



# HINDU & EXPRESS NOTES

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## In Maharashtra's poorest district, bamboo ambulances venture where roads fail- TH States

Sociology

## **Easy Explanation**

Nandurbar, a district in Maharashtra, feels neglected and underdeveloped. Located in the Satpura hill range, it is surrounded by Madhya Pradesh and Gujarat. The area is mostly tribal and faces numerous challenges, especially in healthcare. The landscape changes from green in the monsoon to dry in other seasons, making it difficult for residents to access daily services.

The district's scattered population and difficult geography make it hard to reach many villages. Villagers often use makeshift bamboo stretchers to carry sick people to the nearest health centers. Despite improvements in poverty levels, Nandurbar remains the poorest district in the State.

The district lacks basic infrastructure like roads and connectivity. During monsoons, areas are cut off, and boat ambulances have to be used. The district has a shortage of medical staff, and efforts to attract doctors to work in remote areas have been unsuccessful. For example, of the approved posts for medical officers, many remain vacant.

Local health workers, like ASHA workers, try to raise awareness about the importance of medical checkups and institutional births. However, the lack of proper infrastructure and medical facilities remains a significant barrier. For instance, pregnant women often have to travel long distances for checkups, and many give birth at home without medical assistance.

The government has implemented some measures, such as boat ambulances and floating dispensaries, to provide basic healthcare services. However, these efforts are often insufficient due to the challenging terrain and severe staff shortages. For example, boat dispensaries can only provide basic first aid, and transporting patients to proper health centers is difficult, especially during the monsoon.

Local leaders and residents express frustration over the lack of development and basic infrastructure in the district. There are calls for better roads, bridges, and medical facilities to improve living conditions and healthcare access. Despite some improvements, the district still faces significant challenges in providing adequate healthcare to its residents.

## Key Takeaways

## Geographical and Infrastructure Challenges:

Nandurbar's location and landscape make it difficult for residents to access essential services. The district is often cut off during the monsoon, and there is a lack of proper roads and connectivity.

## Healthcare Difficulties:

The district faces severe healthcare challenges, including a high infant mortality rate and many home births without medical assistance. Villagers often rely on makeshift bamboo stretchers to transport sick people to health centers.

## Lack of Medical Staff:

Nandurbar has a significant shortage of medical professionals. Efforts to attract doctors to work in the area have largely failed, leaving many health centers understaffed.

## Government and Community Efforts:

Local health workers and government initiatives, such as boat ambulances and floating dispensaries, try to address the healthcare needs of the population. However, these measures are often inadequate due to the region's difficult terrain and lack of resources.

## **Political and Social Concerns:**

Local leaders and residents express frustration over the lack of development and basic infrastructure in the district. There are calls for better roads, bridges, and medical facilities to improve living conditions and healthcare access.

## Court on climate right and how India can enforce it- TH Editorial

Environment

# Easy Explanation

Recently, the Supreme Court of India made an important ruling in the M.K. Ranjitsinh vs Union of India case. The court declared that the Indian Constitution now includes the right to be free from the harmful effects of climate change, linking this right to the fundamental rights to life and equality. This new right gives citizens the power to hold the government accountable for protecting them from climate change.

The case initially focused on whether electricity transmission lines could be built through the habitat of the critically endangered Great Indian Bustard. The court decided that developing renewable energy infrastructure was crucial to combat climate change,



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even if it meant modifying previous orders that protected the bird's habitat. This judgment has sparked discussions on how India should handle climate change going forward.

The court's ruling suggests that India needs more comprehensive climate change legislation. Currently, there is no overarching law that addresses climate change in India. Such a law could help set a clear vision for addressing climate change across various sectors, create necessary institutions, and establish processes for effective governance.

However, this legislation should be tailored to India's unique needs and not just replicate what other countries have done. India needs to focus on both reducing carbon emissions and building resilience against climate change impacts. This means creating sustainable cities, promoting climate-resilient crops, protecting ecosystems like mangroves, and ensuring social equity.

The law should be an enabling one, helping various sectors make development-focused decisions that support low-carbon growth and climate resilience. It should also consider the federal structure of India, empowering states and local governments with the necessary information and funds to take effective action. Additionally, it should involve businesses, civil society, and communities in the decision-making process to leverage their knowledge and efforts in combating climate change.

## Key Takeaways

**Supreme Court Ruling on Climate Rights:** The Supreme Court of India recognized the right to be free from the adverse effects of climate change, linking it to the fundamental rights to life and equality in the Constitution.

**Focus of the Ruling:** The case involved the construction of electricity transmission lines through the habitat of the Great Indian Bustard, prioritizing renewable energy infrastructure to address climate change.

**Need for Comprehensive Legislation:** The ruling suggests the need for a broad climate change law in India to set a clear vision, create institutions, and establish effective governance processes for climate action.

**Tailored Legislation for India:** The legislation should be specific to India's context, focusing on both reducing carbon emissions and building resilience against climate impacts. It should promote sustainable cities, climate-resilient agriculture, and ecosystem protection.

**Enabling Law Approach:** The law should enable various sectors to make decisions supporting low-carbon growth and climate resilience, involving systematic procedures for transparency, public participation, and expert consultation.

**Consideration of Federal Structure:** The law should empower states and local governments, providing them with necessary information and funds, and should ensure coordinated national action on climate change.

**Involvement of Society:** Businesses, civil society, and communities should be involved in decision-making processes to leverage their knowledge and efforts in addressing climate change, ensuring a comprehensive approach.

## The Rot in India's higher education system- TH Opinion

Sociology

## **Easy Explanation**

The academic year 2022-23 faced significant delays in university admissions due to the introduction of the National Testing Agency (NTA)-run Common University Entrance Test (CUET) for both undergraduate and postgraduate degrees. The NTA had initially planned to introduce a CUET for PhD admissions as well, but this plan was abandoned in mid-September 2022. This left many universities, including Jawaharlal Nehru University (JNU), in a difficult position. JNU, which had a long-standing tradition of conducting its own entrance exams, faced a lot of criticism from within for handing over this core function to the NTA. Despite demands to return to their own entrance exam system, JNU continued with the NTA format.

PhD admissions for the academic year 2022-23 were completed only by mid-March 2023, eight months late. New UGC regulations for 2022 allowed universities to conduct their own entrance exams, but many Central universities, including JNU, continued to use the NTA's services due to directives from the Ministry of Education. This was despite the Central government's own denial that such



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a mandate existed. In April 2024, the JNU administration decided, without consulting its Academic Council, to use only the scores from the June 2024 UGC-NET exam for PhD admissions, further complicating the admission process.

The NTA has significantly influenced the academic calendar of universities over the last three years, with the UGC strongly promoting its use. Vice-Chancellors of many Central universities have supported this shift, despite internal concerns about the mode and format of the exams. This situation has raised questions about university autonomy and the effectiveness of the NTA. To restore student confidence and correct the issues in the higher education system, it is suggested that universities should be allowed to complete PhD admissions promptly according to their own procedures and UGC regulations.

#### Key Takeaways

**Delays in University Admissions:** The academic year 2022-23 saw major delays in admissions due to the introduction of the NTA-run CUET for undergraduate and postgraduate programs.

Abandoned Plans for PhD Admissions: The NTA had planned to introduce a CUET for PhD admissions, but this was dropped in September 2022, causing confusion and delays.

**Impact on JNU:** JNU, a prominent university, faced criticism for adopting the NTA format and saw PhD admissions delayed by eight months.

**New UGC Regulations:** The UGC regulations of 2022 allowed universities to conduct their own entrance exams, but many Central universities continued with the NTA due to directives from the Ministry of Education.

**NTA's Influence:** Over the past three years, the NTA has significantly influenced university academic calendars, with strong promotion from the UGC and support from university Vice-Chancellors.

**Concerns About University Autonomy:** The shift to NTA-run exams has raised concerns about the loss of university autonomy and the effectiveness of the NTA.

**Restoring Confidence:** To restore confidence in the higher education system, it is suggested that universities should be allowed to complete PhD admissions promptly according to their own procedures and UGC regulations.

#### Should education be brought back to the State list?- TH Text&Context

Sociology

## Easy Explanation

The NEET-UG exam, which is crucial for medical college admissions, has faced various controversies, including issues of grace marks, allegations of paper leaks, and other irregularities. Similarly, the UGC-NET exam was canceled after it was conducted, and the CSIR-NET and NEET-PG exams have been postponed, highlighting significant problems in the examination system.

#### Historical Background:

Education in India has undergone several changes regarding which level of government is responsible for it. During British rule, the Government of India Act of 1935 created a federal structure where education was a responsibility of the provinces (now States). After independence, education remained under the State list, meaning it was primarily the responsibility of State governments.

However, during the Emergency in the 1970s, the Congress party set up the Swaran Singh Committee to recommend constitutional amendments. One of its recommendations was to move education to the concurrent list, allowing both the Central and State governments to have a say. This change was implemented through the 42nd constitutional amendment in 1976 without much debate. Later, the Janata Party government tried to reverse this with the 44th amendment in 1978, but it only passed in the Lok Sabha and not in the Rajya Sabha, so education remained in the concurrent list.

#### International Practices:

Different countries handle education governance differently. In the U.S., State and local governments manage education standards and supervise schools and universities, while the federal government focuses on financial aid and key educational policies. In Canada, education is entirely managed by the provinces. Germany gives legislative powers for education to its States (Länder). In South Africa, there are national departments for school and higher education, but provinces have their own departments to implement these policies and address local issues.

#### The Way Forward:

Some argue that keeping education in the concurrent list ensures uniform policies, improved standards, and synergy between the Centre and States. However, given India's vast diversity, a uniform approach may not be practical or desirable. According to a report by the Ministry of Education in 2022, States bear 85% of the total revenue expenditure on education, while the Centre contributes only 15%. This significant financial burden on States suggests that they should have more control over education policies.

Despite arguments against moving education back to the State list due to concerns about corruption and professionalism, the centralisation of education has not resolved these issues. The recent problems with NEET and NTA show that centralisation does not eliminate these problems. Therefore, there should be a discussion about moving education back to the State list, allowing States to create policies tailored to their specific needs for syllabus, testing, and admissions in higher education, including professional courses like medicine and engineering. Central regulatory bodies like the National Medical Commission, University Grants Commission, and All India Council for Technical Education can still oversee higher education standards.

## Key Takeaways

**Controversies in NEET-UG Exam:** The NEET-UG exam faced issues such as grace marks, paper leaks, and other irregularities, leading to cancellations and postponements of related exams.

**Historical Background:** Education was initially a State responsibility but was moved to the concurrent list during the Emergency in the 1970s, allowing both the Centre and States to manage it.

**International Practices:** Different countries have varying approaches to education governance, with some giving more control to local or State governments.

**The Way Forward:** There is a need to consider moving education back to the State list to allow States to create policies tailored to their specific needs, while central bodies continue to regulate higher education standards.

## Sanctuary on fire- IE Ideas

Environment

## **Easy Explanation**

The recent fires in Uttarakhand's Binsar forest have highlighted the problems with a disconnected governance structure. Even though government officials do their jobs well, they often miss how their responsibilities interconnect with those of other departments. This lack of coordination can lead to small failures adding up to large, systemic problems.

Forest fires are a regular occurrence, but the one last month was particularly severe. Several factors contribute to these fires: high temperatures, dry leaves, careless disposal of cigarette butts, and possibly deliberate arson by frustrated villagers. These villagers face economic hardships due to inadequate schools, healthcare, utilities, and infrastructure. Sometimes they set fires to draw attention to their problems.

The recent fire in Binsar revealed four main issues:

- 1. Lack of Coordination: Different government agencies worked to fight the fire and provide medical help, but without a unified command, their efforts were less effective than they could have been.
- 2. Inadequate Resources: Firefighters lacked proper equipment and training. Most were volunteers without fire-resistant clothing or oxygen masks.

- 3. **Poor Infrastructure:** The only road into the forest was in such bad condition that fire engines and ambulances couldn't reach the fire.
- 4. **Need for Public-Private Cooperation:** Villagers, who understand the local terrain well, could be a valuable resource in fighting fires. However, their motivation to help has decreased since their incentive to cut one tree annually was taken away when Binsar was declared a sanctuary.

These issues highlight the need for an integrated action plan to prevent and manage future forest fires. The government should provide better resources and training for firefighting and maintain infrastructure to ensure quick response times. Additionally, involving local communities through incentive schemes can harness their expertise and increase their participation in firefighting efforts.

## Key Takeaways

**Disconnected Governance Structure:** Government officials often miss the interconnections between their responsibilities and those of other departments, leading to systemic problems.

**Forest Fires:** Regular forest fires in Binsar are becoming more severe due to high temperatures, dry leaves, careless disposal of cigarette butts, and possibly arson by frustrated villagers.

Lack of Coordination: Different government agencies' efforts to fight the fire were less effective due to the absence of a unified command.

Inadequate Resources: Firefighters lacked proper equipment and training, highlighting the need for better resources and training.

**Poor Infrastructure:** The poor condition of the only road into the forest prevented fire engines and ambulances from reaching the fire, emphasizing the need for better infrastructure maintenance.

**Public-Private Cooperation:** Involving local villagers through incentive schemes can harness their expertise and increase their participation in firefighting efforts, improving overall effectiveness in managing forest fires.

A passion to serve by PM Modi- IE Ideas

#### Polity

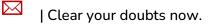
## **Easy Explanation**

M. Venkaiah Naidu, a well-known and respected Indian statesman, recently turned 75. This milestone is an opportunity to celebrate his dedication, adaptability, and commitment to public service. Venkaiah Naidu has had a long and varied political career, from his early days as a student leader in Andhra Pradesh to his tenure as the Vice President of India. He is known for his eloquence, wit, and ability to navigate politics with humility, earning respect across party lines.

Venkaiah Naidu started his political journey inspired by the "Nation First" vision of the Sangh Parivar, aligning with the RSS and ABVP before strengthening the Jana Sangh and BJP. He was active in the anti-Emergency movement in the 1970s and played a significant role in protecting democratic principles in Andhra Pradesh. His political career saw him elected as an MLA even during challenging times, demonstrating his resilience and dedication to his core ideology.

In the 1990s, Venkaiah Naidu's efforts were recognized by the BJP central leadership, leading to his role in national politics as the party's All India General Secretary and eventually the national president. He was instrumental in the BJP's rise to power, contributing to the party's efforts to bring India's first BJP prime minister.

As a minister, Venkaiah Naidu focused on rural development, associating closely with the Pradhan Mantri Gramin Sadak Yojana. Later, he handled crucial portfolios related to urban development, launching important initiatives like the Swachh Bharat Mission. His unique experience in both rural and urban development set him apart as a leader.



In 2017, Venkaiah Naidu was nominated as the Vice President of India. Despite the challenge of filling his shoes in the party, his nomination was seen as the best choice. As Vice President, he took various steps to enhance the dignity of the office and was an outstanding chairperson of the Rajya Sabha, promoting participation and effective debates.

Venkaiah Naidu is also a voracious reader and writer, known for bringing Telugu culture to Delhi. Even after his vice presidency, he continues to lead an active public life, staying engaged with national issues and offering his insights.

## Key Takeaways

**Early Political Journey:** Venkaiah Naidu began his political career as a student leader in Andhra Pradesh and chose to work with the Sangh Parivar, inspired by the "Nation First" vision.

Anti-Emergency Movement: He was active in the anti-Emergency movement in the 1970s and played a significant role in protecting democratic principles in Andhra Pradesh.

**National Politics:** In the 1990s, Venkaiah Naidu's efforts were recognized by the BJP central leadership, leading to his role as the party's All India General Secretary and eventually the national president.

**Ministerial Roles:** He focused on rural development and later handled crucial urban development portfolios, launching initiatives like the Swachh Bharat Mission.

**Vice Presidency:** As Vice President, Venkaiah Naidu took steps to enhance the dignity of the office and promoted participation and effective debates in the Rajya Sabha.

Cultural Contributions: Venkaiah Naidu is known for bringing Telugu culture to Delhi and continues to lead an active public life even after his vice presidency.

**Boosting a Special Bond- IE Ideas** 

International Relations

## Easy Explanation

Nepal and India have a special relationship marked by an open border, shared culture, economic ties, and strong people-to-people connections. India is Nepal's biggest trading partner, main source of tourists, sole supplier of petroleum, and largest foreign investor. It also provides a significant amount of remittances from Nepalese working in India. During disasters, India has always been the first to help Nepal.

Despite these strong ties, Nepal faces a significant trade deficit with India, amounting to about 18% of its GDP. The country also struggles with inadequate infrastructure and high transaction costs. To address these issues, both countries are focusing on reducing the trade deficit and enhancing cross-border financial connectivity to ease trade, tourism, and remittance flows.

In recent years, relations between Nepal and India have strengthened. Numerous high-level visits have taken place, leading to the implementation of many agreements. One major area of progress is in the power sector. A joint vision statement on power sector cooperation was signed in 2022, resulting in significant electricity exports from Nepal to India. This has helped Nepal reduce its trade deficit and increase foreign exchange earnings. A long-term power trade agreement was also signed, aiming for Nepal to export 10,000 megawatts of electricity to India over the next decade.

Both countries are also working on building cross-border transmission lines and increasing investment in hydroelectricity. This has led to new projects and even plans for Nepal to export electricity to Bangladesh under a tripartite agreement with India. These efforts support the development of a regional grid in the BIMSTEC and SAARC regions, promoting renewable energy.

In addition to energy cooperation, Nepal and India are enhancing digital financial connectivity. This will allow Indians to make payments in Nepal using their mobile phones, and soon, Nepalis will be able to do the same in India. This facility will make transactions easier for tourists, traders, students, and those seeking medical treatment in India. Simplifying the process for Nepalis to open bank accounts and obtain Aadhaar cards in India is also in progress.



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Both countries are taking measures to reduce the cost of doing business in Nepal. This includes constructing new petroleum pipelines, building integrated check posts to facilitate smooth movement of goods and people, upgrading border roads, and developing cross-border rail and road networks. These initiatives aim to improve transportation efficiency and reduce costs.

The relationship between Nepal and India is deep and multifaceted. While there are challenges and concerns to address, the progress and partnership momentum of recent years should continue. Established bilateral mechanisms should be activated to address cooperation areas and concerns, ensuring the relationship remains strong and robust.

## Key Takeaways

**Special Relationship:** Nepal and India share a unique bond due to their open border, cultural connections, economic ties, and strong people-to-people relationships. India is Nepal's largest trading partner, main source of tourists, and major foreign investor.

**Economic Interdependence:** Despite the strong ties, Nepal faces a trade deficit with India. Both countries are working to reduce this deficit and enhance financial connectivity to ease trade and tourism.

**Strengthened Relations:** Recent years have seen numerous high-level visits and the implementation of many agreements, particularly in the power sector, leading to significant electricity exports from Nepal to India.

**Digital Financial Connectivity:** Efforts are underway to allow mobile payments between the two countries, simplifying transactions for tourists, traders, and those seeking medical treatment.

**Infrastructure Development:** Both countries are investing in infrastructure projects such as new petroleum pipelines, integrated check posts, upgraded border roads, and cross-border rail networks to reduce business costs and improve transportation efficiency.

**Continued Partnership:** Despite challenges, the progress in the bilateral relationship should continue, with mechanisms in place to address cooperation areas and concerns, ensuring a robust and enduring partnership.

India's new criminal laws- IE Explained

#### Polity

## **Easy Explanation**

India is about to introduce three new criminal laws: the Bharatiya Nyaya Sanhita (BNS), the Bharatiya Nagrik Suraksha Sanhita (BNSS), and the Bharatiya Sakshya Adhiniyam (BSA). These laws will replace the older Indian Penal Code (IPC) of 1860, the Criminal Procedure Code (CrPC) of 1973, and the Indian Evidence Act of 1872. This change aims to modernize India's criminal laws, which were originally created during British colonial rule.

The new laws introduce some significant changes. For instance, the BNS includes new crimes like using deceitful means to have sexual relations, which can result in up to 10 years of imprisonment. It also recognizes murder based on race, caste, or community as a separate offense, addressing issues like lynching more specifically.

The BNSS, on the other hand, changes the detention period in police custody from a maximum of 15 days to up to 90 days, which is a major shift. This change has raised concerns about potential abuses and prolonged detentions without adequate safeguards.

One notable addition in the BNS is the inclusion of community service as an alternative punishment for minor offenses. This can help keep first-time and minor offenders out of jail, which is a positive step considering India's overcrowded prisons.

However, there are also some controversial aspects. The BNS still includes a form of the sedition law, despite claims of its removal, and it does not address issues related to male victims of sexual assault adequately, as it does not make rape laws gender-neutral.

#### Key Takeaways

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**Introduction of New Laws:** Three new criminal laws (BNS, BNSS, BSA) will replace the old IPC, CrPC, and Indian Evidence Act starting Monday. These changes aim to modernize and "decolonize" India's criminal laws.



#### Significant Changes:

- New Crimes: BNS includes new crimes like deceitful sexual relations and recognizes murder based on race, caste, or community as separate offenses.
- **Detention Periods:** BNSS extends police custody from 15 days to up to 90 days, raising concerns about potential misuse and prolonged detentions.

**Community Service:** Community service is introduced as an alternative punishment for minor offenses, which could reduce overcrowding in prisons and provide a more rehabilitative approach.

#### **Controversial Aspects:**

- Sedition Law: Despite claims, a form of the sedition law still exists in the BNS.
- Gender-Neutral Rape Laws: The new laws do not make rape laws gender-neutral, leaving male victims of sexual assault without adequate legal recourse.

**Implementation and Impact:** The success of these new laws will depend on their implementation. While some changes like community service are positive, others, such as extended detention periods, may require careful oversight to prevent abuses.

# 2nd July 2024

## Israel is facing a strategic defeat in Gaza- TH Editorial

#### International Relations

## **Easy Explanation**

The conflict between Israel and Hamas has escalated significantly since Hamas attacked Israel on October 7, 2023, killing at least 1,200 people. Israel's Prime Minister, Benjamin Netanyahu, vowed to "crush" Hamas, but achieving this has proven difficult. Gaza, which has been under Israeli blockade since 2007, faced intense airstrikes and a ground invasion following the attack.

The war has caused immense destruction in Gaza. Out of its 2.3 million residents, almost everyone has been displaced, over 37,000 people have been killed, and more than 86,000 have been wounded. Despite this, Israel has not been able to eliminate Hamas, as stated by the Israeli Defence Forces.

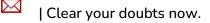
Israel's situation is complicated by several factors. First, Hezbollah, an Iran-backed militia in Lebanon, has been launching attacks on Israel's northern border, causing further displacement and requiring Israel to respond with military action without escalating into a full-scale war.

Second, Israel's strikes on Iranian targets have provoked a strong response from Iran, including missile and drone attacks. This has weakened Israel's deterrence and allowed Iran to advance its nuclear program.

Third, Israel's plans to normalize relations with Arab countries, particularly Saudi Arabia, have been disrupted. Saudi Arabia has now linked peace with Israel to the creation of a Palestinian state, which has stalled the normalization process.

Fourth, Israel faces international criticism for its conduct in the war, including calls for a ceasefire from the United Nations and legal challenges at the International Court of Justice and the International Criminal Court.

Lastly, the conflict has brought the Palestinian issue back into focus, reversing the trend of marginalizing it in international diplomacy. Some European countries have recognized the state of Palestine, adding pressure on Israel.



Israel's leadership, particularly Prime Minister Netanyahu, faces a dilemma. Continuing the war without clear objectives could worsen the strategic situation for Israel. There is a growing need for Israel to reassess its strategies and possibly seek new leadership to navigate these challenges.

## Key Takeaways

## **Escalation of Conflict:**

- The conflict began with a deadly attack by Hamas on October 7, 2023.
- Israel responded with heavy airstrikes and a ground invasion of Gaza.

#### Humanitarian Impact:

• Gaza's population of 2.3 million has faced severe displacement, with over 37,000 killed and more than 86,000 wounded.

#### Challenges in Eliminating Hamas:

- Despite intense military action, Israel has not been able to eliminate Hamas.
- Israeli Defence Forces acknowledge the difficulty in eradicating Hamas entirely.

#### Hezbollah Threat:

- Hezbollah's attacks from Lebanon have added to Israel's security concerns.
- Israel has responded with limited strikes but avoided full-scale war.

#### Iran's Response:

- Israel's attacks on Iranian targets led to significant retaliation from Iran.
- Iran has accelerated its nuclear program amidst the conflict.

## Disruption of Arab Normalization:

- Efforts to normalize relations with Saudi Arabia have stalled.
- Saudi Arabia now demands a resolution to the Palestinian issue for peace with Israel.

#### International Criticism:

- Israel faces global condemnation for its conduct in the war.
- Legal challenges have been raised at international courts.

#### **Revival of Palestinian Issue:**

- The conflict has renewed focus on the Palestinian cause.
- Some countries have recognized the state of Palestine, increasing diplomatic pressure on Israel.

#### Strategic Dilemma:

- Israel's prolonged conflict without clear objectives is problematic.
- There is a need for Israel to reassess its strategies and possibly seek new leadership.

# Sense of Uncertainty-TH Editorial

Polity

## **Easy Explanation**

The three new criminal laws in India, which include the Bharatiya Nyaya Sanhita (replacing the Indian Penal Code), the Bharatiya Nagarik Suraksha Sanhita (replacing the Code of Criminal Procedure), and the Bharatiya Sakshya Adhiniyam (replacing the Indian Evidence Act), have come into effect. However, there are concerns that the police and judicial systems are not adequately prepared for these changes. Some basic training and workshops have been conducted, and there have been upgrades to the Crime and Criminal Tracking Network and Systems to facilitate electronic filing of complaints. Still, the overall readiness of the police and other legal personnel is unclear.

The government decided to implement the laws on July 1, expecting that the police, courts, and lawyers will adapt over time. There are fears of potential confusion during this transition period, and it is uncertain how long this confusion will last. Many believe that more preparation time should have been provided before these laws were enforced.

Additionally, the names of the new laws, which are in Hindi, have been questioned for not having English equivalents. The laws were not thoroughly debated in the legislature or widely discussed with the public, which has raised concerns. Some new provisions, such as allowing multiple periods of police custody and including 'terrorism' as an offense in ordinary penal law, have sparked fears of increased police power. While some reforms like registering FIRs regardless of jurisdiction and videography of searches are positive, there is still uncertainty about the overall impact of these new laws.

