution highlighted the profound impact of unity and an unwavering mindset, illustrating that collective determination can conquer even the most formidable obstacles.

Mains easy language:

The Silkyara tunnel rescue was a challenging operation to save 41 workers trapped in Uttarakhand, coinciding with Deepawali, a significant festival in the country. This event evoked varied emotions nationwide, unfolding as a test of resilience and unity.

Multiple agencies, including the NDRF, BRO, and local miners, collaborated using diverse tactics such as Auger drilling and establishing communication systems. This collaborative effort under a whole-of-government approach efficiently mobilized resources both nationally and internationally, showcasing effective coordination during the rescue mission.

Despite facing numerous hurdles, the trapped workers, miners, and the collective rescue teams displayed exceptional bravery and unwavering determination throughout the arduous ordeal. Their perseverance in adverse conditions served as a source of inspiration and admiration for the entire nation.

Moreover, the rescue operation shed light on the importance of respecting nature's forces and the significance of unity, determination, and adaptability in overcoming daunting challenges.

In essence, the Silkyara tunnel rescue was a testament to human resilience, collaborative spirit, and the triumphant power of unity in the face of adversity.

IBC LOOSE ENDS-Indian Express Editorial

Economy

Key takeaways:

Admission and Withdrawals: Over 7,000 cases were admitted under the Insolvency and Bankruptcy Code (IBC). Around 26,000 applications, accounting for defaults worth Rs 9.33 lakh crore, were withdrawn before admission.

Operational Creditors' Involvement: About half of the admitted cases were initiated by operational creditors, providing them with a tool for debt recovery, especially small and medium enterprises.

Case Outcomes: Out of the admitted cases, some have been closed on appeal or settled. Resolution plans were approved in a significant number of cases, while liquidation commenced in others, resulting in lower realizations than anticipated.

Realizations and Liquidation Values: Creditors realized only about 31.85% of their admitted claims through resolution plans. Liquidation values were even lower, at 6.5% of the claims. Most cases ending in liquidation had diminished economic value, with asset values pegged at a mere 7% of the outstanding debt.





Time-Bound Resolution: IBC promised a time-bound resolution process, but the average time taken for resolution or closure of the process exceeded expected timelines. A majority of ongoing cases crossed 270 days, and in liquidation cases, 55% crossed two years.

Mains easy language:

The Insolvency and Bankruptcy Code introduced in 2016 aimed to streamline debt resolution, restore credit relationships, and incentivize promoters to fulfill financial obligations. Despite admitting over 7,000 cases, a considerable number of applications were withdrawn before admission, reflecting underlying issues in the resolution framework.

Operational creditors found a tool for debt recovery, particularly aiding small and medium enterprises. However, the outcomes of admitted cases varied widely. While some cases saw successful resolution plans, others resulted in liquidation, with significantly lower realizations and liquidation values than expected.

Although IBC reduced the time to resolve insolvency, the process often exceeds expected timelines. Most ongoing cases have surpassed the stipulated period, indicating a need for further improvements in the code's efficiency and effectiveness. More stringent measures are required to address the gaps and enhance the functioning of the Insolvency and Bankruptcy Code.

Stepping up, together-Indian Express Editorial

International relations

Key takeaways:

Multilateral Revitalization: India's leadership revitalized multilateralism, advocating for a shift from GDP-centric progress to a more human-centric approach during its G20 presidency.

Global South Empowerment: India amplified the voice of the Global South, integrating the African Union as a permanent member of the G20, fostering comprehensive dialogue on global challenges and opportunities.

Development Focus: The presidency emphasized development, incorporating the perspectives and concerns of developing countries into the international discourse, shaping a more inclusive global narrative.

Empowerment of Women: India championed the cause of women's empowerment, exemplified by initiatives like the formation of a dedicated Working Group and the Women's Reservation Bill 2023.

Sustainable Development Goals (SDGs): India spearheaded the G20 2023 Action Plan to Accelerate Progress on the SDGs, taking an action-oriented approach encompassing health, education, gender equality, and environmental sustainability.

Digital Infrastructure: India led global technological collaboration through the Digital Public Infrastructure Repository, a platform enabling inclusive growth and sharing experiences of digital innovation.

Climate Action and Justice: The presidency advocated for climate justice, stressing the need for substantial financial and technological support for developing countries to fulfill their commitments, along with initiatives for a cleaner, greener world.

Mains easy language:

India's tenure in the G20 presidency was a pivotal period marked by a significant paradigm shift, advocating for a recalibration from GDP-centric growth to a more human-centric approach. At its core, the presidency prioritized amplifying the voices of the Global South, advocating for development, and empowering women. Notable achievements included spearheading the G20 2023 Action Plan for Sustainable Development Goals (SDGs), demonstrating a commitment to addressing global challenges holistically.