## Key Takeaways

#### New Criminal Laws Implemented:

- The Bharatiya Nyaya Sanhita, Bharatiya Nagarik Suraksha Sanhita, and Bharatiya Sakshya Adhiniyam have replaced the Indian Penal Code, Code of Criminal Procedure, and Indian Evidence Act respectively.
- These laws came into force on July 1 despite concerns about readiness.

#### Concerns About Preparedness:

- Limited training and workshops for police personnel have been conducted.
- The level of preparedness among police and legal personnel is unclear.

## Implementation Amidst Concerns:

- The government chose to implement the laws and let the police, courts, and lawyers adapt over time.
- Potential confusion is expected during the initial period of transition.

#### Names and Debate:

- The new laws' Hindi names have been questioned for lacking English equivalents.
- The laws were not thoroughly debated in the legislature or widely discussed with the public.

## Fears of Increased Police Power:

- Provisions like multiple periods of police custody and including 'terrorism' as an offense have raised concerns.
- These changes could increase police power to the disadvantage of citizens.

## Positive Reforms:

- Some procedural reforms, like registering FIRs regardless of jurisdiction and videography of searches, are seen as positive.
- Despite this, there is uncertainty about the overall impact of these new laws.

# Glossing over unemployment, its high electoral price- TH Editorial

Economy

# Easy Explanation

India needs to create over 25 million jobs in the next five years to employ all the currently unemployed people. The government claims the economy grew by 8% last year, but this growth has not created enough jobs. The unemployment rate has decreased from 4.2% in 2021 to 3.1% in 2023, but this is not enough compared to the GDP growth rate. In the 2024 general election, the Bharatiya Janata Party (BJP) lost its majority in Parliament, leading to a coalition government with parties that have different economic ideologies.

The gap between the rich and the poor has widened over the last two decades. Currently, 1% of India's population owns 40% of the country's wealth, which is harmful to democracy and national stability. This inequality is known as "K-shaped" inequality, where a small group's income is rising while a larger group's income is decreasing.

Prime Minister Modi has claimed that GDP growth during his tenure has lifted 25 crore people out of poverty, but the recent election results have raised questions about this claim. The BJP's management of the economy needs improvement, but recent cabinet appointments do not indicate any significant changes.

The government claims that the GDP grew by 8.2% in 2023-24, following a 7% growth in 2022-23, but the method of calculation is unclear. The growth has been driven by a large budget deficit and government spending, not by investments in key sectors like industry, agriculture, and services. The growth rate in previous years has been inconsistent, and experts expect it to decline further.

The government has called for new economic reforms, but this is challenging as the BJP no longer has a majority in Parliament and its allies have different economic views. Most jobs in agriculture are in the unorganized sector, and in industry and services, most jobs are in small and medium-sized informal sectors. Only 27% of jobs are in the government and formal private sector. Therefore, India needs a new long-term economic strategy, but this is difficult without a cohesive majority in Parliament and knowledgeable economists advising the government.

## Key Takeaways

#### Job Creation Needs:

• India needs over 25 million jobs in the next five years to employ the currently unemployed.

## Economic Growth vs. Job Creation:

- Government claims 8% GDP growth last year, but not enough jobs have been created.
- Unemployment rate decreased but not proportional to GDP growth.

#### **Political Impact:**

• BJP lost its majority in the 2024 general election and formed a coalition government with parties having different economic views.

#### Wealth Inequality:

- The gap between rich and poor has widened, with 1% owning 40% of the wealth.
- Known as "K-shaped" inequality, where a small group's income is rising and a larger group's is decreasing.

## **Government Claims:**

- Prime Minister Modi claims GDP growth has lifted 25 crore people out of poverty.
- Election results raise questions about this claim.

## Economic Management:

- Recent cabinet appointments do not indicate significant changes in economic management.
- GDP growth driven by budget deficit and government spending, not key sector investments.
- Experts expect GDP growth to decline further.

## Need for New Strategy:

| Clear your doubts now.

- Most jobs in agriculture and industry are in the unorganized and informal sectors.
- Only 27% of jobs are in the government and formal private sector.
- India needs a new long-term economic strategy, but this is difficult without cohesive political support and expert advice.

## Waiting for a reformist- TH Editorial

International Relations

## Easy Explanation

In Iran's snap presidential elections, no candidate secured over 50% of the votes, leading to a run-off on July 5 between the two leading candidates: reformist Masoud Pezeshkian and conservative Saeed Jalili. Pezeshkian, who was the Health Minister under reformist President Mohammed Khatami, received 42.5% of the votes. Jalili, a former chief nuclear negotiator, got 38.8%. The election was necessary due to President Ebrahim Raisi's death in a helicopter crash in May. This election occurs during a challenging period for Iran, marked by economic difficulties, strict cultural enforcement, and external pressures related to its regional proxies and nuclear program.

Historically, even reformist leaders like Khatami and Rouhani, despite winning on promises of change, struggled to reform the tightly controlled system dominated by the Shia clergy. The economic woes, largely due to Western sanctions, have led to voter apathy. Voter turnout, which was above 80% in 2009, dropped to a record low of 39.9% this year. This decline is attributed to the conservative control over all state branches and the barring of several reformist candidates from the election. Even if reformists win, their influence is limited by unelected bodies like the Supreme Leader's office and the Islamic Revolutionary Guard Corps.

The current dominance of conservatives and the reluctance of the clergy to change are weakening Iran's limited democracy. Economic struggles and strict enforcement of the Islamic code add to public dissatisfaction. While Iran managed to hold a presidential election amidst these crises, its leaders should heed the growing dissent and declining voter interest, considering necessary political and social reforms.

## Key Takeaways

#### **Run-Off Election:**

- No candidate won over 50% in Iran's presidential election, leading to a run-off on July 5.
- Reformist Masoud Pezeshkian and conservative Saeed Jalili are the top two candidates.

#### **Election Context:**

- The election was prompted by President Ebrahim Raisi's death in May.
- Iran is experiencing economic hardships, strict cultural policing, and external pressures.

#### Historical Background:

- Past reformist leaders promised change but were constrained by the conservative-controlled system.
- Economic woes and Western sanctions have led to voter apathy and dissatisfaction.

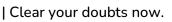
#### Voter Turnout:

- Voter turnout dropped to a record low of 39.9% from over 80% in 2009.
- Conservative control and barring of reformist candidates contributed to the low turnout.

#### Institutional Constraints:

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- Even if reformists win, their influence is limited by unelected institutions like the Supreme Leader's office and the Islamic Revolutionary Guard Corps.
- The dominance of conservatives is weakening Iran's limited democracy.



- Economic hardships and strict enforcement of the Islamic code are fueling public discontent.
- Iran's leaders should consider political and social reforms in response to growing dissent and declining voter interest.

## What is in the agenda for 16th Finance Commission? TH Text & Context

Economy

## Easy Explanation

The 16th Finance Commission (FC) has started its work under Article 280 of the Indian Constitution, focusing on how funds from the consolidated fund are distributed. Local bodies, like panchayats and municipalities, have become more important since the 73rd and 74th constitutional amendments. These amendments require the FC to recommend ways to boost State funds to support local bodies.

**Cities as Growth Engines:** Cities, while contributing about 66% of India's GDP and 90% of government revenues, face significant financial challenges. The World Bank estimates that \$840 billion is needed for urban infrastructure over the next decade. However, despite efforts by previous finance commissions, financial support to cities remains inadequate, affecting their productivity and quality of life. Urban Local Bodies (ULBs) receive only about 0.5% of India's GDP, far less than what cities in other developing countries get.

**Taxation Issues:** The introduction of the Goods and Services Tax (GST) has reduced the tax revenue of ULBs. State Finance Commissions have recommended only a small portion of State revenues for ULBs. There is a need to increase the percentage of Intergovernmental Transfers (IGTs) to cities. The 74th amendment aimed to financially strengthen ULBs, but progress has been limited over the past 30 years.

**Challenges with Parallel Agencies:** Parallel agencies and programs like the Member of Parliament Local Area Development Scheme have distorted the roles of local governments, affecting their financial and operational autonomy. Local governments need support from both Union and State governments, but the growth of these parallel agencies has hindered this.

**Importance of the Census:** Without the 2021 Census, reliance on 2011 data is insufficient for making informed financial decisions. India has many statutory towns and Census towns, along with villages that function as urban areas. The 16th FC needs to consider these changes and the significant migration to smaller cities.

**Guiding Principles:** The 16th FC should revisit and update the nine guiding principles of the 15th FC, focusing on areas like property tax collection, pollution mitigation, and primary healthcare. The McKinsey Global Institute warns that without increased investment in urban infrastructure, cities will face significant shortages in water supply and sewage treatment.

## Key Takeaways

Work of the 16th Finance Commission: The 16th Finance Commission (FC) has begun its work under Article 280 of the Indian Constitution, focusing on the devolution of funds to local bodies like panchayats and municipalities, as mandated by the 73rd and 74th amendments.

**Importance of Cities:** Cities contribute 66% of India's GDP and 90% of government revenues. However, their financial support is inadequate, affecting their productivity and quality of life. The World Bank estimates \$840 billion is needed for urban infrastructure in the next decade.

**Taxation and Financial Challenges:** The introduction of GST has reduced the tax revenue of Urban Local Bodies (ULBs). State Finance Commissions have recommended only a small portion of State revenues for ULBs. Increasing the percentage of Intergovernmental Transfers (IGTs) to cities is necessary.

**Impact of Parallel Agencies:** Parallel agencies and programs like the Member of Parliament Local Area Development Scheme have distorted the roles of local governments. This has affected their financial and operational autonomy, hindering their ability to

function effectively.

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| Clear your doubts now.

**Need for Updated Census Data:** Without the 2021 Census, reliance on 2011 data is insufficient for making informed financial decisions. The 16th FC needs to consider the changes in urban areas and the significant migration to smaller cities.

**Guiding Principles for Financial Support:** The 16th FC should update the guiding principles of the 15th FC, focusing on areas like property tax collection, pollution mitigation, and primary healthcare. Increased investment in urban infrastructure is crucial to avoid shortages in water supply and sewage treatment.

#### On the Upswing- IE Editorial

Economy

#### **Easy Explanation**

The Indian banking system is showing strong performance across various measures. According to the latest financial stability report by the Reserve Bank of India, banks have improved their asset quality, maintained high profitability, and kept their capital positions healthy. This positive trend is seen in both public and private sector banks, making them more attractive to investors, as reflected in the Nifty Bank index, which has increased by more than 16% over the past year, with public sector banks seeing significant gains.

The report highlights that the gross non-performing loans (NPLs) in the Indian banking system have dropped to a 12-year low of 2.8% as of March. This decline in bad loans is observed across agriculture, industry, services, and personal loans. However, certain segments like gems and jewellery, construction within the industry, and credit cards within personal loans still show high levels of bad loans. The overall reduction in bad loans is due to a combination of write-offs and a decrease in new bad loans. Banks have also improved their provision coverage ratios, increased their net interest income, and maintained a healthy capital position. Stress tests indicate that banks are well-prepared to handle macroeconomic shocks, with their capital positions remaining above the minimum requirements even in severe stress scenarios. It is projected that bad loans could fall further to 2.5% by March 2025 under normal business conditions.

However, there are areas that need closer monitoring. While the asset quality of retail loans has improved, with bad loans falling from 2.1% in June 2022 to 1.2% in March 2024, in the case of private sector banks, 40% of new bad loans came from retail loans. In consumer credit, personal loans below Rs 50,000 have high delinquency levels, and many borrowers have multiple loans. The central bank is aware of the risks in this segment and continuous supervision is required.

#### Key Takeaways

**Strong Performance:** The Indian banking system shows strong performance in terms of asset quality, profitability, and capital positions. This trend is seen in both public and private sector banks, enhancing their attractiveness to investors.

**Reduction in Bad Loans:** Gross non-performing loans (NPLs) have decreased to a 12-year low of 2.8% as of March. This decline is seen across agriculture, industry, services, and personal loans, although some segments like gems and jewellery, construction, and credit cards still show high levels of bad loans.

**Improved Financial Metrics:** Banks have improved their provision coverage ratios, increased their net interest income, and maintained healthy capital positions. Stress tests indicate that banks are well-prepared to handle macroeconomic shocks, with their capital positions remaining above the minimum requirements even in severe stress scenarios.

Future Projections: Bad loans are expected to decrease further to 2.5% by March 2025 under normal business conditions.

**Areas of Concern:** Despite overall improvements, there are areas that need closer monitoring. In private sector banks, 40% of new bad loans came from retail loans. In consumer credit, personal loans below Rs 50,000 have high delinquency levels, and many borrowers have multiple loans. Continuous supervision is required to manage risks in these segments.

#### Drawing borders in the Air- IE Ideas

International Relations

I Clear your doubts now.

## **Easy Explanation**

Recent satellite images show China's advanced J20 stealth fighters at the Shigatse air base in Tibet. This has raised concerns and comparisons with India's Rafale fighters. However, just counting the number of aircraft doesn't give the full picture of air power. Factors like weapon capability, tactics, experience, and combat readiness are crucial.

The J20, China's stealth fighter, is being used to demonstrate its ability to operate high-end platforms from high-altitude bases. This shows China's growing capability to project air power and respond to India's forward deployment of its own advanced fighters like the Sukhoi and Rafale. Politically, it signals that the border dispute with India is also about control of airspace.

Despite these developments, the lack of infrastructure and supporting ground equipment at the base suggests that the J20s might be temporarily deployed. The presence of different aircraft types highlights China's ability to conduct complex missions and project power over long distances.

China has strengthened its border infrastructure and army deployments, maintaining a military presence despite numerous diplomatic talks. Creating buffer zones in disputed areas might lead to demands for aerial buffer zones, limiting India's air operations. This could restrict India's ability to conduct intelligence, surveillance, and reconnaissance missions.

Currently, India's fleet of fourth-generation fighters, supplemented by Rafales, provides an advantage. However, this is not enough to meet future security needs. There's an urgent need to fill the gap in India's Multi-Role Fighter Aircraft (MRFA) to maintain air power.

India's fifth-generation fighter project, the Advanced Medium Combat Aircraft (AMCA), will take a decade to be operational. By then, China might have developed even more advanced fighters. Additionally, India's older aircraft will become obsolete, reducing its high-end platform inventory. Therefore, fulfilling the MRFA requirement is crucial for national security.

A partnership with France for more jointly-produced Rafales makes strategic sense. It would ensure steady induction, platform commonality, future upgrades, and reduce dependence on Russia and the US, while boosting indigenous defense production.

China's efforts to balance India's air power will impact India's deterrence and military capability. It's important for India not to lose its current advantage.

## Key Takeaways

**China's J20 Stealth Fighters:** Recent images show China's advanced J20 fighters in Tibet, raising concerns and comparisons with India's Rafale fighters.

**Beyond Numbers:** Counting aircraft isn't enough; weapon capability, tactics, experience, and combat readiness are crucial for true air power assessment.

**China's Air Power Projection:** China's deployment of J20s showcases its ability to use high-altitude bases and project air power, countering India's forward deployment of advanced fighters.

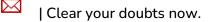
Political Signal: China's actions signal that the border dispute with India is also about control of airspace.

Infrastructure Gaps: The lack of supporting infrastructure at the base suggests temporary deployment of J20s.

India's Current Advantage: India's fleet, including Rafales, provides an advantage, but it's not enough for future needs.

**Urgent MRFA Requirement:** India needs to fill the gap in its Multi-Role Fighter Aircraft (MRFA) to maintain air power and national security.

**Partnership with France:** A partnership for more Rafales with France would ensure steady induction, future upgrades, and reduce dependence on other countries.



**Impact on Deterrence:** China's efforts to balance India's air power will impact India's deterrence and military capability. Maintaining India's current advantage is crucial.

#### Floods and Urbanisation in Delhi- IE Explained

Sociology

## **Easy Explanation**

Urban expansion is the main cause of chronic flooding in Delhi and the larger National Capital Region (NCR). Recently, heavy rains led to severe flooding in parts of Delhi, causing traffic jams, power cuts, property damage, and several deaths. Flooding during monsoons has become common in Delhi due to inadequate desilting of drains and other factors, but the core issue lies deeper.

**Rapid Urban Growth:** Delhi is one of the world's fastest-growing cities. From 1991 to 2011, its geographic size almost doubled, mainly expanding into the peripheries. Cities like Ghaziabad, Faridabad, Noida, and Gurugram in the NCR have also rapidly urbanized. By 2030, Delhi is expected to overtake Tokyo as the world's most populous city, with an estimated population of nearly 39 million.

**Topography and Drainage:** Urban expansion in Delhi has ignored natural topography, which determines drainage patterns. Historically, cities and villages in Delhi were built on higher ground to allow rainwater to drain out easily. As the city expanded, the natural drainage capacity was not considered, leading to significant runoff and inadequate drainage systems during heavy rains.

**Concrete Everywhere:** Urbanization has led to the channeling of water into concretized drains, which often serve as sewage dumps. Construction in low-lying areas worsens the situation. For example, many drains in South Delhi converge at Sarai Kale Khan, causing intense flooding. The floodplain of the Yamuna River has been used for various constructions, leaving little room for rainwater to seep into the soil.

Lack of Planning: There is no comprehensive water master plan for Delhi. Land is often treated as real estate without considering water as a crucial planning resource. This neglect results in frequent flooding, such as in the Pragati Maidan Tunnel, which floods every monsoon.

**Destroyed Water Bodies:** Officially, Delhi has around 1,000 water bodies, but only about 400 exist on the ground. The missing water bodies have been converted into valuable real estate, further aggravating the flooding problem.

**Solutions:** Urban planners need to develop a water master plan. This plan should prioritize water flow management, stop construction in low-lying areas, de-concretize lawns and pavements, and unblock drains. Proper filtration pits should be set up to carry water to aquifers in low-lying areas, relying on gravitational flow instead of pumping out water.

## Key Takeaways

**Urban Expansion and Flooding:** Rapid urban growth in Delhi and the NCR has led to frequent flooding during monsoons due to inadequate drainage and neglect of natural topography.

**Ignored Topography:** Historically, Delhi's cities and villages were built on higher ground for better drainage. Modern expansion has ignored this, leading to significant runoff and inadequate drainage systems.

**Concrete Jungle:** Urbanization has channeled water into concretized drains, leading to severe flooding in low-lying areas and floodplains. Constructions on the Yamuna floodplain have worsened the situation.

Lack of Water Master Plan: Delhi lacks a comprehensive water master plan, leading to frequent flooding. Land is treated as real estate without considering water management.

**Destroyed Water Bodies:** Many of Delhi's water bodies have been converted into real estate, reducing the city's capacity to manage rainwater and increasing flooding.

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**Need for Planning and Solutions:** A water master plan is needed, prioritizing water flow management, stopping construction in low-lying areas, de-concretizing spaces, and setting up proper filtration pits to manage water flow using gravitational methods.

#### How the world's first brain implant to control epileptic seizures works- IE Explained

Science tech

## **Easy Explanation**

A teenager from the UK, Oran Knowlson, is the first person in the world to get a brain implant to control his epileptic seizures. The device, which sends electrical signals deep into his brain, has reduced his daytime seizures by 80%.

What is epilepsy? Epilepsy is a condition where a person has repeated seizures, which can cause jerking of limbs, confusion, staring spells, or stiff muscles. It happens because of abnormal electrical activity in the brain. The cause of epilepsy is often unknown, but it can be triggered by head injuries, brain tumors, certain infections, or genetics. In India, between 3 and 11.9 out of every 1,000 people have epilepsy. Even with many anti-seizure medicines available, 30% of patients do not respond to treatment.

How does the device work? The device, a neurostimulator, constantly sends electrical impulses to the brain to block seizure-causing signals. It is a small device, 3.5 cm square and 0.6 cm thick, implanted in Knowlson's skull. Two electrodes were inserted into his brain, reaching the thalamus, and connected to the device. Once Knowlson recovered from surgery, the device was turned on. It can be recharged using a wireless headset.

What is DBS? The device uses Deep Brain Stimulation (DBS), which is also used for conditions like Parkinson's. While DBS has been used for childhood epilepsy before, those devices were placed in the chest with wires running to the brain. This new method places the device directly in the brain. Dr. Manjari Tripathi from AIIMS, New Delhi, mentions that DBS is not a miracle cure and is not the first treatment choice. Initially, doctors use anti-seizure medicines and a ketogenic diet. If these don't work, brain surgery to remove the part causing seizures might be done. Another surgery, corpus callosotomy, involves removing part of the brain that connects the two halves, preventing abnormal signals from spreading.

How expensive is DBS? Neurostimulators cost about Rs 12 lakh, with additional surgical costs in private hospitals bringing the total to about Rs 17 lakh. In comparison, brain surgery costs between Rs 20,000 and Rs 30,000. Dr. Tripathi suggests DBS for those whose epilepsy starts in multiple brain areas, making surgery less viable, or when medicines and diet fail. AIIMS has only performed DBS therapy on seven patients out of thousands, averaging one patient per year.

#### Key Takeaways

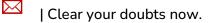
**Introduction of New Treatment:** A UK teenager, Oran Knowlson, is the first to receive a brain implant to control epilepsy, significantly reducing his daytime seizures by 80%.

**Understanding Epilepsy:** Epilepsy causes recurring seizures due to abnormal brain activity. It can result from various factors like head trauma, brain tumors, infections, or genetics. About 30% of patients do not respond to available treatments.

**Mechanism of the Device:** The neurostimulator, implanted in the skull, sends electrical impulses to block seizure-causing signals. Electrodes are connected to the brain's thalamus and the device can be recharged wirelessly.

**Deep Brain Stimulation (DBS):** DBS, used for other neurological conditions like Parkinson's, is not new for epilepsy but previously involved chest implants. The new method implants the device directly in the brain. It is not the first treatment option; medications and diet are preferred initially.

**Cost and Viability of DBS:** DBS devices cost around Rs 12 lakh, with additional surgical costs increasing the total to about Rs 17 lakh. Brain surgery is comparatively cheaper. DBS is suggested for complex epilepsy cases where surgery is less viable or when other treatments fail. AIIMS has performed DBS therapy on very few patients due to its specific application.



# 3rd July 2024

## Who was Abdul Hamid, hero of Asal Uttar battle?- IE Explained

Sociology

## **Easy Explanation**

RSS leader Mohan Bhagwat released a book titled "Mere Papa Paramvir," which tells the story of Abdul Hamid, one of India's greatest war heroes. The book, written by journalist-filmmaker S Ramachandran, was launched in Hamid's ancestral village, Dhampur, Uttar Pradesh.

Who was Abdul Hamid? Abdul Hamid was born on July 1, 1933. He served as Company Quarter Master Havildar (CQMH) in the Indian Army and died heroically fighting Pakistan's Patton tanks during the Battle of Asal Uttar in the 1965 Indo-Pak War. For his bravery, he was posthumously awarded the Param Vir Chakra, India's highest gallantry award.

**The Battle of Asal Uttar** The Battle of Asal Uttar took place in Punjab's Tarn Taran district, near the India-Pakistan border, close to the town of Khem Karan. In September 1965, the Pakistan Army launched an offensive, capturing parts of Khem Karan and cutting off Punjab, including Amritsar, from the rest of India. India's 4th Mountain Division, caught by surprise, initially fell back. However, Lt Gen Harbaksh Singh advised a strong defense and moved the 2nd Armoured Brigade to repel the Pakistani attack. The fierce tank battle lasted from September 8 to September 10, resulting in the decimation of Pakistan's offensive. The Pakistan Army lost 97 Patton tanks and an entire armoured regiment, which surrendered to the Indian Army. Khem Karan remained under Pakistani control until the ceasefire on September 23, after which it was returned to India in exchange for India-occupied areas in Pakistan.

Hamid's Heroism During the battle, Hamid was serving with the 4th Grenadiers Battalion of the Indian Army, leading a detachment of jeep-mounted recoilless guns hunting enemy tanks. On September 10, Hamid spotted four Pakistani Patton tanks and destroyed three from close range, but was killed by heavy fire from a nearby Pakistani tank. His bravery inspired his comrades to fight fiercely and repel the enemy's tank assault. The site of his death is now part of a war memorial, with a captured Pakistani Patton tank standing at the entrance as a tribute to the Indian soldiers who fought in the battle.

## Key Takeaways

- 1. **Book Release**: RSS leader Mohan Bhagwat released a book titled "Mere Papa Paramvir," authored by S Ramachandran, detailing the heroics of Abdul Hamid.
- 2. Abdul Hamid: Born on July 1, 1933, Hamid was a CQMH in the Indian Army who died fighting Pakistani Patton tanks during the 1965 Indo-Pak War. He was posthumously awarded the Param Vir Chakra.
- 3. **Battle of Asal Uttar**: The battle occurred in Punjab's Tarn Taran district near Khem Karan. The Pakistan Army launched an offensive, capturing parts of Khem Karan. Lt Gen Harbaksh Singh advised a stout defense, leading to a fierce tank battle from September 8 to September 10, resulting in significant Pakistani losses.
- 4. **Hamid's Actions**: Hamid, serving with the 4th Grenadiers Battalion, led a detachment of recoilless guns. On September 10, he destroyed three Pakistani Patton tanks but was killed by enemy fire. His bravery inspired his comrades and played a crucial role in repelling the Pakistani assault.
- 5. **War Memorial**: The site of Hamid's death is now a war memorial with a captured Pakistani Patton tank at the entrance, honoring the Indian soldiers who fought in the battle.

## Iran's presidential election- IE Explained

Polity

## **Easy Explanation**

On June 28, Iran held the first round of voting for a new President after Ebrahim Raisi's death in a helicopter crash in May. Since neither Masoud Pezeshkian (reformist) nor Saeed Jalili (hardliner) won more than 50% of the votes, a run-off election will be held on

July 5.



**Role of the President in Iran:** The President in Iran's hybrid theocratic-democratic system plays a significant role but must align with the Supreme Leader's policies. The President manages day-to-day affairs and has some executive power but must negotiate major policies with the Supreme Leader.

#### Candidates' Views:

- Masoud Pezeshkian: A reformist, he opposes oppressive restrictions on women, seeks better relations with the West, and wants to end Iran's isolation due to Western sanctions. He supports the Iran nuclear deal (JCPoA) and more liberal policies.
- **Saeed Jalili:** A hardliner, he is against making deals with the West, supports the "resistance economy," and favors closer ties with China and Russia. He is close to the Supreme Leader and serves on the Expediency Council.

**Election Process:** Candidates must be vetted by the establishment. The Supreme Leader has criticized Pezeshkian's stance on improving U.S. relations, but Pezeshkian's reformist views resonate with some voters.