A key highlight was India's emphasis on digital collaboration, evidenced by the Digital Public Infrastructure Repository. This platform showcased India's innovative digital initiatives, fostering inclusive growth and knowledge sharing globally. Furthermore, India played a crucial role in steering discussions on climate action, underscoring the importance of climate justice and substantial support for developing nations to meet their commitments. Gender equality emerged as a focal point, evident in initiatives such as the formation of a dedicated Working Group for Women's Empowerment and the proposed Women's Reservation Bill 2023.

The New Delhi Declaration epitomized India's commitment to policy coherence, reliable trade, and ambitious climate action. As India passes on the G20 presidency to Brazil, its legacy lies in steering a more inclusive, sustainable, and development-oriented global discourse. India's efforts have left an indelible mark on the G20 platform, reflecting a collective pursuit of a fairer, more equitable, and sustainable future for all nations.

India at the climate summit-Indian Express Explained

Environment



| Clear your doubts now.



Key takeaways:

India's Climate Role: As the world's third-largest emitter, India's stance at the COPs is pivotal for global climate initiatives.

Emissions and Development: India's significant greenhouse gas emissions stem from its size and population, but per capita emissions remain lower, reflecting lower living standards.

Historic Involvement at COPs: India advocated for equitable responsibilities, stressing that developed countries should bear the climate burden due to their greater resources and past emissions.

Shifts at Recent COPs: Recent years witnessed India's increased assertiveness, proposing initiatives like phase-down of fossil fuels, lifestyle changes, and emphasizing a gradual approach to emissions reduction.

India's Commitments: India's Nationally Determined Contributions (NDCs) focus on emission intensity reduction, non-fossil fuel-based energy, and carbon sink creation through tree cover, emphasizing growth sustainability.

Global Initiatives: India spearheaded initiatives like the International Solar Alliance and Coalition of Disaster Resilient Infrastructure to promote renewable energy and resilient infrastructure.

Red Lines: India's non-negotiable stances include resisting direct emission reductions, immediate closure of coal-based plants, and emissions cuts in agriculture, essential for food security.

Mains easy language:

India, a significant contributor to greenhouse gas emissions, plays a pivotal role in global climate conferences like COP. Historically advocating for equitable responsibilities, India has defended the stance that developed nations should shoulder a greater climate burden due to their past emissions. Recent years saw India's increased assertiveness at COPs, proposing initiatives for a gradual approach to emissions reduction, emphasizing lifestyle changes, and advocating for fossil fuel phase-down.

India's climate commitments in its NDCs aim at sustainable growth, focusing on emission intensity reduction and promoting non-fossil fuel-based energy sources. Alongside formal commitments, India has initiated global alliances like the International Solar Alliance and Coalition of Disaster Resilient Infrastructure.

However, India maintains red lines on certain issues, such as rejecting direct emissions reductions, advocating for a phased approach in reducing coal dependency, and resisting emission cuts in agriculture, which could impact food security. India's stand at COPs reflects its dual commitment to climate action and sustainable development while safeguarding its developmental needs.

Global marine life on the move due to oceans warming: study-Indian Express Explained

Geography

Key takeaways

Tropicalization Shift: Climate change is causing tropical marine species to move from equatorial regions toward the poles, termed "tropicalization," altering marine species' distribution significantly.

Impact on Species: As waters warm, temperate species retreat due to unsuitable conditions, leading to habitat competition and the introduction of new predators, disrupting ecosystems.

Ecological Changes: The shift in marine life is reshaping ocean ecosystems, potentially impacting biodiversity and the global economy.

Ocean Currents and Change: Climate change affects factors like ocean currents, aiding the movement of species poleward and exacerbating the shift away from temperate species.

Mediterranean Hotspot: The Mediterranean Sea is highlighted as a significant hotspot for tropicalization, showcasing rapid changes in specific regions.

Consequences of Tropicalization: Tropicalization poses significant ecological and evolutionary consequences for species, communities, and entire ecosystems, potentially altering global diversity patterns.

COP28 Significance: The study's release during COP28 emphasizes the urgent need for global policymakers to address the impact of climate change on marine ecosystems.

Mains easy language:

The study, featured in Trends in Ecology and Evolution, illuminates the profound impact of ocean warming on marine ecosystems, termed "tropicalization." It elucidates how rising temperatures are compelling tropical marine species to migrate from equatorial regions towards the poles, while temperate species retreat due to unsuitable warm waters. This migration disrupts established



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ecosystems, triggering habitat competition and the introduction of new predators. Notably, the Mediterranean Sea emerges as a hotspot for these rapid changes.

The consequences of this phenomenon are far-reaching, with ecological and evolutionary ramifications for species, communities, and entire marine ecosystems. These changes carry the potential to significantly reshape global biodiversity patterns. The study underscores the urgency for action, coinciding with COP28, urging global policymakers to address the pressing issues caused by climate change in marine environments. It emphasizes the need for immediate and decisive measures to safeguard marine biodiversity and ecological balance in the face of this accelerating "tropicalization" phenomenon.