**President's Power:** The President has executive power but must align with the Supreme Leader's broader policies. Past Presidents have varied in their approaches, from regional assertiveness to advocating for dialogue with the West.

**Influence on Foreign Policy and Relations with India:** The election's outcome may not significantly alter Iran's immediate foreign policy, especially in the Israel-Hamas conflict. Tehran's relationship with New Delhi remains stable, rooted in historical ties and unaffected by Iran's internal politics.

**Voter Turnout:** The low turnout of around 40%, the lowest since the revolution, suggests public despondency and skepticism about the impact of electing a liberal President on policy changes. However, more voters might participate in the run-off election.

#### Key Takeaways

- 1. Election Overview: Iran's presidential run-off on July 5 between Masoud Pezeshkian and Saeed Jalili follows a first round where neither candidate won more than 50% of votes.
- 2. **President's Role:** The President has significant executive power but must align major policies with the Supreme Leader.
- 3. Candidates' Stances:
  - Pezeshkian: Reformist, seeks better West relations, opposes restrictive policies on women.
  - Jalili: Hardliner, opposes West deals, supports economic independence and ties with China and Russia.
- 4. **Election Process:** Candidates are vetted by the establishment; the Supreme Leader indirectly criticized Pezeshkian's views on U.S. relations.
- 5. Foreign Policy Impact: Immediate foreign policy changes are unlikely, with Tehran-New Delhi relations remaining stable.
- 6. Voter Turnout: Low turnout indicates public skepticism about the impact of electing a liberal President on major policy changes, but more voters might participate in the run-off.

#### Abhaya mudra, Buddhist & Hindu cultural symbol conveying freedom from fear- IE Explained

Culture

## **Easy Explanation**

RSS leader Mohan Bhagwat recently highlighted the significance of the "abhaya mudra," a gesture symbolizing reassurance and fearlessness, while launching the book 'Mere Papa Paramvir' about war hero Abdul Hamid. Bhagwat emphasized that fearlessness is a core aspect of various religions, including Hinduism, Buddhism, Islam, Christianity, and Jainism.

**Mudras in Buddhism:** Mudras are hand and arm gestures in Buddhist rituals and images of deities. The term means seal, mark, or sign. Mudras convey different meanings in depictions of the Buddha. Early depictions from around 500 years after the Buddha's time did not include his physical form but used symbols like vacant thrones or footprints. Physical depictions began around the first millennium in Gandhara and Gupta art.

#### **Common Buddhist Mudras:**

Abhaya Mudra: Gesture of fearlessness.

| Clear your doubts now.

- Bhumisparsha Mudra: Earth-touching gesture.
- Dharmachakra Mudra: Gesture of the wheel of dharma.
- Dhyana Mudra: Gesture of meditation.

With the evolution of Mahayana and Vajrayana Buddhism, many more mudras were introduced, especially in tantric practices.

**Abhaya Mudra:** Formed with the right hand's palm facing outward at shoulder height and fingers pointing up, sometimes with the thumb touching the index, second, or third finger. It symbolizes fearlessness, security, serenity, and compassion derived from enlightenment. According to legend, the Buddha used this gesture to calm a mad elephant sent to harm him.

**In Hinduism:** The abhaya mudra is also seen in Hindu depictions, most notably of deities like Shiva, Vishnu, and Ganesha. The Buddha is considered the ninth avatar of Vishnu in Hindu tradition. This integration reflects the blending of cultural and religious influences over centuries.

#### **Key Takeaways**

- 1. Abhaya Mudra: A gesture symbolizing fearlessness and reassurance, significant in various religions.
- 2. Mudras in Buddhism: Hand gestures in Buddhist rituals and images, each conveying different meanings.
- 3. Early Depictions: Buddha was initially symbolized through objects like vacant thrones; physical depictions began around the first millennium.
- 4. **Common Mudras:** Include abhaya (fearlessness), bhumisparsha (earth-touching), dharmachakra (wheel of dharma), and dhyana (meditation).
- 5. Legend of Abhaya Mudra: Buddha used it to calm a mad elephant, symbolizing protection and granting refuge.
- 6. Abhaya Mudra in Hinduism: Seen in depictions of deities like Shiva, Vishnu, and Ganesha, reflecting the blending of cultural influences.

A HOME FOR THE CHEETAH- IE Editorial

#### Environment

## Easy Explanation

Gandhi Sagar Wildlife Sanctuary in Madhya Pradesh is set to become the second home for cheetahs in India. The current habitat at Kuno National Park has reached its carrying capacity, leading to a 25% loss in the cheetahs' main prey, the chital. Kuno's leopards are competing with cheetahs for food. In the open savannah, cheetahs can outrun leopards, but in Kuno, leopards have an advantage. To restore Kuno's ecological balance, surplus cheetahs will be moved to Gandhi Sagar, but the two predators will still compete for prey in both areas.

Initially, cheetahs at Gandhi Sagar will be in a 64 sq km enclosure. The first challenge is to remove leopards from this area. The long-term plan is to develop a larger part of the 3,600 sq km sanctuary for cheetahs, but the prey base is still low. Other predators in the sanctuary include sloth bears, striped hyenas, gray wolves, golden jackals, jungle cats, Indian foxes, and marsh crocodiles.

Monitoring the health of cheetahs, which went extinct in India over 70 years ago, will be challenging. The Supreme Court criticized the government last year after multiple cheetah deaths in Kuno. Gandhi Sagar's authorities should learn from these past experiences and setbacks.

A proposal to introduce a larger cat in Kuno to reduce leopard activities is being considered. While this could reduce pressure on Kuno, it might also push leopards out, leading to human-animal conflicts. Project Cheetah has highlighted long-standing conservation issues in India, and it's up to policymakers to address these challenges.

## Key Takeaways

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- 1. New Habitat: Gandhi Sagar Wildlife Sanctuary will be the second home for cheetahs due to overcapacity at Kuno National Park.
- 2. Competition: Leopards in Kuno compete with cheetahs for prey, causing a 25% loss in the chital population.

- 3. **Challenges at Gandhi Sagar:** Initially, cheetahs will be housed in a 64 sq km enclosure, and leopards must be removed. The long-term plan involves developing a larger habitat despite low prey density.
- 4. **Other Predators:** Gandhi Sagar also has sloth bears, striped hyenas, gray wolves, golden jackals, jungle cats, Indian foxes, and marsh crocodiles.
- 5. Health Monitoring: Monitoring the health of cheetahs, extinct in India for over 70 years, is challenging.
- 6. Supreme Court Criticism: The government faced criticism after multiple cheetah deaths in Kuno.
- 7. **Proposal for Larger Cat:** Introducing a larger cat in Kuno to reduce leopard activities is being considered, but it may cause human-animal conflicts.
- 8. **Conservation Issues:** Project Cheetah has highlighted conservation problems in India, requiring policymakers to address these challenges.

## The problem with Modinomics- IE Ideas

#### Economy

## **Easy Explanation**

Private investment in India has been weak despite various government measures to encourage it. The Modi government's efforts, known as Modinomics, focus on increasing returns for investors but have not adequately addressed the risks that investors face.

Over the past decade, the government has improved infrastructure, cut corporate tax rates, provided subsidies, imposed protective tariffs, and cleaned up bank balance sheets. However, these measures have not led to a significant increase in private investment, especially in manufacturing.

Investors are cautious because of three main risks:

- 1. National Champions Risk: The government's policy changes to promote certain national champions deter other investors. This risk has affected sectors like retail, airports, cement, ports, telecoms, and media.
- 2. **Coercive State Action:** Aggressive tax collection and selective raids by authorities increase investor risk. High-profile cases like Cairn/Vedanta and Vodafone, which challenged retrospective taxes, have further shaken investor confidence.
- 3. **Supply Chain Risk:** For India to be internationally competitive, firms need access to global supplies. However, frequent tariff increases and product bans create uncertainty about supply chain stability.

To reassure investors, the government needs to focus on reducing these risks through consistent actions and restraint. This is challenging because building a good risk environment takes time and effort. The Chinese model, which combined subsidies and infrastructure with minimizing investor risk, worked for China but may not be replicable in India's democratic and procedural context.

## Key Takeaways

- 1. Weak Private Investment: Despite measures to encourage investment, private investment in India remains weak, especially in manufacturing.
- 2. Focus on Returns, Neglect on Risks: Modinomics focuses on increasing returns for investors but has not adequately addressed investment risks.
- 3. National Champions Risk: Policy changes to promote certain national champions deter other investors in sectors like retail, airports, cement, ports, telecoms, and media.
- 4. **Coercive State Action:** Aggressive tax collection and selective raids increase investor risk, with high-profile cases like Cairn/Vedanta and Vodafone shaking confidence.
- 5. **Supply Chain Risk:** Frequent tariff increases and product bans create uncertainty about supply chain stability, hindering India's international competitiveness.
- 6. **Need for Risk Reduction:** Reducing investment risks requires consistent actions and restraint, challenging to achieve in India's democratic and procedural context.
- 7. China Comparison: The Chinese model combined subsidies and infrastructure with minimizing investor risk, but this may not be replicable in India.

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8. **Opportunity Amid Challenges:** China's current economic issues might make investors more willing to take on Indian risks, but consistent and risk-reducing policies are crucial for sustained investment growth.

## Mixed Signals- TH Editorials

Economy

## **Easy Explanation**

In May, the output data from eight core infrastructure sectors showed a slowdown in industrial activity due to a severe heatwave. The heatwave increased the demand for power to run cooling systems, resulting in significant growth in coal and electricity generation. However, other sectors like crude oil, fertilizers, and cement saw a decline in production, while growth slowed in natural gas, refinery products, and steel. The heatwave particularly affected northern India, causing breaks in construction and increasing power demand, which weakened the demand for cement and steel. Fertilizer production's continued decline is worrisome as it indicates ongoing issues in the agricultural sector, although there was a slight improvement from April.

The core sector data is reported with a delay, but the HSBC India Manufacturing PMI for June suggests a rebound in factory activity after the heatwave. The PMI reading increased to 58.3 in June from 57.5 in May, showing strong demand and increased output. However, this also led to higher costs for labor, materials, and transportation, causing manufacturers to raise prices significantly. Despite the positive PMI, the increase in costs and a dip in confidence about future output suggest ongoing economic challenges. Policymakers have an opportunity to address these issues in the upcoming Union Budget to support industrial growth.

## Key Takeaways

- 1. Heatwave Impact: Industrial activity slowed in May due to a heatwave, increasing power usage for cooling.
- 2. Sector Performance: Coal and electricity generation saw double-digit growth, but crude oil, fertilizers, and cement production declined.
- 3. **Regional Effects:** Northern India was particularly affected, with construction activity and power demand impacted.
- 4. Agriculture Concerns: Continued decline in fertilizer production indicates issues in the agricultural sector, despite a slight improvement from April.
- 5. Delayed Data: Core sector data is reported with a lag, affecting timely analysis.
- 6. **Manufacturing Rebound:** The HSBC India Manufacturing PMI for June shows a rebound in factory activity, driven by strong demand.
- 7. **Rising Costs:** Increased demand and output led to higher labor, material, and transportation costs, causing manufacturers to raise prices.
- 8. **Economic Challenges:** Despite positive PMI, higher costs and reduced confidence in future output highlight ongoing economic challenges.
- 9. **Policy Opportunity:** The upcoming Union Budget presents an opportunity for policymakers to support industrial growth and address economic issues.

#### Digital jurisprudence in India, in an Al era- TH Editorial

Science Tech

## **Easy Explanation**

Generative AI (GAI) is a powerful technology that can change society, but current laws and court rulings might not be enough to manage it effectively. Here are some key issues:

1. Liability and Safe Harbour: There is a debate on whether GAI tools should be considered as intermediaries like search engines or mere conduits for user prompts. This affects how they are held liable for the content they generate. The Delhi High Court has said that only "passive" intermediaries get safe harbour protection, but it's hard to classify GAI tools in this way. Legal conflicts have already arisen, such as a lawsuit against OpenAI for defamation by ChatGPT.



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- 2. **Copyright Issues**: The Indian Copyright Act doesn't clearly address AI-generated works. Questions arise about whether AI-generated works should be protected by copyright, and if so, who gets the credit: the user, the program, or the programmer. The current law is not well-equipped to handle this.
- 3. **Privacy Concerns**: The Digital Personal Data Protection Act introduces rights like the "right to erasure" and "right to be forgotten." However, once an AI model learns from data, it can't easily "unlearn" it, posing challenges for personal data control.

#### Steps to Address These Issues:

- 1. Learning by Doing: Grant temporary immunity to GAI platforms to responsibly develop and identify legal issues through a sandbox approach.
- 2. Data Rights and Responsibilities: Overhaul data acquisition processes for GAI training, ensuring proper licensing and compensation for intellectual property.
- 3. Licensing Challenges: Create centralized platforms for licensing data, similar to stock photo websites, to simplify the process for developers and maintain data integrity.

The legal framework for GAI needs comprehensive re-evaluation and a holistic approach to maximize its benefits while protecting individual rights.

## Key Takeaways

- 1. Current Legal Frameworks Insufficient: Existing laws may not effectively govern the rapidly evolving technology of Generative AI (GAI).
- 2. Liability Challenges: The classification of GAI tools as intermediaries, conduits, or active creators affects their liability for generated content, complicating legal responsibility.
- 3. **Copyright Uncertainty**: The Indian Copyright Act does not clearly address AI-generated works, raising questions about authorship and ownership.
- 4. **Privacy Issues**: The Digital Personal Data Protection Act introduces rights that are hard to enforce with AI models that cannot "unlearn" data.
- 5. Steps Forward:
  - Temporary immunity for GAI platforms to develop responsibly.
  - Overhaul data acquisition processes for legal compliance.
  - Create centralized licensing platforms for data.
- 6. **Need for Comprehensive Legal Review**: A re-evaluation of digital jurisprudence is necessary to balance technological benefits and individual rights.

## On Improving rural mobile connectivity- TH Text&Context

#### Sociology

## Easy Explanation

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Mobile devices, like smartphones, are a big part of our daily lives. We use them to talk to family and friends, pay for things using UPI, and connect to the Internet. These devices connect to the Internet through mobile networks, like 4G or 5G. These networks are made up of equipment that helps move data between our devices and other networks.

Mobile networks have two main parts. The first part is the Access Network (AN), which includes base stations (towers) that provide wireless connectivity in certain areas. The second part is the Core Network (CN), which connects these base stations to the Internet and other networks. Even if two people are close to each other, their data must go through the CN to connect.

In cities, mobile networks are everywhere, but in rural areas, the connectivity is not as good. This is because people in rural areas often have lower incomes and live in places that are harder to reach with network equipment. This creates a gap between how well-connected urban and rural areas are.

To solve this, researchers at IIT Bombay developed a new standard, called IEEE 2061-2024, to make it easier and cheaper to provide good Internet connectivity in rural areas. This standard uses a mix of different types of base stations, including larger ones that cover bigger areas and smaller ones for faster connections within villages. It also includes a new way to connect rural areas to the Internet without always needing the central core network, which can help avoid issues like call drops.

This new standard can help bring better Internet to rural areas and could be a big step forward for mobile networks in the future.

## Key Takeaways

**Importance of Mobile Connectivity:** Mobile devices rely on cellular networks for communication, financial transactions, and Internet access. These networks have two main parts: the Access Network (AN) with base stations and the Core Network (CN) that connects to other networks.

**Urban-Rural Digital Divide:** There is a significant difference in mobile connectivity between urban and rural areas. Urban areas have higher tele-density, meaning more mobile connections, while rural areas have fewer due to lower income, population density, and remoteness.

**IEEE 2061-2024:** Standard Developed by IIT Bombay, this new standard aims to provide affordable broadband access in rural areas. It integrates various types of base stations, including macro base stations for large coverage areas and Wi-Fi for high-speed connectivity within villages.

**Innovative Network Architecture:** The IEEE-2061 network includes a heterogenous AN and an integrated AN control functionality, allowing seamless movement between different connectivity types without service disruption. It also proposes using a multi-hop wireless middle-mile network to extend connectivity to remote areas where optical fibers are not feasible.

**Direct Internet Access:** Unlike traditional 4G/5G networks, the IEEE-2061 network can provide direct Internet access from the AN, bypassing the CN. This is particularly beneficial for stationary rural users and can improve communication efficiency between nearby users.

**Potential Impact:** If adopted, the IEEE 2061-2024 standard could enhance affordable connectivity in rural areas and introduce scalable solutions for future mobile networks. This could help bridge the digital divide and improve Internet access for rural populations.

# 4th July 2024

# Elections in the UK- IE Explained

#### International relations

#### Easy explanation

In the upcoming UK elections, Keir Starmer's Labour Party is expected to achieve a landslide victory, ending the 14-year Conservative rule under Prime Minister Rishi Sunak. The Conservative Party has faced significant challenges post-Brexit, including economic instability, declining living standards, and multiple leadership changes, with five prime ministers since 2016. Voters are particularly concerned about falling real wages, high food prices, and deteriorating public services like the NHS. Labour's manifesto promises economic growth through a National Wealth Fund, NHS improvements, and clean energy investments, while opposing Sunak's immigration policies. Critics argue that Starmer has moved Labour to the political center, alienating traditional left-wing supporters. Despite these criticisms, Labour's focus on addressing economic and social issues positions them as the preferred choice for many voters seeking change.

#### Key Takeaways

1. Economic and Social Issues

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1. **Falling Living Standards**: The UK has experienced economic instability since Brexit in 2016. Voters are most concerned about declining living standards, with inflation peaking at 11.1% in October 2022, real wages falling, and food prices 20% higher than in July 2021.

2. **Public Services Decline**: Under Conservative rule, public spending cuts have severely impacted the NHS, pensions, and public housing. Household disposable incomes are expected to decline by 0.9% between 2019 and 2024.

## 2.Political Turmoil

- 1. Frequent Leadership Changes: Since Brexit, five Conservative Prime Ministers have held office. Notable leaders include:
  - **Liz Truss**: Resigned after 49 days due to a disastrous mini-budget.
  - Boris Johnson: Resigned amidst multiple scandals, including 'Partygate'.
  - Theresa May: Failed to finalize a Brexit plan, leading to her resignation.
  - Rishi Sunak: Current PM struggling with internal party issues and public dissatisfaction.

#### 3.Labour's Promises and Challenges

- 1. **Economic Growth**: Labour plans to establish a National Wealth Fund to support economic growth and clean energy investments.
- 2. NHS Reforms: Labour aims to improve NHS services with additional appointments and staff.
- 3. **Immigration and Energy Policies**: Labour opposes Sunak's immigration policies and promises to invest in clean energy projects.

#### 4.Criticism of Labour

1. **Centrist Shift**: Critics argue that Starmer has moved Labour to the political center, abandoning its leftist roots to gain broader appeal. This has led to internal divisions and comparisons to former PM Tony Blair's pragmatic approach.

Overall, the upcoming elections are set to bring significant changes to the UK's political landscape, with Labour poised to address the economic and social issues that have plagued the country in recent years.

What Labour's win could mean for India-UK FTA- IE Explained

## International relations Easy Explanation

A Labour Party victory in the UK elections could significantly impact the ongoing India-UK free trade agreement (FTA) negotiations. Political stability under Labour might provide the necessary environment to finalize the deal, which has been stalled due to Brexitinduced uncertainty. Unlike Jeremy Corbyn's leadership, Keir Starmer's Labour is not perceived as anti-India, potentially easing tensions. However, immigration and climate policies remain contentious issues. Labour is likely to negotiate firmly on India's demand for temporary visas for its service sector and tougher climate regulations, including the carbon tax, could complicate negotiations further.

## Key Takeaways

- 1. **Political Stability**: A Labour victory may provide the political stability needed to finalize the India-UK FTA, which has been in negotiation for over two years.
- 2. **Shift in Labour's Stance**: Under Keir Starmer, Labour has moved away from the anti-India sentiments of Jeremy Corbyn's era, recognizing the political influence of the UK's Indian-origin population.
- 3. **Immigration Concerns**: Immigration remains a contentious issue, with Labour likely to negotiate hard on India's demand for temporary visas for its service sector workforce.
- 4. **Climate Policy**: Labour's stricter stance on climate issues could lead to tougher negotiations on the carbon tax, which India opposes as it could negate tariff concessions in the FTA.
- 5. **Potential Benefits**: If resolved, the FTA could result in mutual tariff relaxation on goods like cars, clothes, alcoholic beverages, and medical instruments, benefiting both economies.

## Why SEBI accused Hindenburg of breaking Indian law over its Adani report- IE Explained

Economy



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#### **Easy Explanation**

Hindenburg Research received a show cause notice from India's capital markets regulator, SEBI, over short-selling Adani Enterprises Ltd (AEL) stock before releasing a report accusing the Adani Group of stock manipulation and accounting fraud. SEBI alleges Hindenburg colluded with entities to profit from non-public information. Hindenburg rejected the notice, stating that SEBI is targeting the exposers of malpractice rather than the perpetrators. The notice also implicated Kingdon Capital Management but conspicuously omitted Kotak Mahindra Bank, which Hindenburg claims managed the offshore fund structure used by its investor partner.

#### Key Takeaways

- 1. **Hindenburg Report**: Released in January 2023, the report accused Adani Group of decades-long stock manipulation and accounting fraud, causing a significant drop in Adani companies' shares.
- 2. **SEBI's Allegations**: SEBI's notice accuses Hindenburg and its affiliates of using insider information to short-sell AEL shares for profit, naming key individuals and entities involved.
- 3. **Hindenburg's Rejection**: Hindenburg dismissed SEBI's notice, arguing it is an attempt to stifle those exposing financial misconduct, and emphasized their public disclosure of their short positions on Adani.
- 4. **Kotak Mahindra Bank's Role**: Hindenburg highlighted SEBI's omission of Kotak Mahindra Bank, which managed the fund structure used by Hindenburg's investor partner, implying preferential treatment for the bank.
- 5. **Kotak's Response**: Kotak Mahindra Bank clarified it had no direct dealings with Hindenburg and that all investments followed standard KYC procedures.

#### An unexpected bounty- IE Editorial

## Economy Easy Explanation

The recent decision by the Reserve Bank of India (RBI) to transfer a significant surplus to the Indian government has sparked debates on fiscal management and capital expenditure. Despite a history of fiscal deficits exceeding targets, with recent figures still not aligning with the Fiscal Responsibility and Budget Management (FRBM) Act's recommendations, there is pressure on how to utilize this unexpected financial boon. Some suggest increasing capital expenditure, while others, considering India's current economic strength, argue for using these funds to reduce the fiscal deficit. The real challenge lies in balancing immediate economic stimulation with long-term fiscal health, especially in a landscape where the actual state of the economy might not fully align with the optimistic growth figures presented.

#### Key Takeaways

- 1. **Unexpected RBI Dividend**: The RBI's transfer of Rs 2.11 lakh crore, double the anticipated amount, presents a fiscal opportunity and challenge for the government.
- 2. **Debate on Capital Expenditure**: There's a strong push for increased capital expenditure to stimulate growth and address infrastructure deficits. However, the necessity and efficiency of such spending are questioned, especially considering past experiences and current economic conditions.
- 3. **Fiscal Prudence**: Historical data suggests that India has consistently struggled to maintain fiscal deficits within the recommended limits. This windfall provides an opportunity to address these long-standing fiscal imbalances.
- 4. **Economic Indicators vs. Reality**: While official figures suggest robust economic growth, there's a potential disconnect between these figures and the on-ground economic reality. This discrepancy could influence decisions on whether to boost spending or focus on reducing the deficit.
- 5. **Strategic Spending vs. Broad Increases**: The discussion highlights the need for strategic, well-calculated capital expenditures rather than broad, indiscriminate spending increases, particularly in contexts like telecom revitalization and high-speed rail projects where the return on investment is debatable in the current economic landscape.

#### Nine Internal Security Challenges- IE Editorial

Internal Security

#### **Easy Explanation**

The recent elections are over, and the NDA government is now firmly in place. The Prime Minister has achieved many things, and India's international reputation is very high. The economy is improving, and China now knows India won't back down from a fight. For the next five years, the government should focus on nine key areas for internal security:

- 1. **Internal Security Doctrine**: India needs a clear national security doctrine to deal with internal and external challenges systematically.
- 2. Internal Security Ministry: Create a dedicated ministry for internal security to ensure issues get immediate attention.
- 3. Jammu and Kashmir: Despite improvements, the region is not entirely safe. The government needs to reorganize the security system, restore statehood, and hold elections.
- 4. **Northeast Issues**: The government needs to address ongoing ethnic conflicts, illegal migration, drug trafficking, and arms smuggling in the Northeast.
- 5. **Naxal Problem**: Although Naxal violence has decreased, the government should offer peace talks and address their grievances.
- 6. Intelligence Bureau/CBI: Restructure these organizations to prevent misuse and strengthen their legal mandates.
- 7. State Police: Transform the police from a "Ruler's Police" to a "People's Police" to better serve the public.
- 8. **Central Armed Police Forces**: Address internal problems like inadequate training and poor discipline by setting up a high-powered commission.
- 9. Technology: Use modern technology to enhance police capabilities and address future challenges.

By focusing on these areas, India can improve its internal security and continue to project strength internationally.

#### Key Takeaways

#### Government's Current Standing

The NDA government has secured its position with a strong list of achievements, including enhanced international prestige and an improving economy. China now recognizes India's willingness to confront aggression.

#### Need for an Internal Security Doctrine

India requires a national security doctrine to systematically address internal and external challenges. This would replace the current ad-hoc approach, especially during government changes.

## **Creation of an Internal Security Ministry**

A dedicated ministry for internal security would ensure prompt attention to urgent matters, similar to the effective approach previously demonstrated by Rajesh Pilot.

#### Addressing Jammu and Kashmir

Despite a decrease in terror incidents, Jammu and Kashmir remain unstable. The government should reorganize the security grid, restore statehood, and hold Assembly elections to maintain stability.

#### Focusing on the Northeast

The government must resolve issues in the Northeast, including ethnic conflicts, illegal migration, and drug trafficking. Direct intervention by the Prime Minister may be necessary to achieve peace.

#### **Tackling the Naxal Problem**

With a significant decrease in Naxal violence, the government should offer peace talks and address the genuine grievances of Naxals to bring them into the mainstream.

#### Restructuring Intelligence Bureau and CBI

The Intelligence Bureau and CBI need restructuring to prevent misuse and enhance their legal mandates. This would improve their effectiveness in maintaining national security.

### **Transforming State Police**

Reforming the state police to serve as a "People's Police" rather than a "Ruler's Police" would make law enforcement more responsive to public needs.

### Improving Central Armed Police Forces

The government should address internal issues within the Central Armed Police Forces by establishing a high-powered commission to propose long-term solutions.

### Utilizing Technology for Security

Implementing modern technology in policing can act as a force multiplier, helping address current and future security challenges more effectively.

By addressing these nine areas, India can enhance its internal security and maintain its strong international standing.

#### Spiral galaxies evolved 4 billion years sooner than expected-The Hindu Science

#### Science

### **Easy Explanation**

A new study published in the Astrophysical Journal Letters reveals that spiral galaxies formed much earlier than previously thought, around 1.5 billion years after the universe's birth, challenging the conventional theory that spiral galaxies emerged 6 billion years ago. Using data from the James Webb Space Telescope, researchers from the University of Missouri identified 216 spiral galaxies among 873 studied. This finding suggests that the cooling and formation of spiral arms occurred much earlier and more frequently than anticipated, indicating that the universe's galaxy formation processes are more complex than previously understood.

#### Key Takeaways

- 1. **Earlier Formation of Spiral Galaxies**: The study identified spiral galaxies forming around 1.5 billion years after the universe's birth, much earlier than the previously believed 6 billion years.
- 2. **Research Methodology**: Using the James Webb Space Telescope, researchers analyzed 873 galaxies and classified 216 as spiral, highlighting a significant presence of spiral galaxies in the early universe.
- 3. **Challenge to Existing Theories**: The discovery complicates the existing theory that spiral galaxies formed from cooling, hot, thick disks over billions of years, suggesting simultaneous cooling and spiral formation.
- 4. **Need for Revised Models**: Current astrophysical models need refinement to account for the earlier and more frequent formation of spiral galaxies, indicating a more complex galaxy evolution process.
- 5. **Impact on Star Formation Understanding**: The findings may affect understanding of star formation rates and the conditions necessary for the formation of earth-like planets in spiral galaxies.

#### UFO Day rekindles the conspiracy theory that refuses to die-The Hindu Science

## Science

## Easy Explanation

World UFO Day rekindles interest in UFOs and extraterrestrial life amid fresh claims and historical incidents. Recently, a former U.S. Air Force officer alleged that the U.S. has a secret program for reverse-engineering UFOs, which the Pentagon has denied. Simultaneously, the Mexican Congress discussed purported non-human mummies, and NASA appointed a director for research on unidentified anomalous phenomena. Despite these intriguing developments, comprehensive investigations by NASA and the Pentagon have consistently found no evidence of extraterrestrial involvement in UFO sightings. The day's significance traces back to



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the 1947 Roswell Incident, which sparked widespread speculation about alien spacecraft, although later attributed to a military balloon project. This ongoing fascination highlights cultural interest and security concerns around UFOs, driving continuous scrutiny and investigation into aerial phenomena.

## Key Takeaways

- 1. **Persistent UFO Claims and Denials**: Retired Air Force Maj. David Grusch testified about a secretive U.S. program to retrieve UFOs, which the Pentagon strongly denied. The Mexican Congress also explored claims about non-human mummies, but researchers dismissed these as nonsensical.
- 2. **Official Studies and Findings**: Both NASA and the Pentagon have conducted studies that conclude there is no evidence of extraterrestrial life related to UFO sightings, despite the historical and ongoing public fascination with the possibility.
- 3. **Public and Governmental Interest**: Interest in UFOs remains high, evidenced by the establishment of positions and directives aimed at investigating unidentified anomalous phenomena. This includes efforts by the Pentagon to destigmatize reporting of unusual aerial sightings by military personnel.
- 4. **National Security Concerns**: UFO sightings are often treated as national security concerns by U.S. lawmakers from both political parties, highlighting the need for improved data collection and understanding of these phenomena.
- 5. **Cultural and Historical Context**: World UFO Day is rooted in the 1947 Roswell Incident, which continues to be a touchstone for UFO conspiracy theories and the public's enduring fascination with the potential for otherworldly visitors.

## Factory accidents, a pointer to rusty inspection reform-The Hindu Editorial

Economy

## Easy Explanation

The recurring industrial accidents in Maharashtra, exemplified by the recent explosion in Dombivli, underscore the dire state of labour inspection reforms in India. Despite previous decisions to relocate hazardous factories, implementation has been lax. Data reveals low inspection rates across key industrial states, including Maharashtra, Tamil Nadu, and Gujarat, attributed to an insufficient number of appointed inspectors and an overwhelming workload. This deficiency in the inspection regime, coupled with compromised safety checks and endemic corruption within the system, highlights the urgent need for substantive reforms. Current practices such as randomized inspections and self-certification, while modern, often fall short of the stringent requirements set by the International Labour Organization's Labour Inspection Convention.

## Key Takeaways

- 1. **Recurring Industrial Accidents**: Frequent accidents in Maharashtra's chemical factories highlight systemic issues in safety and inspection practices.
- 2. **Inadequate Inspection Rates**: A significant portion of factories, especially hazardous ones, remain uninspected due to a shortage of labour inspectors and an inefficient inspection system.
- 3. **Corruption and Inefficiency**: The term "inspector-raj" denotes a system rife with corruption, where inspections and certifications are often compromised through under-the-table deals.
- 4. **Need for Substantial Reforms**: Current reforms such as self-certification and randomized inspections do not adequately address the underlying issues. There is a crucial need for reforms aligned with the International Labour Organization's standards to ensure thorough and effective inspections.
- 5. **Penalties and Accountability**: The lack of serious consequences for non-compliance and failures in governance highlights the need for a more robust penal system for both companies and state enforcers to ensure legal compliance and prevent future industrial disasters.

## Trials, medical ethics and the orbit of power- TH Editorial

Ethics

## **Easy Explanation**

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In January 2021, several representatives from organizations helping victims of the Bhopal Gas tragedy wrote to Prime Minister Narendra Modi and Health Minister Dr. Harsh Vardhan. They complained about unethical practices during clinical trials for Bharat Biotech's COVID-19 vaccine, Covaxin, conducted at People's Hospital in Bhopal. They claimed that participants, many from



vulnerable groups, were not properly informed, adverse events were not reported, and there was inadequate follow-up. They demanded the trial be stopped, those responsible be punished, and participants be compensated.

One key issue was the role of the ethics committees overseeing these trials. Questions were raised about their effectiveness and adherence to ethical guidelines. Dr. Jacob Puliyel filed a petition in the Supreme Court to ensure data transparency in clinical trials. The court emphasized the importance of making trial data public.

The article also highlights the broader issue of ethical violations in medical research and the role of whistle-blowers in exposing these practices. It points out the lack of strong whistle-blower protection laws in India, making it difficult for individuals to report wrongdoing.

In the context of drug development, the article notes that India excels in manufacturing generic drugs but struggles with developing innovative therapies. Ethical issues, such as the lack of informed consent and the ineffectiveness of ethics committees, are significant problems in clinical studies in India.

A study by Gayatri Saberwal and colleagues found numerous issues with how ethics committees operate in India, including approvals for trials without ethics committees and poor oversight. The article criticizes the Ministry of AYUSH for promoting poorly designed studies and highlights the need for stronger systems to ensure medical ethics are upheld.

#### Key Takeaways

#### Letter to Prime Minister Modi

In January 2021, representatives of organizations aiding Bhopal Gas tragedy victims wrote to PM Modi and Health Minister Dr. Harsh Vardhan. They complained about unethical practices during Covaxin's clinical trials, including improper informed consent and inadequate reporting of adverse events. They demanded the trial be stopped and participants be compensated.

#### Role of Ethics Committees

The letter highlighted the ineffectiveness of ethics committees in overseeing the trials. Dr. Jacob Puliyel's petition in the Supreme Court called for data transparency in clinical trials. The court stressed the need to make trial data public to ensure accountability.

#### **Broader Ethical Issues in Medical Research**

The article discusses the persistent ethical violations in medical research and the crucial role of whistle-blowers in exposing them. It emphasizes the lack of strong whistle-blower protection laws in India, making it challenging for individuals to report misconduct.

#### **Challenges in Drug Development**

While India is successful in manufacturing generic drugs, it struggles with developing innovative therapies. The article points out the ethical issues in clinical studies, such as the lack of informed consent and the ineffectiveness of ethics committees, hindering progress in drug development.

#### **Study on Ethics Committees**

A study by Gayatri Saberwal et al. identified numerous issues with the functioning of ethics committees in India. These included approvals for trials without ethics committees and inadequate oversight. The article criticizes the Ministry of AYUSH for promoting poorly designed studies and calls for stronger systems to ensure medical ethics are upheld.

#### **Need for Stronger Systems**

The article concludes that even well-designed systems of checks and balances can be undermined by those in power. India needs to develop robust mechanisms to hold wrongdoing accountable and ensure the basics of medical ethics are correctly followed.

## Till Russia do us part? NATO at 75, an enduring alliance- TH Text&Context

International Relations

#### **Easy Explanation**

In Gen. Sir John Hackett's fictional book "The Third World War" (1978), he imagines a nuclear conflict sparked by a provocation against NATO (North Atlantic Treaty Organization). Despite NATO winning, the victory is devastating. This book, like H.G. Wells' work, presents a futuristic vision and is an interesting way to understand NATO, which turned 75 this year.

NATO was formed in 1949 with 12 founding members, including the U.S., Canada, the U.K., and France, to counter the Soviet Union's expansion. Its first Secretary-General described its purpose as keeping the Soviet Union out, the Americans in, and the Germans down. Over the years, NATO has grown to 31 members and has faced various challenges and internal tensions.

Significant events like the Berlin blockade in 1948 led to the formation and growth of NATO. The alliance was built on the coordination plans from World War II. Despite grand ideals, NATO included non-democratic states and engaged in secret operations to counter Soviet influence.

NATO differs from earlier alliances, which were often marked by distrust and opportunism. Modern NATO focuses on integration and transparency among its members. Despite setbacks like the war in Afghanistan, Russia's aggression has renewed NATO's sense of purpose.

#### Key Takeaways

#### Formation and Purpose of NATO

NATO was formed in 1949 to counter the Soviet Union's expansion. Initially comprising 12 members, including the U.S., Canada, and several European countries, its purpose was to keep the Soviet Union out, the Americans in, and the Germans down.

#### Historical Context and Growth

The formation of NATO was influenced by events like the Berlin blockade in 1948. The alliance grew over the years, now including 31 members. Significant early coordination came from World War II plans by leaders like Dwight D. Eisenhower.

#### **Internal Tensions and Challenges**

From its inception, NATO faced internal tensions between Western European powers and the U.S. Despite grand ideals, it included non-democratic states and engaged in secret operations to counter Soviet influence.

#### **Comparison with Earlier Alliances**

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Unlike alliances from the 18th and 19th centuries, which were marked by mutual suspicion, NATO members chose integration and transparency in defense efforts. This approach helped NATO endure through various challenges.

#### Modern Relevance

Despite failures like the war in Afghanistan, NATO has found renewed relevance due to recent Russian aggression. This has given the alliance new momentum and a sense of purpose in contemporary geopolitics.

# 5th July 2024

## What keeps JEE's integrity intact, compared to NEET-Indian Express Explained

#### Governance

## Easy explanation

The integrity of the Joint Entrance Examination (JEE), particularly compared to the National Eligibility cum Entrance Test (NEET), remains intact due to several key factors. Following reports of malpractice in NEET, a high-level committee was formed to explore reforms, considering the JEE model. JEE is conducted in two stages: JEE (Mains) and JEE (Advanced), with the latter handled entirely by the Indian Institutes of Technology (IITs). The exam's integrity is maintained through a computer-based format, conducted at secure Tata Consultancy Services (TCS) test centers. Despite past issues, such as the 2021 manipulation case, enhanced security measures have been implemented. The IITs' active involvement, especially in setting and securing question papers, plays a crucial role in preserving the examination's sanctity.

#### Key Takeaways:

- 1. **High-Level Committee for Reform**: The Centre constituted a committee to reform the National Testing Agency (NTA) examination process following malpractice reports in NEET.
- 2. JEE Examination Structure: JEE is conducted in two stages: JEE (Mains) by NTA with IIT involvement, and JEE (Advanced) entirely by IITs.
- 3. **Computer-Based Testing**: JEE is now a computer-based test conducted at TCS centers, reducing vulnerabilities like question paper leaks and outside agency involvement.
- 4. Past Issues and Security Enhancements: Despite past issues like the 2021 manipulation case in Haryana, security measures at TCS centers have been enhanced.
- 5. Active IIT Involvement: IITs play a significant role, especially in JEE (Advanced), with detailed processes to maintain secrecy and integrity in question paper preparation and examination conduct.
- 6. Sense of Ownership: IIT faculty members have a strong sense of ownership and stake in the examination process, contributing to its integrity.
- 7. **Comparison with NEET**: NEET has a larger number of candidates and different vulnerabilities, making JEE's model a potential reference for reform.

These elements collectively ensure that JEE remains a robust and credible examination system.

## SCO-Indian Express Explained

#### International relations

#### **Easy Explanation**

The Shanghai Cooperation Organisation (SCO), emerging from the "Shanghai Five" formed in 1996, is an international organization focused on security cooperation among its primarily Asian members. Established officially in 2001, the SCO now includes countries such as India, China, Russia, and recently Belarus. The SCO is seen as an alternative to Western-led groupings, with significant geopolitical implications, especially in the context of US relations with Russia and China. India's involvement in the SCO provides a platform for engagement with Central Asian countries despite challenges in relations with China and Pakistan.

## Key Takeaways:

- 1. **Formation and Evolution**: The SCO evolved from the "Shanghai Five" (1996) and was officially established in 2001 to address security concerns in the region.
- 2. **Current Membership**: Before Belarus joined, the SCO had nine members: China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, India, Pakistan, and Iran.
- 3. **Geopolitical Significance**: The SCO is one of the few international organizations focusing on security issues, often seen as an alternative to Western-led groups.



- 4. **China-Russia Dynamics**: Despite a declared "limitless friendship" between China and Russia, there is competition for influence within the SCO, particularly in Central Asia.
- 5. Belt and Road Initiative (BRI): China's BRI is a significant aspect of its involvement, leveraging infrastructure projects in Central Asian countries.
- 6. India and Pakistan's Inclusion: Both countries joined the SCO in 2017, reflecting the strategic balance maintained by China and Russia within the organization.
- 7. India's Participation: For India, the SCO offers a platform for cooperation with Central Asian countries. However, strained relations with China and Pakistan pose challenges.
- 8. India's Stance on BRI: India opposed a paragraph in the 2023 New Delhi Declaration supporting the BRI due to the China-Pakistan Economic Corridor passing through Pakistan-occupied Kashmir, which India sees as a violation of its territorial integrity and sovereignty.

These aspects highlight the SCO's role in regional security, geopolitical strategy, and the complexities of member relations.

## Too much milk powder-Indian Express Explained

#### Economy

## **Easy Explanation**

Indian dairy farmers face a surplus of skimmed milk powder (SMP) due to continuous milk supply and limited demand. With stockpiles estimated at 3-3.25 lakh tonnes, the surplus has caused SMP prices to plummet, impacting dairy revenues and farmer payments, especially ahead of the Maharashtra elections. Solutions proposed include export subsidies and government-financed buffer stocks. The SMP surplus results from overproduction during the flush season and inadequate off-take during the lean period. While milk fat has a stable market, SMP faces challenges due to higher production from cow milk. Political measures like subsidies offer temporary relief but don't address the core issue. Long-term strategies involve developing a domestic market for SMP to balance production and demand, ensuring financial stability for farmers and mitigating potential future milk inflation.

#### Key Takeaways:

- 1. **SMP Production and Storage**: SMP is produced during the flush season when milk production is high. It is stored for use during lean seasons. The current surplus is due to continuous milk supply throughout the year, leading to excessive SMP stockpiling.
- 2. **Impact on Prices**: The surplus has caused a significant drop in SMP prices to Rs 200-210 per kg, affecting dairy revenues and their ability to pay farmers adequately.
- 3. **Comparison with Milk Fat**: The surplus issue is less severe for milk fat as it has a good market, particularly during festival seasons. Milk fat prices are more likely to recover compared to SMP.
- 4. **Political Implications**: The surplus and resulting low prices could be politically damaging, particularly with Maharashtra assembly elections approaching. The state government announced a Rs 5 per litre subsidy for farmers, but this does not address the root problem of SMP surplus.
- 5. Proposed Solutions:
  - **Export Subsidies**: Exporting SMP could alleviate the surplus, but current low global prices make this commercially unviable without government subsidies.
  - **Buffer Stock**: Creating a government buffer stock of 50,000-100,000 tonnes of SMP could stabilize prices and protect both producers and consumers from future price fluctuations.
- 6. **Long-Term Market Development**: The dairy industry needs to develop a domestic market for SMP due to the increasing share of milk production coming from cows, which produce more SMP per unit of fat compared to buffaloes.

These measures aim to address the immediate surplus issue and ensure the financial stability of dairy farmers while preparing for future market demands.

## Constitution at the centre-indian Express Editorial

Polity Easy Explanation

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The Indian Constitution has recently seen a resurgence in political and public reverence, demonstrated through parliamentary oaths and public declarations. Article 99 mandates members of Parliament to pledge allegiance to the Constitution, reflecting its importance. The judiciary's oath emphasizes performance without bias, upholding the Constitution. This renewed focus on constitutionalism is a reaction to political and social concerns, highlighting the Constitution as a safeguard against overreach. The Kesavananda Bharati case established the doctrine of the Basic Structure, ensuring that fundamental principles remain unaltered despite amendments. The judiciary's role in maintaining these principles through reasoned judgment is crucial to preserving constitutional integrity.

## Key Takeaways:

- 1. **Renewed Affinity for the Constitution**: Politicians and public figures have increasingly expressed reverence for the Constitution, signaling its central role in Indian democracy.
- 2. **Oath of Allegiance**: Article 99 requires MPs to pledge allegiance to the Constitution, highlighting its supremacy over laws passed by Parliament.
- 3. Judiciary's Role: The judicial oath emphasizes unbiased performance and the independence of the judiciary, crucial for upholding constitutional values.
- 4. **Kesavananda Bharati Case**: This landmark case established the Basic Structure doctrine, ensuring that core constitutional principles cannot be altered by amendments.
- 5. **Constitutionalism as Safeguard**: The Constitution is seen as a protection against political overreach, with the judiciary playing a key role in maintaining its integrity.
- 6. Judicial Interpretation and Innovation: The judiciary is tasked with innovating and interpreting the law to align with constitutional principles, ensuring good governance.
- 7. **Constitutional Underreach**: The main concern is not judicial overreach but the need for the judiciary and political elites to actively uphold constitutional values.
- 8. **Prime Minister's Emphasis**: The PM highlighted the Constitution's spirit beyond its provisions, reinforcing the importance of its underlying principles.
- 9. **Public and Elite Responsibility**: While the public actively supports constitutional values, it is essential for political and judicial elites to do the same to preserve the Constitution's integrity.

## THE HATHRAS QUESTIONS-Indian Express Editorial

## Sociology

## Easy Explanation

The tragic stampede in Hathras, which resulted in 121 fatalities, mostly women and children, has raised serious questions about crowd management and administrative negligence. The event, which attracted approximately 250,000 devotees—over three times the expected number—was organized for a congregation led by Bhole Baba, a controversial former police constable turned godman. Despite his large following, the preparations and security measures at the event were grossly inadequate. The minimal police presence and lack of contingency planning, such as proper traffic management next to a national highway, contributed to the disaster. Investigations are ongoing, with the expectation that those responsible will be held accountable.

#### Key Takeaways:

- 1. **Event Background**: The gathering was significantly larger than anticipated, with poor planning and oversight by the district administration.
- 2. Administrative Failures: There was a clear lack of adequate security and emergency planning, despite the large crowd size and the event's location near a major highway.
- 3. **Responsibility and Accountability**: Initial reports suggest negligence in crowd management and emergency response, with an investigation underway to determine the extent of the administrative failures.
- 4. **Legal Implications**: Questions arise about the legality of Bhole Baba's activities under the Drugs and Magic Remedies Act and the potential seizure of ill-gotten assets under local anti-gangster laws.
- 5. **Investigation and Transparency**: A Special Investigation Team (SIT) has been formed to investigate the incident, emphasizing the need for transparency and urgency in its proceedings.
- 6. **Health and Safety Concerns**: The immediate response to the tragedy, including delays in medical aid, has been criticized, highlighting the need for better emergency preparedness in large gatherings.

## What went wrong with the Hajj pilgrimage this year?-The Hindu Text and Context

International relations

### Easy Explanation

The 2023 Hajj pilgrimage experienced significant challenges due to extreme heat, resulting in over 1,300 reported casualties. The majority of these occurred during the movement from Arafat to Mina. Despite a fixed quota system for issuing Hajj visas based on the Muslim population of each country, an estimated 200,000 unauthorized pilgrims attended the pilgrimage, exacerbating the situation. Unauthorized pilgrims, often economically disadvantaged, bypassed official channels using cheaper, riskier alternatives offered by unscrupulous agents. These individuals, lacking proper documentation and support, faced severe conditions without access to adequate transportation, water, or medical facilities.

#### Key Takeaways:

- 1. **Significant Casualties**: The harsh weather conditions contributed to a high number of deaths, particularly among unauthorized pilgrims.
- 2. **Unauthorized Pilgrims**: Many pilgrims entered Saudi Arabia on visitor visas or without proper Hajj documentation, primarily from neighboring countries or as workers from places like India and Pakistan.
- 3. **Challenges for Unauthorized Pilgrims**: These pilgrims often undertook perilous journeys through the desert to reach Hajj sites, facing extreme temperatures without the support mechanisms available to authorized pilgrims.
- 4. **Historical Context of Tragedies**: Past tragedies at Hajj due to stampedes and mismanagement led to infrastructural improvements in Mecca. However, the issue of unauthorized pilgrims remains a significant challenge.
- 5. **Economic and Health Risks**: The economic inability to afford the official Hajj process leads many to risk their health and safety by using informal means to fulfill their religious obligation.
- 6. **Saudi Authorities' Response**: While the Saudi government has taken steps to improve facilities and safety measures, the persistent issue of unauthorized pilgrims and extreme weather conditions continues to pose risks.

This year's Hajj highlighted the ongoing issues of crowd management and the need for enhanced safety protocols, especially considering the vulnerabilities of unauthorized pilgrims under extreme weather conditions.

## Education 'remains the most effective contraceptive'-The Hindu Science

#### Science

#### **Easy Explanation**

India, now the world's most populous country with a projected peak population of 1.7 billion by 2064, faces significant challenges in managing its demographic growth. The focus is increasingly on the sexual and reproductive health of its young population. Recent studies, such as those based on the National Family Health Surveys (NFHS), highlight a significant correlation between education and the unmet needs for family planning, particularly among young women. These findings underscore the importance of education in delaying sexual activity and enhancing access to contraception. Cultural norms and limited sex education exacerbate challenges, especially concerning the use of contraceptives and access to safe abortion under the strict conditions of the Medical Termination of Pregnancy Act.

#### Key Takeaways:

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- 1. **Demographic Trends**: India's population growth is slowing, with the total fertility rate now below the replacement level of 2.1.
- 2. **Educational Impact**: Education is shown to be the most effective method for addressing unmet needs in family planning, delaying the onset of sexual activity, and reducing teenage pregnancies.
- 3. **Cultural Barriers**: Cultural resistance to discussing sexual health and contraception, particularly for unmarried young people, hinders effective family planning.

- 4. Legal Restrictions on Abortion: Abortion in India is regulated under the Medical Termination of Pregnancy Act, making it difficult for many to access safe and legal abortions without meeting specific conditions.
- 5. **Need for Comprehensive Sex Education**: There is a pressing need for comprehensive sex education to dispel misconceptions about sexual health and improve the reproductive health infrastructure.
- 6. **Role of Healthcare Providers**: Health professionals emphasize the importance of providing education and a variety of contraceptive options to meet the diverse needs of India's youth.

This scenario presents an opportunity for India to enhance its educational strategies and healthcare policies to better manage its population dynamics while improving the overall health and autonomy of its young people.

## Should India review its Myanmar policy in view of the humanitarian crisis-The Hindu Editorial

## International relations

### **Easy Explanation**

The ongoing conflict in Myanmar between the military junta and ethnic armed organizations (EAOs) has intensified, leading to a serious humanitarian crisis that has implications for neighboring countries, including India. The coordination among EAOs and the People's Defense Force (PDF) has allowed them to control significant portions of Myanmar's territory, influencing trade routes and prompting an influx of refugees into India. This situation necessitates a review of India's Myanmar policy, which traditionally balanced support for Myanmar's military with backing democratic forces.

### Key Takeaways:

- 1. Strategic Reassessment Needed: Given the complex and changing dynamics in Myanmar, experts suggest that India should reassess its policy to address the new realities, including the influence of EAOs and the humanitarian impact on the region.
- 2. Humanitarian Concerns: The conflict has led to severe humanitarian issues, with significant numbers of refugees and a lack of basic necessities like medical care, prompting calls for India to provide humanitarian assistance.
- 3. **Dialogue with EAOs**: There's a recommendation for India to initiate dialogue with EAOs to address the refugee crisis and counterbalance China's dual influence with both the military junta and the EAOs.
- 4. Legal and Diplomatic Engagement: Experts suggest that India should engage diplomatically with Myanmar's government to assist affected populations and negotiate the rebuilding of communities, ensuring it aligns with both nations' interests.
- 5. **Regional Stability**: The potential Balkanization of Myanmar could have dire consequences for regional stability, making it imperative for India to engage with various stakeholders, including neighboring countries and international forums, to prevent further fragmentation.
- 6. **Support for Federal Structure**: Discussions about a federal union within Myanmar are highlighted as a crucial area where India could facilitate dialogue, helping to maintain Myanmar's territorial integrity and stability.
- 7. **Comprehensive Policy Approach**: The advice for India includes maintaining investments in its relationship with Myanmar's military while using its influence to address humanitarian issues, ensuring mutual stability and prosperity.

This nuanced approach underscores the need for India to adapt its policy in response to the evolving political and humanitarian landscape in Myanmar, balancing strategic interests with humanitarian concerns.

## Grave concern-The Hindu Editorial

# Science Easy Explanation

The resurgence of wild poliovirus type-1 (WPV1) in Pakistan and Afghanistan poses a significant challenge to global eradication efforts, with rising cases and environmental detections indicating ongoing transmission. Despite the reduction in reported cases in 2023 compared to 2022, the increasing detection of the virus in environmental samples, particularly in key historical reservoirs such as Karachi, Quetta, Peshawar-Khyber blocks, and Kandahar, underscores the persistent risk. These findings highlight shortcomings in vaccination campaigns, including instances of fake finger marking without actual vaccination. The situation is compounded by the mobility of populations, including Afghan refugees returning from Pakistan, raising concerns about cross-border transmission and the potential international spread of the virus.

#### Key Takeaways:

- 1. **Resurgence of WPV1**: Both Pakistan and Afghanistan are experiencing a resurgence in WPV1 cases and environmental detections, threatening efforts to eradicate the virus by 2026.
- 2. Environmental Detection: The significant increase in positive environmental samples in both countries indicates ongoing virus circulation, with a majority linked to a genetic cluster suggesting cross-border transmission from Afghanistan to Pakistan.
- 3. **Challenges in Polio Campaigns**: Inadequate vaccination coverage and practices such as fake finger marking are major hurdles, allowing the virus to persist even in urban centers like Karachi.
- 4. **Risk of International Spread**: The large movements of people, including over half a million Afghan refugees, exacerbate the risk of the virus spreading across borders, particularly given the large number of unvaccinated children in southern Afghanistan.
- 5. **Public Health Implications**: The situation demands robust public health interventions, including strengthening surveillance, enhancing vaccination efforts, and ensuring effective cross-border cooperation to prevent further spread and achieve eradication goals.

## 6th July 2024

## How Agniveer compensation differs from a regular soldier's- IE Explained

#### Polity

## **Easy Explanation**

Earlier this week, Rahul Gandhi claimed that the family of Agniveer Ajay Kumar, who died in a landmine blast, did not receive financial help from the government. Defense Minister Rajnath Singh countered this, stating that families of fallen Agniveers receive Rs 1 crore in compensation. Rahul Gandhi accused him of lying. The Army then clarified that the family would receive Rs 1.65 crore in total compensation, including various insurance and ex gratia payments.

Agniveers and regular soldiers have different compensation structures for deaths in service. Agniveers receive insurance and ex gratia payments, but lack some benefits available to regular soldiers, such as gratuity and monthly family pensions.

## Key Takeaways

#### **Compensation for Fallen Agniveers**

Earlier this week, Rahul Gandhi alleged that the family of Agniveer Ajay Kumar, who was killed in a landmine blast, did not receive financial assistance from the government. Defence Minister Rajnath Singh claimed that fallen Agniveers' families receive Rs 1 crore in compensation, which Rahul Gandhi called a lie. The Army later clarified that the family would receive Rs 1.65 crore in compensation, including insurance, ex gratia, and other payments.

#### Insurance and Ex Gratia for Agniveers and Soldiers

Regular soldiers contribute Rs 5,000 per month towards the Army Group Insurance Fund, providing them with Rs 50 lakh in insurance. Agniveers, who do not contribute from their salary, are insured for Rs 48 lakh. Ex gratia payments for Agniveers whose deaths are attributable to military service are set at Rs 44 lakh. Regular soldiers receive between Rs 25 lakh and Rs 45 lakh, depending on the nature of the casualty. Ex gratia from state governments varies and applies to both Agniveers and regular soldiers.

### Seva Nidhi Scheme for Agniveers



The Seva Nidhi is a contributory scheme exclusive to Agniveers. In case of death not attributable to military service, the accumulated amount, including the government's contribution and interest, is given to the family. If an Agniveer dies on duty or in operations, the family receives full pay for the unserved period up to four years, including the Seva Nidhi component.

## Benefits for Regular Soldiers Only

Regular soldiers' families receive death gratuity, ordinary family pension, special family pension, and liberalised family pension, depending on the cause of death. These pensions are revised periodically, and children of soldiers who die in operations are eligible for educational allowances. Families of regular soldiers also benefit from the Ex-Servicemen Contributory Health Scheme (ECHS), providing medical care to armed forces pensioners and their families.

## Aphelion- IE Explained

Science Tech

## **Easy Explanation**

Earth reaches its farthest point from the Sun, called aphelion, every July. This year, it happened on Friday. Earth's orbit around the Sun is not a perfect circle but an elongated one. This elliptical orbit is due to the gravitational forces between the planets, especially Jupiter, which is the most massive.

At aphelion, Earth is about 152.1 million kilometers from the Sun. Six months later, at perihelion, Earth is closest to the Sun, about 147.1 million kilometers away. While we get less sunlight at aphelion, the difference in Earth's distance from the Sun does not cause the seasons. Instead, Earth's tilt on its axis determines the seasons.

If Earth's orbit were a perfect circle, the lengths of the seasons would be the same, but not much else would change. However, if the orbit became more elliptical, the seasons could become extreme, especially in the Southern Hemisphere, making summers very hot and winters very cold, which could harm crops and make advanced civilization impossible.

## Key Takeaways

#### Earth's Aphelion Explained

Earth reaches aphelion, its farthest point from the Sun, every July. This year, it occurred on a Friday. Aphelion is a result of Earth's elliptical orbit, which is common for all planets in the solar system. This elliptical shape is due to gravitational influences, primarily from Jupiter, the most massive planet in our solar system.

#### Distance from the Sun

At aphelion, Earth is about 152.1 million kilometers away from the Sun. In contrast, during perihelion in early January, Earth is closest to the Sun at approximately 147.1 million kilometers.

#### Impact on Temperatures

A common misconception is that Earth's varying distance from the Sun causes the seasons. While there is 7% less sunlight at aphelion compared to perihelion, this does not significantly affect the seasons. Earth's tilt on its axis is the main factor influencing seasonal changes.

#### **Hypothetical Scenarios**

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If Earth's orbit were a perfect circle, the seasons' lengths would be identical, with no major impact on the environment. However, a more eccentric orbit could lead to extreme seasonal changes, particularly in the Southern Hemisphere, resulting in severe summers and winters that could disrupt agriculture and civilization.

In summary, Earth's current orbit keeps it in a "sweet spot," balancing the influences of gravity and allowing for stable seasons.



#### Economy

## **Easy Explanation**

In the first quarter of 2023-24, India saw a surplus in its current account for the first time in 11 quarters. This is important because the current account influences the exchange rate of the rupee, India's credit rating, and overall economic health. To understand the current account, you need to look at the Balance of Payments (BoP), which records all transactions between India and the rest of the world.

The BoP includes two main accounts: the Current Account and the Capital Account. The Current Account covers trade in goods (like cars and wheat) and services (like IT and tourism), as well as transfers and income from investments. The Capital Account includes investments, such as Foreign Direct Investment (FDI) and Foreign Institutional Investments (FII).

In the fourth quarter, India had a surplus in the Current Account and the Capital Account. However, the entire financial year showed a deficit in the Current Account. The Reserve Bank of India (RBI) manages these transactions to maintain the rupee's stability and ensure economic growth.

## Key Takeaways

## **Current Account Surplus in Q4**

India saw a surplus in its current account for the first time in 11 quarters during January-March 2023-24. This surplus indicates a positive balance of trade and services for that period.

## Importance of Balance of Payments

The Balance of Payments (BoP) records all transactions between India and the rest of the world, showing money inflows and outflows. It includes the Current Account and the Capital Account.

## **Constituents of the Current Account**

The Current Account is divided into trade of goods and services. The trade or merchandise account records physical goods, while the invisibles trade covers services, transfers, and income from investments. In Q4, the invisibles trade showed a surplus, while the trade account showed a deficit.

## **Constituents of the Capital Account**

The Capital Account captures investments like FDI and FII. For Q4, the Capital Account showed a net surplus of \$25 billion.

#### Impact on Foreign Exchange Reserves

A BoP surplus means more dollars are coming into the country, which the RBI adds to its foreign exchange reserves to maintain the rupee's stability.

## **Understanding Deficit and Surplus**

Deficit and surplus are not always indicators of bad or good economic health. A current account deficit may suggest strong demand in the economy, while a surplus might indicate low economic activity, as seen during the Covid-19 lockdowns in FY2020-21.

#### **Economic Implications**

A current account deficit of 1.5%-2% of GDP is generally considered sustainable for India, supporting a GDP growth rate of 7%-8%.

International Relations

#### Easy Explanation

Recently, Chinese Premier Li Qiang announced China's willingness to explore plans to connect its railway projects in Southeast Asian countries, such as Malaysia, Laos, and Thailand, to enhance regional connectivity. This announcement was made at the groundbreaking ceremony for a terminal station of Malaysia's East Coast Rail Link (ECRL), a significant part of China's Belt and Road Initiative (BRI). The BRI aims to improve infrastructure development in Asia, Africa, and South America.

The ECRL is a nearly \$10 billion project intended to connect Kota Bharu in the east of Malaysia with Port Klang on the west coast. This railway, spanning 665 kilometers, is expected to boost economic benefits through improved connectivity and tourism. Although the project faced delays due to funding issues, it is now slated for completion by 2027.

The pan-Asian rail network is a broader vision that includes linking Southeast Asian countries through three main routes from China via different paths in Myanmar, Laos, Vietnam, and Thailand, eventually reaching Malaysia and Singapore. However, only the Laos-China section is currently operational. Other sections face delays and cost concerns. There are also doubts about the economic viability of the project, with experts suggesting that air travel and maritime shipping might remain more economical and practical for most routes.

China's interest in these projects extends beyond economic benefits. Strengthening regional connectivity through infrastructure projects aligns with China's broader geopolitical strategies. The BRI allows China to bolster economic ties and increase its influence in Southeast Asia. Despite concerns over debt and financing, China continues to pursue these projects to develop goodwill and trust in the region.

### Key Takeaways

#### Announcement of Regional Connectivity Plans

Chinese Premier Li Qiang expressed interest in connecting China's railway projects in Southeast Asian countries like Malaysia, Laos, and Thailand to enhance regional connectivity. This announcement aligns with China's Belt and Road Initiative (BRI), which aims to improve infrastructure in various regions, including Asia.

#### Details of the East Coast Rail Link (ECRL)

The ECRL is a \$10 billion project connecting Kota Bharu in eastern Malaysia with Port Klang on the west coast. This 665-kilometer railway is expected to enhance economic benefits through improved connectivity and tourism. Initially stalled due to funding issues, the project is now expected to be completed by 2027.

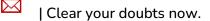
#### Pan-Asian Rail Network Vision

The pan-Asian rail network envisions linking Southeast Asian countries through three main routes from China via Myanmar, Laos, Vietnam, and Thailand, ultimately reaching Malaysia and Singapore. However, only the Laos-China section is currently operational. Other sections face delays and financial concerns.

#### **Economic Viability Concerns**

Experts have expressed doubts about the economic viability of the pan-Asian rail network. Air travel and maritime shipping are expected to remain more practical and economical for most routes compared to the proposed railway system.

#### **China's Strategic Interests**



China's interest in these projects extends beyond economic gains. The BRI strengthens regional connectivity and aligns with China's broader geopolitical strategies. The initiative allows China to bolster economic ties and increase its influence in Southeast Asia, despite concerns over debt and financing.

#### Impact on Regional Relationships

China aims to leverage these infrastructure projects to develop goodwill and trust in Southeast Asia. The BRI helps China strengthen its economic and cultural ties with the region, although concerns about debt trap diplomacy persist.

### When Waters Rise- IE Editorial

Environment

## **Easy Explanation**

Last October, after the flood waters receded in Assam, Chief Minister Himanta Biswa Sarma announced 54 projects aimed at mitigating the effects of flooding in the state. He promised that these initiatives would bring Assam closer to being flood-free. However, this year, the state is far from securing people's lives and properties from rising and raging waters. According to the Assam State Disaster Management Authority, floods have claimed more than 50 lives and displaced 360,000 people. Additionally, over 40,000 hectares of crop area have been affected, with large parts of Dibrugarh and Guwahati submerged. The Chief Minister has expressed despair, stating that floods are due to geographical factors beyond the state's control.

Assam's vulnerability to floods is due to a combination of hydrological and climatic factors. The state has more than 120 rivers, many of which originate from extreme rainfall areas in Arunachal Pradesh, Meghalaya, China, and Bhutan. Despite this, for nearly 70 years, neither the Centre nor the Assam government has found effective ways to control the damage caused by these rivers. The embankment-centered approach has been the primary method for flood control, but most of these structures date back to the 1960s and 1970s when the hydrology of Assam's rivers was poorly understood. Solutions such as using indigenous knowledge to build flood-resistant houses, dredging rivers, arresting erosion, or building more resilient embankments have either remained on paper or have not been adequately implemented.

In 2021, a parliamentary panel asked the Centre to set up modern weather stations in the upstream catchments of the Northeast's dams and install sirens to alert people downstream of floods. However, the region still lacks state-of-the-art warning systems. Guwahati, being a bowl-shaped lowland, is particularly susceptible to waterlogging. Historically, marshes and water channels made the city habitable, but construction projects over the past 70 years have damaged these critical ecological features. Like most Indian cities, Guwahati's drainage system is in disrepair, leading to flash floods from rainwater coming from neighboring Meghalaya and surrounding hills. For at least a decade, it has been clear that both the Northeast governments and the Centre need to collaborate to mitigate flood-related damages. The people of Assam and the Northeast deserve effective governance solutions rather than an administration that blames floods on geography.

## Key Takeaways

**Flood Mitigation:** Efforts and Current Challenges Last October, Assam's Chief Minister Himanta Biswa Sarma announced 54 projects to mitigate flooding. However, this year, floods have claimed over 50 lives, displaced 360,000 people, and affected 40,000 hectares of crops. Large parts of Dibrugarh and Guwahati are submerged, and the Chief Minister has stated that the floods are due to uncontrollable geographical factors.

Assam's Hydrological and Climatic Factors: Assam's vulnerability to floods stems from its more than 120 rivers, many originating from extreme rainfall areas in Arunachal Pradesh, Meghalaya, China, and Bhutan. Despite this, the Centre and Assam government have not effectively controlled the damage caused by these rivers for nearly 70 years.

**Embankment-Centered Approach and Its Limitations:** The state's authorities have primarily used an embankment-centered approach for flood control. Most of these structures date back to the 1960s and 1970s, built when the hydrology of Assam's rivers was poorly understood. Solutions such as indigenous knowledge for building flood-resistant houses, dredging rivers, arresting erosion, or constructing more resilient embankments have not been adequately implemented.

Lack of Modern Warning Systems: In 2021, a parliamentary panel asked the Centre to set up modern weather stations in the upstream catchments of the Northeast's dams and install sirens for flood warnings. However, the region still lacks state-of-the-art warning systems.

**Guwahati's Susceptibility to Waterlogging:** Guwahati is a bowl-shaped lowland prone to waterlogging. Historically, marshes and water channels made the city habitable, but construction projects over the past 70 years have damaged these ecological features. Guwahati's drainage system is in disrepair, leading to flash floods from rainwater from neighboring Meghalaya and surrounding hills.

**Need for Collaborative Governance Solutions:** For at least a decade, it has been evident that the Northeast governments and the Centre need to collaborate to mitigate flood-related damages. The people of Assam and the Northeast deserve effective governance solutions instead of an administration that blames floods on geography.

## 7th July 2024

## Hepatitis A vaccination will be cost-effective in Kerala: study- TH Science

Science tech

### **Easy Explanation**

In Kerala, improvements in sanitation and hygiene have led to changes in the pattern of hepatitis A infections. Previously, children under six years old were the primary group affected, experiencing mild symptoms or no symptoms at all. However, now adolescents and young adults are more commonly infected. For older children, hepatitis A can cause more severe symptoms, including liver injury and even death in rare cases.

Kerala has experienced regular hepatitis A outbreaks for the past two decades, with at least one outbreak causing multiple deaths each year since 2017. With better sanitation, children are not exposed to the virus at a young age, making them vulnerable to severe infections as adults. Vaccination has been suggested as a way to reduce outbreaks and lower healthcare costs.

A study published in the journal PLOS ONE found that vaccinating children aged one and adolescents aged 15 in Kerala with either a live, attenuated vaccine or an inactivated vaccine is cost-effective. The live, attenuated vaccine requires only one dose, while the inactivated vaccine requires two doses for full immunization.

The study estimated the cost of vaccinating the target age groups and found significant cost savings, especially for adolescents. Although vaccinating one-year-old children does not lead to immediate net savings, long-term benefits and cost savings are expected.

#### Key Takeaways

#### **Changes in Infection Patterns**

With better sanitation and hygiene, hepatitis A infections in Kerala are shifting from early childhood to adolescents and young adults. Younger children usually have mild or asymptomatic infections, but older children can experience severe symptoms and, in rare cases, liver injury or death.

#### Regular Outbreaks in Kerala

Kerala has faced regular hepatitis A outbreaks for the past two decades, with at least one outbreak each year since 2017 causing multiple deaths. Improved sanitation means children are less likely to get infected at a young age, making them more vulnerable as adults.

#### Vaccination as a Preventive Measure

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Vaccination can help reduce hepatitis A outbreaks and healthcare costs. A study in PLOS ONE found that vaccinating children aged

## Cost of Vaccination vs. Treatment

The study estimated that vaccinating 15-year-olds would cost Rs. 9,330 million for the inactivated vaccine and Rs. 4,649 million for the live, attenuated vaccine. For one-year-olds, the cost is Rs. 7,730 million for the inactivated vaccine and Rs. 3,394 million for the live, attenuated vaccine.

### Long-Term Cost Savings

While vaccinating one-year-olds does not lead to immediate net savings, long-term protection will result in cost savings. Vaccinating adolescents shows higher immediate cost savings due to their higher risk of severe infection.

#### **Effectiveness of Vaccines**

One dose of the live, attenuated vaccine provides full protection, while the inactivated vaccine requires two doses. The live, attenuated vaccine is more cost-effective due to the lower number of doses needed, but both vaccines are ultimately cost-saving.

### Conclusion

Despite higher initial costs, vaccinating against hepatitis A in Kerala will result in significant long-term health benefits and cost savings, especially for adolescents who are at higher risk of severe infection.

## AI comes to the rescue of elephants: TH Science

Science

## Easy Explanation

India's elephant population, currently between 25,000 and 30,000, is classified as "endangered." Their natural habitat has shrunk to just 3.5% of its original range, now confined to the Himalayan foothills, the northeast, some central Indian forests, and the Western and Eastern Ghats. Habitat fragmentation is a major issue, as it limits their living space and breeding options, leading to genetic problems and reduced herd fitness.

Elephants frequently move between their habitats, crossing roads and railway lines, which poses significant risks. For instance, female elephants range over about 500 sq. km, making encounters with human infrastructure inevitable. However, some elephant tracks, such as those in Bandipur, Mudumalai, and Wayanad, are safer as they follow seasonal migration patterns to areas like the Kabini Dam backwaters.

Wildlife corridors, such as the Motichur-Chilla corridor in Uttarakhand, provide a solution by allowing elephants to migrate with minimal human contact. Despite this, conflicts still occur, with elephants sometimes damaging crops or crossing roads and railway tracks.

In Canada, a study tested train-triggered warning systems with flashing lights and bells to reduce animal-train collisions. These systems warned animals of approaching trains, giving them time to move away. Larger animals like elks and grizzly bears responded better with these warnings, leaving the tracks earlier compared to when there were no warnings.

In India, to mitigate elephant-train collisions, the Indian Railways has implemented the Gajraj system. This AI-based system uses geophonic sensors along optical fiber cables to detect the vibrations of elephants' footsteps. When elephant-specific vibrations are identified, alerts are sent to train drivers, who then reduce their speed to prevent accidents. This system is currently operational in the Alipurduar area of north West Bengal, a region with a history of such tragic accidents.

## Key Takeaways

## **Endangered Elephant Population**

India's elephant population, now between 25,000 and 30,000, is considered endangered. Their habitat has drastically reduced to 3.5% of its original range, now limited to specific regions such as the Himalayan foothills, the northeast, central Indian forests, and the Western and Eastern Ghats.

#### Habitat Fragmentation and Genetic Bottlenecks

The fragmentation of their habitat into small forested areas surrounded by human-developed landscapes poses a significant threat. This fragmentation leads to limited breeding options, creating genetic bottlenecks and reducing the overall fitness of elephant herds.

#### **Risks of Habitat Fragmentation**

Elephants often encounter roads and railway lines as they move between habitats. Female elephants, for example, range over about 500 sq. km, making these crossings likely and dangerous in the age of fragmented habitats.

#### Wildlife Corridors as a Solution

Wildlife corridors, like the Motichur-Chilla corridor in Uttarakhand, help mitigate human-elephant conflicts by allowing elephants to migrate with minimal human contact. However, risks still remain as elephants sometimes damage crops or encounter infrastructure.

#### Canadian Study on Animal-Train Collisions

A Canadian study implemented train-triggered warning systems with flashing lights and bells to reduce animal-train collisions. These warnings helped animals, such as elks and grizzly bears, move away from tracks earlier, thus reducing the risk of collisions.

#### Al-Based Detection System in India

The Indian Railways' Gajraj system uses AI and geophonic sensors along optical fiber cables to detect the vibrations of elephants' footsteps. When these vibrations are detected, alerts are sent to train drivers to reduce speed, helping to prevent accidents. This system is currently in use in the Alipurduar area of north West Bengal, a region with a history of tragic elephant-train accidents.

#### Can the uber-rich worldwide be taxed better?- TH Economy

Economy

## Easy Explanation

French economist Gabriel Zucman has proposed a new tax aimed at the world's wealthiest individuals. Specifically, he suggests an annual tax of 2% on people who have more than \$1 billion in wealth. This proposal will be discussed at a meeting of the Finance Ministers of the G-20 group in Rio de Janeiro on July 25-26.

The idea behind this tax is to ensure that very rich people pay their fair share. Zucman's research shows that billionaires currently pay very low tax rates compared to their wealth. By taxing them more, governments could raise significant amounts of money, which could then be used for public goods and services, like health, education, and addressing climate change. Zucman believes that better taxation of the super-rich is necessary to maintain social cohesion and trust in governments.

One reason for proposing this tax now is that contemporary tax systems are not effectively taxing the wealthiest people. The current systems allow ultra-rich individuals to pay less in tax relative to their income than other social groups. The global environment is also more favorable now for such a tax, given the progress in international cooperation on tax matters and the success of the global minimum corporate tax agreement in 2021.

This proposal has significant backing from countries like Brazil, France, Spain, Colombia, Belgium, the African Union, and South Africa. While the U.S. has expressed reservations, President Joe Biden has proposed a similar tax targeting very wealthy individuals.

For India, this proposal is particularly relevant. Studies show that wealth inequality in India has been increasing sharply, with the richest 1% holding a significant portion of the country's wealth. Implementing a similar tax in India could help address these growing inequalities and provide additional funds for essential social services.

#### Key Takeaways

#### The Proposal

Gabriel Zucman has proposed a 2% annual tax on individuals holding more than \$1 billion in wealth. This tax aims to ensure fair taxation of ultra-high-net-worth individuals, potentially raising \$200-\$250 billion a year globally from about 3,000 individuals.

#### Rationale for the Tax

Global billionaires benefit from very low effective tax rates, ranging between 0% and 0.5% of their wealth. The wealth of the top 0.0001% has surged significantly since the mid-1980s, growing at an annual rate of 7.1% net of inflation. In contrast, the average income of an adult has grown by only 1.3% net of inflation annually. Progressive taxation is seen as essential to funding public goods and maintaining social cohesion.

#### **Current Global Tax Systems**

Contemporary tax systems are not effectively taxing the wealthiest individuals. This results in ultra-high-net-worth individuals paying less in tax relative to their income than other social groups. The proposal comes at a time when the global environment is more favorable for such tax reforms, following the success of the global minimum corporate tax agreement in 2021.

#### Support for the Proposal

The proposal has support from Brazil, France, Spain, Colombia, Belgium, the African Union, and South Africa. While the U.S. has expressed reservations, President Joe Biden has proposed a similar tax targeting very wealthy individuals.

#### **Relevance to India**

India has seen a sharp increase in wealth inequality, with the top 1% holding a significant portion of the country's wealth. A similar tax in India could address growing inequalities and provide additional funds for essential social services. A 2% tax on the wealthiest Indian families could yield significant revenue, more than twice the central government's budget for the National Rural Employment Guarantee Act in recent years.

#### How to manage 'brain eating' Amoeba cases?- TH FAQ

Science

## **Easy Explanation**

Recently, Kerala has experienced cases of a rare but deadly infection called primary amoebic meningoencephalitis (PAM). This infection is caused by an amoeba called Naegleria fowleri, often found in warm freshwater bodies such as lakes, ponds, and poorly maintained swimming pools. The amoeba enters the body through the nose, travels to the brain, and causes severe damage. The infection is almost always fatal, with a 97% mortality rate. Symptoms include headache, fever, nausea, vomiting, and later, confusion, loss of balance, and hallucinations. Most people die within five to 18 days of showing symptoms.

To diagnose PAM, doctors perform PCR tests on cerebrospinal fluid. Treatment options are limited and include drugs like miltefosine, Azithromycin, and Amphotericin B. Efforts are being made to prevent further infections, such as advising against swimming in stagnant water, keeping water parks and pools chlorinated, and encouraging the use of nose clips while swimming. Kerala's government is actively working on guidelines and measures to control and treat this infection.

#### Key Takeaways

#### **Recent Cases in Kerala**

Kerala has seen four cases of primary amoebic meningoencephalitis (PAM) in the past two months, resulting in three deaths. A 14year-old boy from Thikkodi in Kozhikode district tested positive on July 5 and is currently stable.

#### **Details of Fatalities**

Three deaths have occurred due to PAM: a 12-year-old from Feroke, Kozhikode on July 3; a 13-year-old from Kannur on June 12; and a 5-year-old from Munniyur, Malappuram on May 20.

#### **Understanding PAM**

PAM is caused by the Naegleria fowleri amoeba found in warm freshwater. It enters the body through the nose and infects the brain, causing tissue destruction and swelling. The infection does not spread person-to-person and is fatal in 97% of cases.

#### Symptoms of PAM

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Early symptoms include headache, fever, nausea, and vomiting. Later stages involve confusion, hallucinations, and loss of balance, often leading to coma and death within five to 18 days.

#### **Diagnosis and Treatment**

PAM is diagnosed through PCR tests of cerebrospinal fluid. Treatment is challenging due to the infection's rarity, but drugs like miltefosine, Azithromycin, and Amphotericin B are used. Kerala's Health Department is following CDC guidelines for treatment.

#### Previous Reports in Kerala

PAM was first detected in Alappuzha in 2016 and has since been reported in Malappuram, Kozhikode, Thrissur, and again in Alappuzha in subsequent years.

#### **Preventive Measures**

To prevent infection, it is advised to avoid swimming in stagnant water, use nose clips while swimming, and keep water resources clean and chlorinated. Kerala's government is formulating guidelines and measures to prevent further infections and protect public health.

## 8th July 2024

#### A law around low-carbon climate resilient development- TH Editorial

Environment

### **Easy Explanation**

The Supreme Court of India has recognized the right to be free from the adverse impacts of climate change, considering it as part of the right to life and equality. This recognition highlights the urgent need for India to address climate change through a comprehensive approach. A patchwork of judicial interventions is insufficient; instead, a robust climate legislation tailored to India's unique context is required.

Such a law should re-orient development towards low-carbon and climate-resilient futures, ensuring these objectives are embedded in decision-making processes. This approach must also advance social justice, addressing the needs of vulnerable communities most affected by climate change.

Several countries have implemented 'framework climate laws' that establish governance structures and processes to address climate change effectively. India needs a similar law that focuses on sustainable development while minimizing carbon emissions and enhancing resilience.

Key elements of this proposed law include the creation of a low-carbon development commission to provide expertise and practical solutions, and a high-level strategic body or 'climate cabinet' to drive policy and coordination. Additionally, the law must engage with India's federal structure, ensuring state and local governments are involved and supported in climate action.

#### Key Takeaways

#### Supreme Court Recognition

The Supreme Court of India has recognized the right to be free from the adverse impacts of climate change, linking it to the right to life and equality. This landmark judgment necessitates comprehensive climate legislation in India.

#### Need for Comprehensive Legislation

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Judicial interventions alone are insufficient to address the systemic nature of climate change. A robust climate law tailored to the Indian context is essential for effective climate action.

#### **Re-orienting Development**

The law must ensure that development is oriented towards low-carbon and climate-resilient futures. This involves embedding climate objectives in routine decision-making processes at all levels of government.



#### Social Justice Imperative

Addressing climate change must also advance social justice, focusing on the needs of vulnerable communities and ensuring a just energy transition.

#### Framework Climate Laws

Several countries have implemented framework climate laws that establish governance structures for effective climate action. India's law should define government-wide goals and processes, ensuring accountability and coordination.

#### Low-Carbon Development Commission

A proposed low-carbon development commission, staffed with experts, would provide practical solutions for achieving low-carbon growth and resilience, and serve as a platform for inclusive decision-making.

#### **Climate Cabinet**

A high-level strategic body, or 'climate cabinet', comprising core ministers and state representatives, would drive climate policy and coordination across government sectors.

#### **Engagement with Federal Structure**

The law must meaningfully engage with India's federal structure, supporting state and local governments in climate action through scientific capacity building, financing mechanisms, and coordination processes.

#### **Complementary Sectoral Laws**

The framework climate law should be complemented by sectoral laws and amendments, informed by the overarching climate strategy, to address specific areas of climate action.

#### Realizing the Court's Pronouncement

The Supreme Court's recognition of climate rights opens the door for legal and governance changes. To make this actionable, India must pass a climate law suited to its context, steering development towards a low-carbon, climate-resilient, and just future.

#### The ANRF plan has got off on the wrong foot- TH Editorial

Science

## **Easy Explanation**

In 2023, India's Parliament passed the Anusandhan National Research Foundation (ANRF) Bill, aiming to boost research in Indian universities and colleges. This initiative was welcomed by the scientific community as it promised to reduce bureaucratic obstacles and provide significant funding. However, nearly a year later, the ANRF has faced criticism for not including representatives from universities or industries on its Governing Board and Executive Council, despite aiming to strengthen research infrastructure in these institutions.

The current leadership includes high-ranking government officials and prominent scientists, but lacks people who understand the practical challenges in the university system. There is also a notable absence of industry representatives, which is concerning given that the ANRF plans to raise over 70% of its funding from non-government sources. Additionally, the foundation lacks diverse representation, particularly of women and young entrepreneurs.

India's research and development (R&D) sector is underfunded, and significant changes are needed to make Indian innovations globally competitive. The ANRF must improve grant management, ensure timely disbursal of funds, and reduce bureaucratic hurdles. It should operate differently from other government science departments, with a diverse and experienced leadership that understands both academia and industry. A complete overhaul is necessary to avoid bureaucratic pitfalls and effectively bridge research and teaching in Indian universities.

#### Key Takeaways

#### Purpose of ANRF

The Anusandhan National Research Foundation (ANRF) was established to boost research in Indian universities and colleges, aiming to reduce bureaucracy and provide significant funding for research initiatives.

#### **Current Leadership Issues**

The ANRF's Governing Board and Executive Council lack representatives from universities and industries, despite their goal to strengthen research infrastructure in these institutions. The leadership includes high-ranking government officials and prominent scientists but lacks practical knowledge of university system challenges.

#### **Need for Practical Representation**

For the ANRF to be effective, it needs representatives who understand on-the-ground challenges and can implement strategies effectively. The current setup risks confusion and inefficiency due to multiple committees and advisory roles without practical insights.

#### Lack of Industry Representation

The absence of adequate industry representation and diversity is a major concern, especially since the ANRF plans to raise over 70% of its funding from non-government sources. The current leadership includes only one industry representative and lacks representation from Indian industry and entrepreneurs.

#### Underfunding of R&D

India's research and development sector is significantly underfunded, requiring an increase in the R&D budget to 4% of GDP. The current funding system needs a major overhaul to boost research and make Indian innovations globally competitive.

#### **Operational Improvements Needed**

The ANRF must improve its grant management system, ensure timely disbursal of funds, reduce bureaucratic hurdles, and provide flexibility in spending. It should not follow the government's stringent financial rules and should permit purchases without using the Government e-marketplace portal.

#### Diverse and Experienced Leadership

The ANRF should include more diverse representations of practicing scientists from universities, with a focus on women and young entrepreneurs. The future CEO should have a background in both industry and academia and be capable of raising funds and understanding the global innovation ecosystem.

#### **Complete Overhaul Required**

To avoid becoming like other government departments, the ANRF needs a complete overhaul. This includes bridging research and teaching in universities effectively and ensuring a diverse, practical, and experienced leadership.

## On expunction powers in Parliament- TH Text&Context

Polity

## **Easy Explanation**

The first special session of the 18th Lok Sabha was marked by intense debates between the government and the Opposition. The session concluded with a significant controversy over the removal of certain remarks made by Opposition leaders in both Houses. Rajya Sabha Chairman Jagdeep Dhankhar and Lok Sabha Speaker Om Birla ordered the expunction of parts of speeches made by Mallikarjun Kharge and Rahul Gandhi, respectively, which criticized Prime Minister Narendra Modi and the BJP. This led to accusations that different standards were being applied to different Members of Parliament (MPs).

## When Are Remarks Expunged?

Parliament keeps a detailed record of all proceedings, but certain remarks can be removed if deemed "defamatory, indecent, unparliamentary, or undignified" by the presiding officer. The Lok Sabha Secretariat maintains a list of words and phrases that are considered unparliamentary. When a presiding officer finds certain words or expressions unparliamentary, they are expunded from the official records.

#### Scope of Expunction

Expunction can be broader than just removing unparliamentary language. Remarks that are prejudicial to national interest, offensive to foreign dignitaries, or derogatory to the armed forces can also be removed. Members must withdraw objectionable remarks if asked by the Chair, and failure to do so can result in expunction.

#### **Remarks Against MPs**

If an MP makes an allegation against another MP or an outsider, there is a specific procedure to be followed. The rule does not prohibit making allegations but requires advance notice to allow for an inquiry. This rule does not apply to allegations against Ministers, as Parliament members have the right to question Ministers' conduct.

#### **Process of Expunction**

The Chairman of the Rajya Sabha and the Speaker of the Lok Sabha have the authority to expunge remarks under specific rules. Expunged portions are marked with asterisks in the official records, and the content is explained as 'expunged as ordered by the Chair.' Despite expunction, the relevance of this practice is questioned in the digital age, where live broadcasts and social media keep the removed content accessible.

#### Key Takeaways

#### **Controversy Over Expunged Remarks**

The first session of the 18th Lok Sabha ended with a dispute over the removal of Opposition leaders' remarks criticizing the Prime Minister and the BJP.

#### **Conditions for Expunging Remarks**

Remarks can be expunded if deemed defamatory, indecent, unparliamentary, or undignified by the presiding officer. A list of unparliamentary words is maintained by the Lok Sabha Secretariat.

#### Broader Scope of Expunction

Expunction can also apply to remarks harmful to national interest, offensive to foreign dignitaries, or derogatory to the armed forces. Members must withdraw objectionable remarks if asked by the Chair.

#### **Procedure for Allegations**

Making allegations against another MP or an outsider requires advance notice and an inquiry. This rule does not apply to Ministers, who can be questioned directly by Parliament members.

#### Authority and Process of Expunction

The Chairman and Speaker have the power to expunge remarks, which are then marked with asterisks in the official records. However, the effectiveness of expunction is debated in the digital age where removed content remains accessible online.

#### What is the Internet Archive and why is it facing backlash from book publishers?- TH Text&Context

Science Tech

#### **Easy Explanation**

The Internet Archive (IA), a non-profit organization dedicated to digitizing, preserving, and sharing multimedia content, is currently facing a significant legal challenge from traditional publishers who accuse it of copyright violations. The publishers argue that IA illegally made books available to the public by scanning physical copies and distributing the digital files. This has led to the forced removal of around half a million books from IA's platform.

#### The Case Against Internet Archive

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Traditional publishers like Hachette, HarperCollins, Wiley, and Penguin Random House have sued IA, alleging that it violated their copyrights. The legal dispute began in 2020, and in March 2023, a court ruled in favor of the publishers. The publishers were



particularly against IA's "National Emergency Library" (NEL) initiative during the COVID-19 pandemic, which allowed multiple users to access the same e-book simultaneously. IA argued that it was functioning as a library and defended itself using the doctrine of fair use, but the court did not accept this defense. IA has appealed the decision, and the case is ongoing.

#### Impact of the Lawsuit

As a result of the lawsuit, IA had to remove over half a million books from its database. This has negatively affected users, particularly students who relied on these books for academic research. Traditional publishers argue that IA operates like a piracy database rather than a legitimate library. Despite this setback, IA still hosts a vast collection of digital content, including billions of web pages, millions of books, audio recordings, videos, images, and software programs.

#### Wayback Machine

The Wayback Machine is a service provided by IA that allows users to access archived versions of web pages. It has been preserving web pages since 1996, and users can search through over 866 billion saved pages. This service helps preserve internet history and provides access to old or deleted web content. Users can easily search for archived pages using a URL or keywords, though the results are not always guaranteed to be complete or accurate.

#### Key Takeaways

#### The Case Against Internet Archive

Traditional publishers sued IA for copyright violations, claiming it illegally made their books available by scanning physical copies and distributing digital files. A court ruling in favor of the publishers has forced IA to remove over half a million books from its platform.

#### Impact of the Lawsuit

The removal of books has significantly impacted users, especially students who used these resources for academic purposes. Despite this, IA still maintains a large collection of digital content, including web pages, books, audio recordings, videos, images, and software programs.

#### Wayback Machine

The Wayback Machine is a tool by IA that allows users to access archived versions of web pages. It has been saving web pages since 1996 and provides a valuable resource for accessing old or deleted web content. Users can search for archived pages using URLs or keywords, although the completeness and accuracy of the saved content can vary.

#### What an NSA does?- IE Editorial

Internal Security

## **Easy Explanation**

The restructuring of the National Security Council Secretariat (NSCS) and the changes in the reporting relationships involving the National Security Advisor (NSA) have significant implications that have not received enough attention. The NSA now heads a larger organization with an Additional National Security Advisor (ANSA) and three deputy NSAs. This restructuring seems to shift the NSA's role to a more advisory capacity rather than operational.

The NSA is expected to work with advisory bodies like the National Security Advisory Board and the Strategic Policy Group. However, officials such as the Chief of Defence Staff (CDS) and service chiefs, along with various Union secretaries, report both to their respective ministers and the NSA. This dual reporting can cause turf issues, especially since the Principal Secretary to the Prime Minister typically handles civil bureaucracy.

The creation of an ANSA adds a layer of bureaucracy, complicating the communication between mid-level unit heads and the NSA. Questions arise about who will brief the Prime Minister daily and how the relationship between intelligence leaders, the CDS, and the Prime Minister will be managed.

This restructuring has led to speculation about the future of the incumbent NSA, Ajit Doval, and whether his role will evolve or if he will be succeeded by ANSA Rajinder Khanna. The efficiency of this new structure remains uncertain due to these ambiguities.

Historically, the role of the NSA in India has been evolving since its creation a quarter-century ago. The responsibilities and position within the national government are still not clearly defined. Despite discussions about the NSA's necessity, the criteria and qualifications for the role are not well established. The position has traditionally been filled by officers from the foreign service or police service, but there is no consensus on whether a diplomat, spook, soldier, or scholar is best suited for the job.

The role of the NSA has expanded under Prime Minister Modi, integrating national security management with higher defense management, an experiment yet to be fully evaluated. Recent controversies, such as those involving R&AW and the Agniveer initiative, have brought the NSA's role back into focus.

The Kargil Review Committee had suggested that the CDS should report directly to the Prime Minister. However, the current structure, where the NSA holds cabinet rank and the CDS has the rank of a secretary, may not serve the armed forces well. The CDS should ideally report directly to the Prime Minister while maintaining a consultative relationship with the NSA.

Overall, the evolving role of the NSA and the National Security Council, along with the new restructuring, presents an opportunity to reevaluate and clearly define the responsibilities and reporting structures for effective national security management.

### Key Takeaways

#### **Restructuring and NSA's Role**

The National Security Council Secretariat (NSCS) has been restructured, expanding the NSA's role with an Additional National Security Advisor (ANSA) and three deputy NSAs, shifting the NSA's role to a more advisory capacity.

#### **Reporting Relationships**

Officials such as the CDS, service chiefs, and various Union secretaries report both to their respective ministers and the NSA, causing potential turf issues, especially with the Principal Secretary to the Prime Minister handling civil bureaucracy.

#### ANSA's Role and Bureaucracy

The creation of the ANSA adds a bureaucratic layer, complicating communication between mid-level unit heads and the NSA. This raises questions about daily briefings and the relationship between intelligence leaders, the CDS, and the Prime Minister.

#### Speculation on NSA's Future

There is speculation about the future of the incumbent NSA, Ajit Doval, and whether he will be succeeded by ANSA Rajinder Khanna or an outsider.

#### **Historical Context and Evolution**

The role of the NSA has been evolving since its creation, with no clear criteria for the position. Traditionally filled by officers from the foreign service or police service, there is no consensus on the ideal background for the NSA.

#### Expanded Role Under PM Modi

Prime Minister Modi has expanded the NSA's role, integrating national security management with higher defense management, an experiment yet to be fully evaluated.

#### **Controversies and Reevaluation**

Recent controversies involving R&AW and the Agniveer initiative have brought the NSA's role back into focus, highlighting the need for reevaluation and clear definition of responsibilities.

#### Kargil Review Committee's Suggestion

The Kargil Review Committee suggested that the CDS should report directly to the Prime Minister. The current structure, where the NSA holds cabinet rank and the CDS has the rank of a secretary, may not serve the armed forces well.

#### **Opportunity for Reevaluation**

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The evolving role of the NSA and the new restructuring present an opportunity to reevaluate and clearly define the responsibilities and reporting structures for effective national security management.



#### Environment

#### **Easy Explanation**

The 1960 Indus Waters Treaty (IWT) between India and Pakistan is a crucial agreement for sharing water from the Indus River basin. However, disputes continue to arise, and India has called for amendments due to dissatisfaction with how disputes are resolved. India blames Pakistan for not properly implementing the treaty and has pointed to Pakistan's bypassing of certain processes for arbitration over India's hydroelectric projects.

Climate change has also added urgency to the need for amending the treaty. The Indus basin is highly stressed, with much of its water flow coming from glaciers and snowmelts, which are impacted by climate change. This makes the river's flow more volatile and seasonal. Additionally, unpredictable monsoons contribute to the variability of water flow.

Both India and Pakistan rely heavily on the Indus for agriculture. The river supports over 90% of Pakistan's agricultural output. With growing populations, the quality of water is also a concern, posing threats to food security, health, and biodiversity.

The main issues within the IWT involve infrastructure development and its perceived impact on downstream flows, with Pakistan, as the lower riparian state, often raising concerns. The trust deficit between the two countries exacerbates these issues, such as when Pakistan accused India of "water terrorism" over a barrage project, despite the project being legally permissible under the IWT.

To address these issues, it is suggested to view the Indus river basin as a cohesive geographical unit rather than through the lens of "upper vs lower riparian." This means integrating ecological perspectives into the treaty, adopting and implementing Environmental Flows (EF) to sustain ecosystems and human livelihoods, and harmonizing these flows with international principles.

Additionally, a better understanding of climate change impacts and population pressures is needed. This could be achieved by developing real-time data-sharing mechanisms between the two countries, supervised by the World Bank, to ensure accountability and improve understanding of water quality challenges.

Recognizing climate change as a shared vulnerability and focusing on holistic basin management could help re-establish the treaty as a positive element in India-Pakistan relations.

### Key Takeaways

**Background of the Indus Waters Treaty (IWT)** The 1960 Indus Waters Treaty (IWT) between India and Pakistan is a key agreement for sharing water from the Indus River basin. Disputes continue, and India has called for amendments due to dissatisfaction with the dispute resolution process and Pakistan's alleged non-compliance.

**Climate Change and Water Stress** Climate change impacts the Indus basin, with glaciers and snowmelts contributing significantly to water flow. This makes the river's flow more volatile and seasonal. Unpredictable monsoons also contribute to the variability of water flow.

**Importance of the Indus River for Agriculture** Both India and Pakistan rely heavily on the Indus for agriculture. The river supports over 90% of Pakistan's agricultural output. Growing populations and deteriorating water quality pose additional threats to food security, health, and biodiversity.

**Disputes and Trust Deficit** Infrastructure development and its impact on downstream flows are contentious issues. Pakistan, as the lower riparian state, often raises concerns. The trust deficit between the two countries exacerbates these issues.

**Ecological Perspective and Environmental Flows (EF)** To address these issues, it is suggested to view the Indus river basin as a cohesive geographical unit. This means integrating ecological perspectives into the treaty, adopting and implementing Environmental Flows (EF) to sustain ecosystems and human livelihoods, and harmonizing these flows with international principles.

| Clear your doubts now.

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**Real-time Data-sharing Mechanism** A better understanding of climate change impacts and population pressures is needed. Developing real-time data-sharing mechanisms between India and Pakistan, supervised by the World Bank, would ensure accountability and improve understanding of water quality challenges.

Holistic Basin Management Recognizing climate change as a shared vulnerability and focusing on holistic basin management could help re-establish the treaty as a positive element in India-Pakistan relations.

## Why Arctic Wildfires are bad news for the world?- IE Explained

Environment

## **Easy Explanation**

Smoke from wildfires has once again darkened the skies over the Arctic, marking the third time in five years that high-intensity fires have erupted in the region. The majority of these fires are in Sakha, Russia, where more than 160 wildfires have burned nearly 460,000 hectares of land by June 24. The carbon emissions from these wildfires in June are the third highest in the past two decades. Wildfires have been a natural part of the Arctic's ecosystems, but their frequency and scale have increased due to global warming, which is exacerbating the climate crisis.

The Arctic has been warming roughly four times faster than the rest of the world. While the global average temperature has increased by at least 1.1 degrees Celsius above pre-industrial levels, the Arctic has warmed by about 3 degrees since 1980. This rapid warming has led to more frequent lightning, which increases the likelihood of wildfires. Additionally, higher temperatures have slowed down the polar jet stream, causing it to get "stuck" and bring unseasonably warm weather to the region, which can lead to intense heatwaves and more wildfires.

When wildfires burn, they release greenhouse gases like carbon dioxide (CO2) into the atmosphere, contributing to global warming. The biggest concern with Arctic wildfires is the carbon stored beneath the permafrost. Permafrost in the Arctic holds about 1,700 billion metric tons of carbon, which is significantly more than the world's annual fossil fuel emissions. Wildfires can cause permafrost to thaw, releasing this stored carbon into the atmosphere, which would further exacerbate climate change.

## Key Takeaways

**Frequent Arctic Wildfires** Smoke from wildfires has darkened the skies over the Arctic for the third time in five years, primarily in Sakha, Russia. Over 160 wildfires have burned nearly 460,000 hectares of land by June 24. The carbon emissions from these fires in June are the third highest in two decades.

**Increasing Frequency and Intensity** Wildfires have naturally occurred in the Arctic's ecosystems, but their frequency and scale have increased due to global warming. The Arctic is warming four times faster than the global average, causing more frequent lightning and slowing down the polar jet stream, which leads to heatwaves and more wildfires.

**Impact on Global Warming** Wildfires release greenhouse gases like carbon dioxide into the atmosphere, contributing to global warming. The Arctic permafrost holds about 1,700 billion metric tons of carbon. Wildfires can make permafrost more vulnerable to thawing, releasing this stored carbon into the atmosphere and worsening climate change.

## The vital importance of Putin- IE Explained

International Relations

## **Easy Explanation**

Prime Minister Narendra Modi is set to meet Russian President Vladimir Putin for the first time since Russia's invasion of Ukraine in 2022. This visit highlights the importance India places on its relationship with Russia. Modi's decision to visit Russia for his first bilateral trip after being sworn in breaks from the tradition of first visiting neighboring countries. This move underscores the priority India gives to its relationship with Moscow, especially as NATO nations gather to celebrate their 75th anniversary.

India has a long-standing relationship with Russia, dating back seven decades. While this relationship has faced some stagnation, defense remains a strong pillar of their strategic partnership. India relies heavily on Russian defense equipment, and it is crucial for India to maintain a steady supply of equipment and spare parts from Russia, particularly amid ongoing tensions with China.

Since the war in Ukraine began, India has significantly increased its purchase of discounted Russian oil to manage rising crude prices. This has led to a substantial boost in bilateral trade between India and Russia. However, this economic relationship has put India in a delicate position with its Western allies, as it tries to balance its strategic interests without explicitly condemning Russia's actions.

India's diplomatic stance has been one of neutrality, advocating for peace and respect for international law without directly opposing Russia. Modi's visit aims to reaffirm India's strategic relationship with Russia while navigating the complex geopolitical landscape involving both the West and China.

## Key Takeaways

**Historical Relationship and Current Visit** Modi's visit to Russia is the first since the Ukraine invasion, highlighting the priority India places on its relationship with Moscow. This breaks from the tradition of visiting neighboring countries first, showing the significance of Russia to India's foreign policy.

**Defense Cooperation** India relies heavily on Russian defense equipment, with over 60% of its defense supplies coming from Russia. The cooperation includes joint R&D and production of various defense systems. Maintaining this relationship is crucial, especially with ongoing tensions with China.

**Economic Ties Boosted by Oil Purchases** Since the Ukraine war, India's purchase of discounted Russian oil has significantly increased, boosting bilateral trade. This move, though criticized internationally, is aimed at managing domestic inflation and ensuring energy security.

**Diplomatic Balance** India has maintained a neutral stance, not condemning Russia's invasion but advocating for peace and respect for international law. This delicate diplomatic balance helps India navigate its relationships with both Western allies and Russia.

Future Relations and Challenges Modi's visit is part of ongoing annual summits to strengthen ties. However, issues like the presence of Indians in Russia involved in the Ukraine war and the Moscow-Beijing relationship pose challenges. The visit aims to reaffirm historical ties and ensure China's influence does not adversely affect the India-Russia relationship.

## 9th July 2024

## TRADE POLICY NEEDS A RESET- IE EDitorial

Economy

## **Easy Explanation:**

India has been resistant to expanding the World Trade Organisation's (WTO) agenda to include topics like e-commerce, trade, climate change, and investment facilitation. The country wants to keep its policies flexible to support its economic development strategies. While this approach benefits traditional sectors like agriculture and fisheries, it might limit opportunities in new areas like the digital economy and high-tech manufacturing. India's vision for 2047 aims to transform it into a technology-driven economy and a developed country within the next 25 years.

As the rules of global economic governance change due to factors like climate change and new technologies, India, being a rising economy, has significant stakes in this new scenario. The country's domestic policy reforms aim to promote global integration and sustainable economic growth. India is attracting substantial foreign direct investment (FDI) and aims to boost its goods exports and e-commerce market significantly by 2030. However, e-commerce exports currently constitute a small fraction of total exports.

India's regulatory reforms in data protection, consumer rights, competition, and taxation have created a conducive environment for ecommerce. The country is also committed to achieving net-zero carbon emissions by 2070 and has made significant progress in energy access and reducing greenhouse gas emissions.



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To support its export-led economic growth, India needs to focus on policy predictability in key markets like the US, EU, and Japan. The country should actively participate in WTO negotiations on e-commerce, trade, climate change, and investment facilitation, moving away from its traditionally defensive positions. Engaging in these discussions is crucial for building leadership in the Global South and achieving national economic development goals.

## Key Takeaways:

**India's Resistance to WTO Agenda Expansion:** India resists expanding the WTO's negotiation agenda to include e-commerce, trade, climate change, and investment facilitation to maintain policy flexibility for economic development.

**Vikas Bharat Vision 2047:** India aims to become a technology-driven economy and a developed country within 25 years, focusing on digital economy and high-tech manufacturing.

**Changing Global Economic Governance:** Global economic rules are evolving due to geoeconomics, new technologies, resilient value chains, and environmental sustainability, making it crucial for India to adapt.

**India's Domestic Policy Reforms:** India's policies promote global integration, attracting substantial foreign direct investment and aiming for significant growth in goods exports and e-commerce by 2030.

**E-Commerce Regulatory Reforms:** India's reforms in data protection, consumer rights, competition, and taxation foster a conducive environment for e-commerce.

**Commitment to Net-Zero Carbon Emissions:** India aims to achieve net-zero carbon emissions by 2070, improving energy access and reducing greenhouse gas emissions.

**Need for Policy Predictability:** To support export-led growth, India needs predictable policies in key markets like the US, EU, and Japan and should engage in WTO negotiations on emerging economic issues.

**Historical Context of India's Trade Policy:** India's current trade policy differs from the post-1991 economic reforms, requiring a focus on digitization, sustainable development, and resilient value chains.

**Importance of WTO Participation:** Active participation in WTO discussions is crucial for building leadership in the Global South and achieving national economic development goals.

**Proactive Engagement Strategy:** India's forward-looking approach in multilateral trade and investment matters should extend to WTO negotiations to achieve its economic objectives.

#### Why NEET does not work? -IE Ideas

Sociology

## **Easy Explanation:**

The National Eligibility cum Entrance Test (NEET) was introduced about a decade ago to ensure merit-based selection to medical schools and standardize the medical entrance process. It aimed to curb high capitation fees charged by private medical institutions. However, there are ongoing debates about its effectiveness in achieving these goals.

This year, over 24 lakh candidates took the NEET, paying significant application fees and spending a lot on coaching. Initially, candidates needed to score at least 50 percentile to qualify, but this was reduced to zero percentile in 2023, supposedly to fill vacant seats in private medical colleges. Despite high scores, many students from economically weaker sections find it difficult to afford private medical colleges, making the MBBS dream unattainable for them.

NEET is part of several changes in India's medical education system over the past decade, including the dissolution of the Medical Council of India, changes in faculty-student ratios, and public-private partnerships for developing medical colleges. The medical sector has seen reforms like the Ayushman Bharat insurance scheme, which has increased private sector participation in healthcare.

In comparison, exams like the UCAT in the UK and MCAT in the US only allow students with excellent grades in higher secondary education to take the tests. NEET, however, only requires passing higher secondary school, which can undermine the importance of excelling in high school. Issues like paper leaks and unauthorized allocation of grace marks have also eroded trust in NEET and the National Testing Agency (NTA).

Tamil Nadu has experimented with different entrance systems over the years, including interviews, entrance exams, and using higher secondary marks for admissions. Despite NEET, the state has tried to ensure social equality by providing reservations for government school students.

The quality of medical education depends more on infrastructure, faculty numbers, and patient care services than on entrance exams. NEET should be reevaluated, considering public health as a state subject and education as part of the concurrent list. States should be involved in framing admission processes for institutions they control.

To make the entrance process more inclusive, alternatives to NEET could include assessing performance over two to three years of school education along with an aptitude test, existing caste-based reservations, and quotas for government school students. This would ensure fair representation of students from disadvantaged sections in the medical field, contributing to accessible healthcare for their communities.

## Key Takeaways:

**Introduction and Purpose of NEET:** NEET was introduced to ensure merit-based selection to medical schools and standardize the entrance process, aiming to curb high capitation fees charged by private institutions.

Application and Coaching Costs: Candidates pay significant application fees and spend a lot on coaching, making it financially challenging for many students.

**Qualification Criteria Changes:** The initial qualifying criteria of 50 percentile were reduced to zero percentile in 2023 to fill vacant seats in private colleges, but this has not made MBBS more accessible for economically weaker students.

**Medical Education System Changes:** NEET is part of broader changes in India's medical education system, including the dissolution of the Medical Council of India, changes in faculty-student ratios, and public-private partnerships.

**Comparison with Other Exams:** Unlike UCAT in the UK and MCAT in the US, NEET has lower entry requirements, which can undermine the importance of excelling in high school.

Tamil Nadu's Experience: Tamil Nadu has experimented with different entrance systems and tried to ensure social equality through reservations for government school students.

**Quality of Medical Education:** Factors like infrastructure, faculty numbers, and patient care services play a decisive role in the quality of medical education, more than entrance exams.

**Need for Re-evaluation:** NEET should be reevaluated, considering public health as a state subject and involving states in framing admission processes for institutions they control.

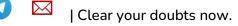
Alternative Approaches: Alternatives to NEET could include assessing school performance over several years, an aptitude test, and existing caste-based reservations to ensure fair representation of students from disadvantaged sections.

## Joblessness & the skill gap - IE Ideas

Economy

## Easy Explanation:

India's job market faces a significant issue with a lack of good-quality jobs, especially for the growing young population. While elections have highlighted joblessness as a critical concern, addressing it requires more than just welfare policies. Historical data



shows that economic growth alone hasn't solved the problem of job availability, making it crucial for political parties to focus on detailed job-promoting policies.

Existing rural employment guarantee schemes provide manual labor for the very poor, but there are still unimplemented aspects of these laws, such as timely wage payments and full provision of stipulated workdays. There is also consideration for a similar urban employment guarantee program to improve infrastructure and environmental resources, although it would be costly.

Long-term solutions require sustainable programs beyond short-term relief. One major issue is the lack of employability due to low skills and training. A large-scale vocational education program linked to apprenticeships in businesses is essential. Successful examples from other countries, such as Germany's vocational system and Kenya's youth employment projects, can be models to follow.

Replacing capital subsidies with wage subsidies for large firms that create new regular jobs, providing technical assistance to nonfarm household enterprises, and addressing demand deficiency by raising incomes of lower-income groups are other potential solutions. A basic income supplement funded by reducing subsidies to the wealthy and increasing taxes on the rich can boost demand and create more jobs.

## Key Takeaways:

Job Market Issue: India faces a significant lack of good-quality jobs, especially for the young population, and economic growth alone hasn't solved this problem.

**Existing Employment Schemes:** Rural employment guarantee schemes provide manual labor but have unimplemented aspects like timely wage payments and full provision of workdays. An urban employment guarantee program is being considered.

Sustainable Programs Needed: Long-term solutions require sustainable programs beyond short-term relief, focusing on improving employability through vocational education and apprenticeships.

**Capital and Wage Subsidies:** Replacing capital subsidies with wage subsidies for firms that create new jobs and providing technical assistance to non-farm enterprises are other potential solutions.

Addressing Demand Deficiency: Raising incomes of lower-income groups through a basic income supplement can boost demand and create more jobs. This can be funded by reducing subsidies to the wealthy and increasing taxes on the rich.

## Behind Russia's high income- IE Explained

Economy

## **Easy Explanation:**

Russia's economy has shown unexpected resilience despite facing extensive Western sanctions. Recently, the World Bank upgraded Russia to a "high-income" country due to growth in trade, the financial sector, and construction. However, this improvement is largely attributed to increased military-related activities and may not last. Russia's economy has adapted by redirecting trade to countries like China, India, and Turkey, and investing in new infrastructure and logistics. Additionally, Russia's job market remains strong with record low unemployment and rising wages, boosting consumer spending.

## Key Takeaways:

**Economic Resilience:** Russia's economy has unexpectedly performed well despite Western sanctions, with the World Bank upgrading its status to a "high-income" country.

**Military-Related Activities:** The growth in Russia's economy is largely due to increased military-related activities, which may not be sustainable in the long term.

**Trade Diversion:** Russia has redirected its trade to countries like China, India, and Turkey, reducing its reliance on Western markets and investing in new infrastructure.



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**Strong Job Market:** Russia's job market is strong, with record low unemployment and rising wages, which has helped boost consumer spending.

**Oil Exports:** Sanctions on Russia's energy sector have not been as stringent, allowing Russia to maintain its oil export revenues by selling to new markets like China and India.

**Investment Recovery:** Corporate investments, particularly in the defense and manufacturing sectors, have recovered, contributing significantly to GDP growth.

**Consumption Recovery:** Private consumption has recovered strongly, driven by a buoyant credit market and a strong labor market.

Government Spending: Increased government spending, particularly on defense, has also contributed to economic growth.

**Long-Term Challenges:** Despite short-term gains, Russia faces long-term economic challenges, including export restrictions, technological gaps, and higher trade costs.

## How climate change fuelled Hurricane Beryl's record early intensification - IE Explained

Environment

## **Easy Explanation:**

Beryl is a very strong hurricane that recently hit the Caribbean islands and the United States. Hurricanes are big storms that form over warm ocean waters near the equator. When warm, moist air from the ocean rises, it creates a low-pressure area that pulls in more air, forming clouds and thunderstorms. As this process continues, the storm gains strength and can become a hurricane.

Hurricanes are ranked from Category 1 to Category 5 based on their wind speeds. Category 5 is the strongest, with winds over 252 kilometers per hour (kmph). Beryl became a Category 5 hurricane very quickly, which is unusual for this time of year. Normally, the first major hurricanes don't form until September because the ocean isn't warm enough yet.

This year, however, the ocean has been much warmer than usual, which scientists believe is due to climate change. Warmer oceans provide more energy for hurricanes, making them stronger. Beryl's rapid intensification into a Category 5 hurricane is a sign of this.

Beryl is significant because it became a Category 5 hurricane in early July, making it the earliest such storm ever recorded in the Atlantic hurricane season. The storm caused a lot of damage, including floods and power outages, especially in Texas.

Scientists are worried that as the planet and its oceans get warmer, we might see more powerful hurricanes more often. Climate change seems to be making hurricanes stronger and more frequent, which can lead to more destruction and danger for people living in affected areas.

## Key Takeaways:

**Formation and Classification of Hurricanes:** Hurricanes form over warm ocean waters near the equator. They are classified into five categories based on their sustained wind speeds, with Category 5 being the strongest.

**Beryl's Rapid Intensification:** Beryl quickly transformed from a tropical depression to a Category 5 hurricane within a few days, making it the earliest Category 5 hurricane recorded in the Atlantic season.

**Impact of Climate Change:** Unusually warm ocean temperatures, likely due to climate change, contributed to Beryl's rapid intensification. Climate change is making hurricanes more prone to rapid intensification.

**Record-Breaking Temperatures:** Ocean heat content and sea surface temperatures in the Atlantic have been at record-breaking levels, contributing to the formation of stronger hurricanes.

**Future Concerns:** Scientists are concerned that as the world and its oceans continue to warm, more powerful hurricanes like Beryl could form in the future.



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Science

### Easy Explanation:

There has been a lot of talk recently about vaccinating girls in India against the human papilloma virus (HPV) to prevent cervical cancer. However, it's important to understand a few key points about this topic.

First, HPV is a virus that can infect humans, and there are about 200 different types of it. Only a couple of these types are linked to precancerous conditions that might lead to cervical cancer. While many women who die from cervical cancer have HPV, most people with HPV do not develop cancer or die from it. This means that the link between HPV and cervical cancer isn't as straightforward as some might think.

Cancer data from India and global organizations show that cervical cancer rates have been declining, regardless of how many people are vaccinated against HPV. Despite this, there is a big push to vaccinate all girls against HPV. This push is controversial because HPV is sexually transmitted, unlike other diseases that spread through the air or water. The idea behind vaccinating young girls is based on the assumption that they will be sexually active and could spread the virus. This assumption doesn't fit well with Indian cultural values and also ignores that men can be carriers of the virus too.

Now, let's talk about the HPV vaccine called Cervavac, which is made in India. Cervavac is promoted as an affordable, locally-made vaccine. But it took nearly 20 years to develop this vaccine after the first HPV vaccines were introduced in the West. Cervavac is made using old techniques from the 1970s, similar to the first vaccine made for Hepatitis-B.

The process of making vaccines has changed a lot over the years. In the past, making vaccines was mostly done by public institutions and shared freely. But in the 1980s, the U.S. changed its patent laws to allow for the patenting of genetically modified organisms and life processes. This shift led to more private companies taking over vaccine development, often with the goal of making a profit.

In India, the Patent Act used to only allow process patents, not product patents. This helped Indian companies produce low-cost generic drugs and vaccines. However, under the current system of product patents, it took a long time to produce a local HPV vaccine like Cervavac. Even though the patents for the HPV vaccine have expired, Cervavac is still expensive.

The high price of Cervavac is a big issue. Despite being made in India with funding from organizations like the Bill & Melinda Gates Foundation, and using facilities that also produced other vaccines, the price remains high. This makes it difficult for many people to afford the vaccine, which is important for public health.

Another concern is the lack of competition. Several Indian companies had plans to produce HPV vaccines, but these have not come to market. This lack of competition keeps prices high.

Currently, the government recommends the Cervavac vaccine for girls aged 9 to 26, but even at the subsidized price, it is costly. For those not covered by the government program, the vaccine costs even more, which is a problem in a country where many people already struggle with high healthcare costs.

In summary, while the need for universal HPV vaccination is debated, issues like high prices and lack of competition need to be addressed to make the vaccine accessible to everyone.

## Key Takeaways:

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**HPV and Cervical Cancer:** Only a few strains of HPV are linked to cervical cancer, and most people with HPV do not develop cancer. Cervical cancer rates are declining globally and in India, regardless of vaccination coverage.

**Controversy Over Universal Vaccination:** The push for universal HPV vaccination in India is controversial due to cultural assumptions and the sexually transmitted nature of the virus. Vaccinating only high-risk groups might be more appropriate.

**Development of Cervavac:** The Indian-made HPV vaccine, Cervavac, took nearly 20 years to develop due to patent laws. It uses old vaccine-making techniques and is still expensive despite being locally produced.

**Patent Laws and Vaccine Pricing:** Changes in global patent laws have shifted vaccine development from public to private hands, leading to higher prices. The high cost of Cervavac is a barrier to widespread use.

Lack of Competition: Other Indian companies had plans to produce HPV vaccines, but these have not materialized, keeping prices high.

**Government Recommendations:** The government recommends Cervavac for girls aged 9 to 26, but the cost is still high for many, making it difficult for widespread use.

## What are new provisions for police officers?- TH Text&Context

Internal Security

## Easy Explanation:

The new criminal laws in India have come into effect from July 1, and the Bureau of Police Research and Development (BPRD) has issued guidelines for police officers to implement these new rules.

### **Registering FIRs:**

- Police must register an FIR (First Information Report) even if there is a jurisdiction issue; they cannot refuse.
- They must register a "zero FIR" and then transfer the case to the correct police station.
- FIRs can be given in writing, orally, or electronically. If given electronically, it must be signed within three days.
- Information given electronically can be through portals like the Crime and Criminal Tracking Network and Systems (CCTNS), police websites, or official email IDs.

#### Videography:

- Videography is now mandatory during searches, at crime scenes, and when seizing property.
- Investigating officers must have electronic devices and training for these tasks.
- A mobile app called 'eSakshya' helps capture photos and videos with geo-tags and timestamps. This data can be accessed by the judiciary and other agencies.

#### Arrest Provisions:

- Information about arrested persons must be displayed at police stations.
- A board (including digital) with names, addresses, and the nature of the offense must be put up.
- Arresting frail, sick, or elderly persons requires permission from a higher officer if the offense is punishable by less than three years in prison.
- Handcuffs should only be used if there's a risk of the person escaping or causing harm.

#### Timelines:

- Medical reports for rape victims must be forwarded to the investigating officer within seven days, who then forwards it to the magistrate.
- POCSO (Protection of Children from Sexual Offences) cases must be investigated within two months.
- Investigating officers must maintain the sequence of custody for electronic devices to prevent tampering.
- The progress of the investigation must be reported to the informant or victim within 90 days.

## Terrorist Acts:

• A new section defines what constitutes a 'terrorist act'.

- The decision to register a case under this section or the UAPA (Unlawful Activities Prevention Act) is up to a Superintendent of Police (SP).
- Factors like whether the terrorist organization is notified under the UAPA, investigation time, the rank of the investigating officer, and the danger posed by the accused are considered.

### Key Takeaways:

FIR Registration: Police must register FIRs even with jurisdiction issues and can use electronic means for FIR submission.

**Mandatory Videography:** Police must use videography during searches and crime scene investigations, using tools like the 'eSakshya' app.

Arrest Procedures: Information about arrests must be displayed, and special permissions are required to arrest elderly or infirm individuals. Handcuffs are to be used cautiously.

**Investigation Timelines:** Medical reports for rape must be submitted quickly, and POCSO cases must be investigated within two months. Proper handling of electronic evidence is emphasized.

**Terrorism Cases:** New rules define terrorist acts, with decisions on registering such cases resting with senior police officers considering several factors.

#### In an electric vehicle, what is regenerative braking?- TH Text&Context

Environment

## Easy Explanation:

Regenerative braking is a feature in electric vehicles that helps increase their energy efficiency. Normally, when a vehicle slows down, its kinetic energy (the energy of motion) is converted to heat and wasted. Regenerative braking, however, captures some of this energy and stores it for later use.

When a car brakes, it slows down by removing kinetic energy. For example, traditional disc brakes use friction to convert this kinetic energy into heat. Regenerative braking, on the other hand, converts this kinetic energy back into electricity. This electricity is then stored in the vehicle's battery.

In an electric vehicle, a battery draws power from the grid and powers an electric motor, which propels the vehicle. During regenerative braking, this motor operates in reverse, acting as a generator. It converts the vehicle's mechanical energy back into electrical energy, which is stored in the battery. This process allows the vehicle to recover some of the energy that would otherwise be lost.

A motor has two main parts: the rotor, which rotates, and the stator, which remains stationary. The stator contains magnets, and the rotor has coils of wire. When the vehicle moves, the motor converts electrical energy into mechanical motion. During braking, the mechanical energy makes the rotor move, creating electricity in the stator, thus switching the motor's role to a generator.

However, regenerative braking can't stop a vehicle completely on its own and must be used with regular brakes that dissipate some energy as heat. It also might not prevent vehicles from rolling downhill. The amount of energy recovered decreases as the vehicle slows down, but regenerative braking is still helpful in stop-and-go traffic.

There are other ways to recover energy as well. For instance, mechanical energy can be used to spin a flywheel, storing energy quickly and efficiently. Flywheels can help manage engine output or assist in navigation systems. Recovered energy can also be used to compress air, which can help start internal combustion engines.

#### Key Takeaways:

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• Regenerative braking converts the vehicle's kinetic energy back into electricity, storing it in the battery for future use, enhancing energy efficiency.



- During braking, the vehicle's motor acts in reverse to generate electricity.
- Regenerative braking needs to be used with conventional brakes for complete stopping and preventing roll-back.
- Other methods of energy recovery include using flywheels and air compression, which store and use energy efficiently.

# 10th July 2024

## The desperate neighbour- IE Editorial

International Relations

## Easy Explanation:

In recent days, seven security personnel in Jammu and Kashmir lost their lives due to terror attacks, which have been linked to Pakistan. Despite efforts to bring peace and security over the last decade, including revoking the special status of Jammu and Kashmir, terrorism remains a significant issue.

Some people believed Pakistan was reducing its terrorist activities due to its internal issues and global pressures, but recent attacks show otherwise. Pakistan has not stopped supporting terrorism but has adapted its methods, partly to avoid international scrutiny.

The belief that removing Jammu and Kashmir's special status would solve the problem has proven false. Pakistan continues to challenge India's control over the region, and the recent attacks seem aimed at disrupting potential elections in Jammu and Kashmir.

Political tensions between India and Pakistan remain high, with limited diplomatic interactions and a focus on isolating Pakistan internationally. However, security measures alone may not change Pakistan's behavior, especially given its close ties with China and nuclear capabilities.

India needs to continue strengthening its counter-terrorism efforts and remain open to diplomatic solutions to ease tensions, as Pakistan faces multiple internal and external challenges.

## Key Takeaways:

- 1. Seven security personnel in Jammu and Kashmir were killed in recent terror attacks linked to Pakistan.
- 2. Despite efforts and policy changes, terrorism in the region remains a significant issue.
- 3. Pakistan has not stopped supporting terrorism but has adapted its methods to avoid international scrutiny.
- 4. Removing Jammu and Kashmir's special status has not solved the problem.
- 5. Diplomatic interactions between India and Pakistan are limited, focusing on isolating Pakistan internationally.
- 6. Security measures alone may not change Pakistan's behavior, especially given its close ties with China and nuclear capabilities.
- 7. India needs to strengthen its counter-terrorism efforts and explore diplomatic solutions to ease tensions.

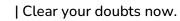
## Jobs, Still- IE Editorial

## Economy

## Easy Explanation:

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There are growing concerns about the lack of sufficient job opportunities in India, even though the economy is growing rapidly. New estimates from the Reserve Bank of India (RBI) suggest that job growth picked up in 2023-24, with employment increasing by 4.67 crore. However, these numbers are provisional and do not break down job growth by sector for the latest year.



In recent years, most job growth has been in agriculture, construction, and trade sectors. These sectors have low productivity, meaning workers in these sectors earn lower wages compared to those in more productive sectors. The increase in jobs has not necessarily translated into better-paying or more stable jobs.

More people, especially women, have joined the workforce recently, but many of these new workers are self-employed or working in family businesses. This indicates a lack of better-paying, more stable jobs. Data shows that a significant portion of the labor force is still working in the informal sector, which includes small, unregistered businesses. These informal sector jobs are much less productive and pay less than jobs in larger, formal companies.

The core issue in India's development is the insufficient creation of more productive non-farm jobs. Even though the government has made efforts to create jobs, progress has been inconsistent. As production processes become more automated and require fewer workers, creating jobs becomes even more challenging. The India Employment Report 2024 highlighted that job creation is becoming more capital-intensive and requires higher skills, which does not match the needs of the Indian labor market. The main challenge for the government is to ensure that economic growth results in more productive and better-paying job opportunities.

## Key Takeaways:

- 1. Despite rapid economic growth, there are concerns about inadequate job opportunities in India.
- 2. RBI estimates suggest a significant increase in employment in 2023-24, but detailed sector-wise data is not yet available.
- 3. Recent job growth has been mainly in agriculture, construction, and trade, which are low-productivity sectors.
- 4. Many new workers, especially women, are self-employed or work in family businesses, indicating a lack of better jobs.
- 5. A significant portion of the workforce is still in the informal sector, where jobs are less productive and pay less.
- 6. The main challenge for India is to create more productive non-farm jobs that translate economic growth into better job opportunities.

**Budgeting for Science- IE Ideas** 

7. Increasing automation and the need for higher skills in jobs pose additional challenges to job creation.

#### Science

## Easy Explanation:

With a new Union Budget approaching, there is a call for fresh ideas and major advancements, similar to the reforms of 1991. India's history shows that investing in science and technology has been a priority, starting from Jawaharlal Nehru's era to Narendra Modi. Nehru focused on space research and atomic energy, which have seen significant progress. However, other areas have lagged behind.

India's spending on research and development (R&D) is very low, at about 0.6-0.7% of GDP, compared to countries like the US, China, Israel, and South Korea, which spend much more. In 2012, Manmohan Singh highlighted India's declining position in global science and the need to do more.

The Economic Advisory Council suggested ways to boost R&D, but progress has been slow. China, for example, increased its R&D spending significantly over the years and now spends a large amount compared to India. China's approach includes a major overhaul of their science and technology sectors and employing a large number of people in R&D.

India's success in space and atomic energy is due to significant investment and granting almost total autonomy to the administrative bodies in these fields. Other areas of science and technology haven't seen similar progress because of heavy government control and bureaucracy. The private sector in India has also not significantly contributed to R&D despite incentives.

PM Modi emphasizes the importance of science, technology, and innovation for building a strong economy. The upcoming Budget could bring significant changes. There are suggestions to merge scientific institutions into a few overarching bodies with similar autonomy as the Space and Atomic Energy Commissions. It's also proposed that companies be mandated to spend a portion of their profits on R&D or contribute to a National Research Foundation if they can't spend it themselves. Additionally, spending on buildings and fixed assets should be excluded from R&D expenditure figures.

There is a need to develop a research mentality in educational institutions and allow state governments to raise funds for R&D projects. The upcoming Budget should focus on revitalizing the R&D sector to achieve India's development goals.

# Key Takeaways:

- 1. **Union Budget Opportunity**: The upcoming Union Budget is seen as a chance for significant reforms in science and technology.
- 2. **Historical Commitment**: Indian leaders from Nehru to Modi have emphasized the importance of science and technology, with notable success in space research and atomic energy.
- 3. Low R&D Spending: India's R&D spending remains low at 0.6-0.7% of GDP, far behind other countries like the US and China.
- 4. **China's Example**: China increased its R&D spending significantly and employed a large number of people in this sector, leading to substantial progress.
- 5. **Need for Autonomy**: Success in space and atomic energy in India is attributed to significant investment and administrative autonomy.
- 6. Private Sector Role: The private sector's contribution to R&D in India has been minimal despite incentives.
- 7. **Proposed Reforms**: Suggestions include merging scientific institutions into overarching bodies, mandating corporate R&D spending, and excluding building costs from R&D expenditure.
- 8. Educational Institutions: Developing a research mentality in higher learning institutions is crucial.
- 9. State Government Involvement: Allowing state governments to raise funds for R&D projects is proposed.
- 10. Budget as Catalyst: The upcoming Budget should revitalize the R&D sector to support India's development goals.

# The High Seas treaty- IE Explained

#### International Relations

# **Easy Explanation:**

The Indian government announced that it will soon sign and ratify the High Seas Treaty, a new international agreement aimed at protecting the oceans. This treaty focuses on reducing pollution, conserving marine biodiversity, and using marine resources sustainably. It's also known as the Biodiversity Beyond National Jurisdictions (BBNJ) Agreement, targeting ocean areas that lie beyond any country's jurisdiction.

Currently, 91 countries have signed the treaty, with eight having ratified it. The treaty aims to achieve three main goals: protecting marine ecosystems, sharing benefits from marine genetic resources fairly, and making environmental impact assessments (EIA) mandatory for activities that could harm the marine environment. Additionally, it seeks to build capacity and transfer marine technologies to developing countries.

The treaty covers high seas, which are international waters beyond the 200 nautical miles (370 km) exclusive economic zones (EEZ) of countries. These areas account for about 61% of the ocean and are considered global commons, meaning they belong to everyone. Oceans are currently governed by the United Nations Convention on the Law of the Sea (UNCLOS), which outlines the general principles of marine protection but does not specify how to achieve these goals in international waters. The High Seas Treaty will serve as an implementing agreement under UNCLOS.

A key objective of the treaty is to create Marine Protected Areas (MPAs) in the high seas, similar to national parks on land. Currently, most protected ocean areas are within territorial waters. The new treaty aims to establish MPAs in high seas to combat pollution, resource over-exploitation, and biodiversity loss.

The treaty also seeks to ensure that benefits from marine genetic resources, which may have valuable properties for drug discovery or cosmetics, are shared equitably among all countries. No single country can claim ownership of these resources.

For any activity that could harm marine ecosystems, an EIA must be conducted and made public. This applies to activities within national jurisdictions if their impacts are expected to affect the high seas.

The High Seas Treaty will become international law once 60 countries ratify it. Ratification means a country agrees to be legally bound by the treaty's provisions. This process varies by country, but often requires legislative approval.

# Key Takeaways:

- 1. **High Seas Treaty**: India plans to sign and ratify this treaty aimed at ocean conservation and sustainable use of marine resources.
- 2. **Objectives**: The treaty focuses on protecting marine ecosystems, sharing benefits from marine genetic resources, and making environmental impact assessments mandatory.
- 3. Marine Protected Areas: The treaty aims to create protected areas in international waters to combat pollution and biodiversity loss.
- 4. **Equitable Benefit Sharing**: The treaty ensures that benefits from marine genetic resources are shared fairly among all countries.
- 5. **Environmental Impact Assessments**: Activities that could harm marine ecosystems must undergo mandatory EIAs, with results made public.
- 6. **Ratification Process**: The treaty will become international law once 60 countries ratify it. Ratification involves a country agreeing to be legally bound by the treaty's provisions, which often requires legislative approval.

# WHAT ORDER OF SAINT ANDREW THE APOSTLE, CONFERRED UPON PM MODI?- IE Explained

### International Relations

# Easy Explanation:

Prime Minister Narendra Modi was awarded Russia's highest civilian honor, the Order of Saint Andrew the Apostle, during his visit to Russia. This award was announced in 2019 for his exceptional contributions to enhancing the strategic partnership and friendly relations between Russia and India.

What is the Order of Saint Andrew the Apostle? The Order of Saint Andrew the Apostle is given to prominent government and public figures, military leaders, and outstanding individuals in science, culture, art, and various economic sectors for their exceptional services to Russia. It can also be awarded to foreign heads of state for their outstanding services to the Russian Federation.

The award is named after Saint Andrew, one of the apostles of Jesus. Saint Andrew traveled extensively to spread Jesus's message and founded the Church of Constantinople, which later led to the establishment of the Russian Orthodox Church. Saint Andrew is considered the patron saint of Russia and Scotland.

Tsar Peter the Great established the Order of Saint Andrew in 1698. The order includes a chain with 17 links featuring a gilded image of the Russian Federation's State Emblem, a double-headed eagle, a badge, a star, and a light blue silk ribbon. For military distinctions, the badge and star are adorned with swords.

The order was abolished in 1918 after the Russian Revolution but was reestablished in 1998 by an Executive Order of the President of Russia.

Who has received this honor before? Previous recipients include notable Russian figures such as military engineer Mikhail Kalashnikov, author Sergey Mikhalkov, the last leader of the Soviet Union Mikhail Gorbachev, and leaders of the Russian Orthodox Church, like Patriarch Alexy II and Patriarch Krill. Foreign leaders honored in the past include Chinese President Xi Jinping in 2017 and former President of Kazakhstan, Nursultan Nazarbayev.

## Key Takeaways:

- 1. Award Received: Prime Minister Narendra Modi received Russia's highest civilian honor, the Order of Saint Andrew the Apostle.
- 2. Award Significance: The award recognizes exceptional services to Russia and can be given to foreign heads of state.
- 3. Historical Background: Established by Tsar Peter the Great in 1698, abolished in 1918, and reestablished in 1998.
- 4. Saint Andrew: The award is named after Saint Andrew, the patron saint of Russia and Scotland.

### 5. Previous Recipients: Includes notable Russian figures and foreign leaders like Xi Jinping and Nursultan Nazarbayev.

## 'Outstanding work': IIT-M team makes mineral nanoparticles with water- TH Science

Science

## Easy Explanation

Water droplets are everywhere and come in different sizes, from large raindrops to tiny microdroplets. These microdroplets are incredibly small, a thousand times smaller than a raindrop. Despite their size, they are very powerful.

Thalappil Pradeep, a chemist at IIT Madras, led a study that showed microdroplets of water can break down minerals into nanoparticles. This study, published in the journal Science, involved researchers from IIT Madras and the Jawaharlal Nehru Centre for Advanced Studies in Bengaluru.

Water molecules in microdroplets are packed closely together, making them more eager to participate in chemical reactions than water molecules in bulk. This makes microdroplets excellent carriers of electric charge. When a larger droplet evaporates and shrinks, the remaining water molecules get closer, establishing weak hydrogen bonds. This often results in the formation of hydroxyl ions (OH-) and free protons (H+), which make the surface more acidic and ready for chemical reactions.

Microdroplets have been shown to assist in forming peptide linkages in amino acids. The new study discovered that these microdroplets could also break bonds in crystals like silica and alumina, creating nanometre-sized pieces.

In an experiment, Spoorthi Bhat, a PhD student, and Dr. Pradeep applied a high voltage to mineral microparticles suspended in water. This process elongated the suspension, creating a mist of microdroplets. Within 10 milliseconds, these microdroplets broke the mineral microparticles into nanoparticles.

The researchers proposed that free protons squeezed into crystal layers could break the minerals from within, aided by the electric fields produced by the charged surface. The surface tension of the droplets also played a role, causing shockwaves that broke the microdroplets apart.

Shashi Thutupalli, a biophysicist not involved in the study, suggested that these findings could be useful in studying proto-cells, which are thought to be the precursors to life on Earth. Microdroplets could mimic proto-cells by providing compartments for biochemical reactions.

Dr. Pradeep also mentioned that the formation of nanoparticles from microparticles could have applications in agriculture. Silica nanoparticles could help convert unproductive soil into fertile land, benefiting crops like rice that absorb silica.

## Key Takeaways

- 1. **Microdroplets' Power**: Despite their tiny size, water microdroplets are powerful and can break down minerals into nanoparticles.
- 2. **Chemical Reactions**: Microdroplets facilitate chemical reactions more readily than bulk water, making them good carriers of electric charge.
- 3. **Experimental Findings**: High voltage applied to mineral microparticles in water can create microdroplets that break the particles into nanoparticles.
- 4. **Potential Applications**: These findings could help in studying the origins of life and improving agricultural productivity by converting unproductive soil into fertile land using silica nanoparticles.

### A Budget that drives growth with stability- TH Editorial

Economy

### **Easy Explanation**

The upcoming Budget for 2024-25, set to be presented on July 23, is the first for the new government and is an opportunity to outline its plans for growth and employment. With a global economic slowdown, India will need to rely on domestic growth. The goal is to achieve a minimum 7% growth in the short term and maintain a 7%-7.5% growth rate in the medium term. This will be helped by reducing the fiscal deficit to 3% of GDP in the next few years. Employment growth is tied to economic growth, with a focus on labor-intensive sectors.

To sustain a growth rate of over 7%, the investment rate needs to be around 35%. Currently, it is slightly below this level. The savings rate also needs to increase slightly to support this investment. A concern is the recent drop in household financial savings, which are crucial for providing investment funds at reasonable rates for the private sector.

On the demand side, net exports have contributed little to GDP growth recently. While service exports are doing better, goods exports have declined. Until exports improve and private investment picks up, government investment will play a key role in driving growth.

Compared to the interim Budget, the government's revenue position is expected to improve due to higher tax and non-tax revenues. Gross tax revenues for 2023-24 were higher than estimated, and with expected GDP growth, tax revenues for 2024-25 are projected to be even higher. Non-tax revenues are also expected to increase, mainly due to higher dividends from the Reserve Bank of India (RBI).

The improved revenue situation will help meet the fiscal consolidation target. Assuming the government sticks to a fiscal deficit of 5.1% of GDP, total expenditure will be around ₹49 lakh crore. This needs to be allocated between revenue and capital expenditures. Revenue expenditure growth is expected to increase to cover higher subsidies, health expenditures, and allocations for rural employment schemes. This will still allow for significant growth in capital expenditure, supporting investment in infrastructure.

The Budget aims to combine growth with stability, including price and fiscal stability. It's important to commit to reducing the fiscal deficit to 5.1% in 2024-25 and further to 3% in the next few years. This will help create a cycle of reducing debt and interest payments, supporting long-term economic stability.

## **Key Takeaways**

- 1. **Budget Presentation**: The new Budget for 2024-25 will be presented on July 23 and will outline the new government's plans for growth and employment.
- 2. **Growth and Employment**: The goal is to achieve at least 7% growth in the short term and sustain a 7%-7.5% growth rate in the medium term, focusing on labor-intensive sectors.
- 3. **Investment and Savings**: To support growth, the investment rate needs to be 35%, and household financial savings need to increase to provide investment funds.
- 4. **Revenue Expectations**: The government's revenue position is expected to improve with higher tax and non-tax revenues, including dividends from the RBI.
- 5. **Expenditure Allocation**: Total expenditure will be around ₹49 lakh crore, with allocations for revenue and capital expenditures to support infrastructure and rural employment.
- 6. **Fiscal Stability**: The Budget aims to reduce the fiscal deficit to 5.1% of GDP in 2024-25 and further to 3% in the next few years, creating a cycle of reducing debt and interest payments.

## The shape of manufacturing 3.0 for Modi 3.0- TH Editorial

Economy

## **Easy Explanation**

Prime Minister Narendra Modi, now leading a coalition government in his third term, needs to focus on economic reforms, especially in manufacturing. As India continues to urbanize, millions of agricultural workers will move to cities seeking formal employment. Failing to create jobs for these workers could strain India's governance. Success in manufacturing will not only benefit India's economy but also strengthen national security, which aligns with American interests.

I Clear your doubts now.

In 2014, the Modi government aimed to increase manufacturing from 15% to 25% of GDP by 2025. Despite economic reforms like the Goods and Services Tax (GST) in 2017, manufacturing has declined to 13% of GDP in 2022, lagging behind countries like Vietnam, Bangladesh, and China. Improving manufacturing is crucial for job creation as many Indian workers are still in low-productivity agriculture and are not suited for the skilled services sector.

India also has a significant goods trade deficit, importing more than it exports. While India has a surplus in services trade, it employs fewer workers. Enhancing manufacturing can help reduce this deficit and create jobs. The U.S. has a stake in India's manufacturing success as it would support regional security and strengthen supply chains.

The central government controls some factors of production, but most are managed by state governments. The new government needs to focus more on policies that encourage state-level improvements in business environments. The Business Reforms Action Plan (BRAP), ranking states on business friendliness, has not been updated since the pandemic and needs revitalization.

The BJP controls about half of India's states, with regional parties governing the rest. Encouraging states to adopt better industrial policies will require incentives and penalties. The government should also focus on job-creating sectors like textiles and furniture rather than just capital-intensive industries like semiconductors.

The U.S. can assist by engaging more with Indian states, providing guidance on economic governance, and encouraging investment beyond major cities like Delhi, Mumbai, and Bengaluru. While India's election offers a chance to reassess policies, the need for jobs, better trade, and security remains. More efforts are needed at the state level to accelerate the "Make in India" initiative.

# Key Takeaways

- 1. Economic Reforms: Modi's third-term government must focus on manufacturing reforms to support urbanization and job creation.
- 2. **Manufacturing Decline**: Despite reforms like GST, manufacturing has declined to 13% of GDP, below targets and other countries' levels.
- 3. Job Creation: Improving manufacturing is essential for creating jobs for workers transitioning from agriculture.
- 4. **Trade Deficit**: India has a significant goods trade deficit and needs to enhance manufacturing to balance trade and create jobs.
- 5. **State Involvement**: Most factors affecting manufacturing are controlled by state governments, requiring better policies and incentives.
- 6. U.S. Role: The U.S. can help by engaging with Indian states and supporting better economic governance and investment.
- 7. **Policy Reassessment**: India's election provides an opportunity to refocus policies on job creation, trade, and security, emphasizing state-level improvements for the "Make in India" initiative.

## The innate limitations in executing iCET- TH Opinion

Science

# **Easy Explanation**

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Even though talks between National Security Adviser Ajit Doval and U.S. counterpart Jake Sullivan seemed promising, challenges remain in the India-U.S. Initiative on Critical and Emerging Technologies (iCET). These challenges mainly stem from U.S. defense companies' reluctance to transfer technology, which they developed at high costs and guard closely due to intellectual property rights (IPR). Additionally, strict U.S. export control laws limit the sharing of military technologies through joint ventures.

The iCET's defense focus includes manufacturing GE F-414 engines for India's Tejas Mk-II aircraft and assembling MQ-9 Reaper drones in India. While negotiations have concluded for 80% technology transfer for the GE engines, critical know-how is missing. Similarly, technology transfer for assembling the MQ-9 drones is limited to 10-15%.

The U.S. defense companies do not act on behalf of the U.S. government regarding IPR, and their commercial motivations could limit technology transfer. These issues led to the failure of the 2012 Defense Technology and Trade Initiative (DTTI), and similar challenges persist with the iCET.

One strategy suggested by Indian defense officials is using "jugaad" or innovative solutions to adapt U.S. platforms to Indian conditions. However, the strict protocols and end-use monitoring agreements with the U.S. prevent such modifications. The iCET also aims to address India's dependency on Russian arms, pushing for future military procurements from the U.S.

The concern is that the iCET could become bogged down in discussions without making real progress, as suggested by Augustine's Laws, which humorously state that excessive talking about tasks can lead to doing less.

# Key Takeaways

- 1. **Challenges in Technology Transfer**: U.S. defense companies are reluctant to transfer technology due to high development costs and intellectual property rights (IPR).
- 2. Strict Export Control Laws: U.S. export control laws limit the sharing of military technologies through joint ventures.
- 3. **Current Focus of iCET**: Manufacturing GE F-414 engines and assembling MQ-9 Reaper drones in India, with limited technology transfer.
- 4. **Past Issues with DTTI**: Similar technology transfer issues led to the failure of the 2012 Defense Technology and Trade Initiative (DTTI).
- 5. **Use of Jugaad**: Indian defense officials suggest using innovative solutions to adapt U.S. platforms, but strict protocols prevent such modifications.
- 6. **Dependency on Russian Arms**: The iCET aims to reduce India's dependency on Russian arms and push for future procurements from the U.S.
- 7. **Potential for Stagnation**: There is a risk that the iCET could become bogged down in discussions without making real progress.

# What is the draft Digital Competition Bill?- TH Text&Context

Polity

# Easy Explanation

In February 2023, the Ministry of Corporate Affairs (MCA) formed a Committee on Digital Competition Law (CDCL) to explore the need for a separate law for competition in digital markets. After a year of discussions, the CDCL recommended adding an ex-ante framework to the existing ex-post framework under the Competition Act, 2002. This means introducing rules to prevent anti-competitive behavior in digital markets before it happens, rather than only punishing it after it occurs. The draft Digital Competition Bill outlines these new preventive rules.

The current Competition Act, 2002, allows the Competition Commission of India (CCI) to act only after anti-competitive conduct has occurred. The CDCL suggests that digital markets need a proactive approach because of their unique nature. Digital companies can grow quickly due to economies of scale and network effects, making it hard to control their dominance once established. The draft Bill aims to address this by focusing on dominant digital companies, setting rules to prevent them from engaging in unfair practices.

The draft Bill is inspired by the European Union's Digital Markets Act and targets only dominant digital companies, identified by financial strength and user numbers in India. These companies, called "systemically significant digital enterprises" (SSDEs), must operate fairly, transparently, and without discrimination. The draft Bill prohibits practices like favoring their own products, restricting third-party applications, preventing direct communication between businesses and users, and misusing user data.

The response to the draft Bill has been mixed. Many are skeptical about how well the ex-ante model will work, especially since it is based on the EU model, which may not fit India's context perfectly. There are concerns that it could negatively affect investments in start-ups and hinder their growth. Some Indian start-ups support the draft Bill, hoping it will curb monopolistic practices by big tech companies, but they worry that the financial and user thresholds might also affect domestic start-ups.

# Key Takeaways

1. **Committee Formation**: The Ministry of Corporate Affairs formed a Committee on Digital Competition Law to explore the need for a new law for digital markets.

- 2. **Ex-Ante Framework**: The CDCL recommended an ex-ante framework to prevent anti-competitive behavior in digital markets before it happens.
- 3. Unique Digital Market Characteristics: Digital markets grow quickly due to economies of scale and network effects, making proactive regulation necessary.
- 4. **Draft Digital Competition Bill**: The draft Bill targets dominant digital companies, setting rules to ensure fair and transparent practices.
- 5. **Systemically Significant Digital Enterprises (SSDEs)**: These companies must not engage in unfair practices like self-preferencing, restricting third-party applications, and misusing user data.
- 6. **Mixed Response**: There is skepticism about the ex-ante model's effectiveness and concerns about its impact on start-ups, although some support exists to curb big tech monopolies.

# On reducing tariffs for smartphone components- TH Text & Context

#### Economy

# **Easy Explanation**

The Indian Cellular and Electronics Association (ICEA), which includes companies like Apple and Foxconn, has asked the government to reduce tariffs on certain smartphone components. At first glance, this might seem to contradict the goal of building a stronger domestic industry for these components. However, ICEA argues that it does not want tariff cuts for components already widely made in India, like open cells and LED parts.

Why reduce tariffs? The main reason is to lower input costs for smartphone assembly units. ICEA says that the domestic market for smartphones is saturated — most phones made in India are assembled domestically, and the surplus is exported. Given that local demand is met, the need for high component tariffs has decreased. Another reason is that some components, like Printed Circuit Boards (PCBs) and sub-assemblies, are complex and not currently made in India. These components are expensive for local assembly operations, and it could take around eight years to start making them domestically.

**Issues with current tariffs** Current tariffs on PCBs (20%) and other inputs are not increasing domestic production of these components but are raising the costs for assembly. Domestic component makers are setting prices just below the cost of imported components, increasing costs for assembly units. Reducing tariffs would force local component makers to lower their prices, reducing expenses for assembly units.

**Competition with other countries** The industry argues that reducing tariffs would help Indian manufacturers compete with major electronics manufacturing countries like China, Vietnam, Thailand, and Mexico. Vietnam, for example, has "bonded zones" with special duty exemptions, allowing lower tariffs on component imports. ICEA suggests that to compete globally, Indian companies should use the best available technologies, regardless of whether they are made in India.

When China began assembling smartphones 15 years ago, its contribution was mostly labor-intensive assembly. Today, Chinese companies provide various technology-intensive components, capturing a significant part of the manufacturing value. ICEA points out that India needs to scale up smartphone production and increase exports to compete with China and Vietnam. This requires reducing tariffs and maintaining a stable tariff regime.

The production linked incentive (PLI) scheme for mobile manufacturing, which subsidizes domestically assembled phones, has supported smartphone assembly units in India.

## Key Takeaways

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- 1. **Tariff Reduction Request**: ICEA has requested lower tariffs on certain smartphone components to reduce input costs for assembly units.
- 2. Market Saturation: Most smartphones made in India are assembled domestically, and the surplus is exported, reducing the need for high component tariffs.
- 3. **Complex Components**: Components like PCBs and sub-assemblies are complex and not yet made in India, raising costs for local assembly.
- 4. Current Tariffs Impact: High tariffs on components are increasing assembly costs without boosting domestic production.

- 5. **Global Competition**: Lowering tariffs would help Indian manufacturers compete with countries like China and Vietnam, which have lower tariffs on component imports.
- 6. **Production Linked Incentive Scheme**: The PLI scheme supports smartphone assembly in India by subsidizing domestically assembled phones.

# 11th July 2024

# The food price constraint- IE Editorial

Economy

# **Easy Explanation**

In India, monetary policy is dealing with mixed economic trends. While GDP growth is strong and core inflation is decreasing, food inflation remains high. Food inflation heavily influences the overall consumer price index (CPI) because food items make up nearly 40% of the CPI basket. Therefore, controlling overall inflation is challenging without reducing food prices.

Historically, whenever CPI approached 4%, food inflation was below 4%. Recent years, however, have seen food inflation surge, especially after the pandemic. Despite efforts to manage inflation, food prices have kept the CPI above the desired 4% target for most months. The Reserve Bank of India (RBI) aims to bring inflation down to 4% but faces challenges due to persistent food inflation.

Climate change adds complexity to this situation. Unpredictable weather patterns like heatwaves and unseasonal rains disrupt agriculture, affecting food prices. For example, in 2022-23, these weather shocks contributed to high inflation despite a normal monsoon. The prediction of an above-normal monsoon by the India Meteorological Department offers some hope, but the distribution of rainfall remains uncertain.

To tackle food inflation effectively, policies must address the impact of climate change. This includes upgrading agricultural infrastructure from production to transportation and storage. Promoting climate-resistant crop varieties and increasing investment in agricultural research and development (R&D) are crucial. Currently, R&D investments are only about 0.5% of agriculture GDP. Enhancing irrigation infrastructure and encouraging cold storage and food processing can also help mitigate food wastage and supply risks.

While monetary policy has limited tools to address these structural issues, it cannot ignore the impact of high food prices on overall inflation. Therefore, the upcoming Union Budget needs to focus on these areas to manage food inflation better.

# Key Takeaways

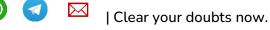
- 1. **Persistent Food Inflation**: Food inflation remains high, heavily influencing the overall consumer price index (CPI).
- 2. Climate Change Impact: Unpredictable weather patterns and climate change disrupt agriculture, leading to higher food prices.
- 3. **Policy Response Needed**: To manage food inflation, policies should focus on upgrading agricultural infrastructure, promoting climate-resistant crops, and increasing investment in agricultural research and development (R&D).
- 4. Budget Focus: The upcoming Union Budget should address these structural issues to better manage food inflation.

## Message to Moscow- IE Editorial

International Relations

## **Easy Explanation**

New Delhi has been moving from its Cold War-era policy of non-alignment to a more practical approach of multi-alignment. This strategy was tested in 2022 when the Ukraine war highlighted major global power rivalries. India has significant partnerships with



both Russia and the US, making the situation complex. Prime Minister Narendra Modi's recent visit to Russia shows that India is becoming more skilled in balancing these relationships. During the visit, Modi expressed warmth towards Russian President Vladimir Putin and announced various agreements on trade, technology, and defense. However, India also criticized Russia, advocating for peace and condemning the alleged bombing of a children's hospital in Kyiv.

Modi's statements during the visit reflect the challenges of maintaining multi-alignment. He emphasized that peace talks cannot succeed amid violence and stressed the need for a peaceful resolution in line with international law and the UN Charter. These statements aim to keep India in a position to mediate between Russia and the West.

Calling Russia an "all-weather friend" ensures ongoing engagement despite the challenges posed by China's support for Russia. India needs Russian oil and arms, making it crucial to maintain supply chains from Moscow. Balancing this act is becoming more difficult in a polarized world, with the upcoming US election potentially reshaping global dynamics.

India must continue engaging with all partners based on its economic and strategic interests. This includes bilateral and multilateral groups like the Quad, I2U2, and the Shanghai Cooperation Organisation. Partnerships with the US, Japan, and Australia help check China in the Indo-Pacific, while the relationship with Russia is vital for energy security and defense. Doing business with a growing India benefits all sides.

# Key Takeaways

- 1. **Multi-Alignment Challenge**: India's move from non-alignment to multi-alignment faces challenges due to the Ukraine war and global power rivalries.
- 2. **Modi's Russia Visit**: Prime Minister Modi's visit to Russia showed diplomatic skill, balancing warmth towards Russia with calls for peace.
- 3. **Strategic Balancing**: India aims to mediate between Russia and the West while maintaining crucial relationships for energy security and defense.
- 4. **Global Engagement**: India continues to engage with all partners, balancing economic and strategic interests, and participating in multilateral groups like the Quad and Shanghai Cooperation Organisation.

It's heating up- IE Editorial

#### Environment

# **Easy Explanation**

The average global temperature from July 2023 to June 2024 was the highest ever recorded, according to the European Union's Copernicus Climate Change Service. The planet was 1.64 degrees Celsius hotter than it was before the fossil fuel era. Although this doesn't mean the world has failed the Paris Climate Pact's 1.5-degree target (which is based on decade averages), it signals a worrying trend. Last month was the hottest June ever recorded. While the onset of La Niña might bring some relief, the data indicates a continuous rise in global temperatures. These temporary breaches of the 1.5-degree target are warnings to prepare for a warmer world and enhance adaptation strategies.

Efforts to reduce greenhouse gas (GHG) emissions and limit warming have been the main focus of climate policies. However, mitigation targets have historically been insufficient, and there has never been a global consensus on who should bear the greater burden of decarbonization. Even a slight increase in global warming intensifies and makes extreme weather events more frequent. The 2023 IPCC Synthesis Report highlighted that current resilience-building measures are often small-scale and reactive, focusing mostly on short-term risks. The report emphasized the need to weather-proof agriculture, protect people's livelihoods, guard vulnerable populations from rising seas and rivers, and strengthen healthcare systems.

A 2021 study by the New Delhi-based Council for Energy, Environment, and Water found that more than 80% of India's population is vulnerable to climate disasters, with most regions having low adaptive capacities. India has a climate adaptation plan, but the annual toll of landslides, floods, and heatwaves shows that more needs to be done to protect the vulnerable. Despite progress, India's weather reporting system struggles to keep up with climate-related complexities, and even major cities like Delhi, Mumbai, and Bengaluru find it hard to handle extreme rainfall. Like much of the world, India's climate adaptation efforts are largely top-down. It's essential for policymakers to understand that while climate change is a global issue, local solutions are crucial.

## **Key Takeaways**

- 1. Record High Temperatures: The global average temperature from July 2023 to June 2024 was the highest ever recorded.
- 2. **Paris Climate Pact**: The 1.64-degree Celsius increase doesn't mean the Paris Agreement's 1.5-degree target has been breached since it measures decade averages.
- 3. **Climate Adaptation Needed**: Temporary breaches of the 1.5-degree target highlight the need for stronger adaptation strategies.
- 4. **Insufficient Mitigation**: Current efforts to reduce GHG emissions have been inadequate, and there is no global agreement on the burden of decarbonization.
- 5. Extreme Weather: Even slight increases in global temperatures make extreme weather events more frequent and intense.
- 6. India's Vulnerability: Over 80% of India's population is vulnerable to climate disasters, with low adaptive capacities in most regions.
- 7. **Improving Resilience**: India needs to enhance its climate adaptation efforts, including better weather reporting and infrastructure to handle extreme weather.
- 8. Local Solutions Important: Policymakers must appreciate that while climate change is a global issue, local solutions are crucial for effective adaptation.

## Russia's razor edge- IE Ideas

### International Relations

# **Easy Explanation**

Prime Minister Narendra Modi's recent visit to Russia has shown India's skill in maintaining strong relations with both global powers despite ongoing conflicts. The visit highlighted warm relations between India and Russia, with discussions on trade, technology, and defense cooperation. Modi's remarks on the Ukraine conflict, emphasizing peace and dialogue, demonstrate India's balanced approach.

Modi successfully negotiated the return of Indian citizens serving in the Russian armed forces and secured Russia's agreement on the need for a peaceful resolution to the Ukraine conflict through international law and the UN Charter. This sets a foundation for potential future negotiations.

The visit also addressed Russia's growing ties with China. Modi likely discussed with Putin the impact of these relations on India's border disputes with China. Russian Foreign Minister Sergei Lavrov's recent statements suggest Russia's position remains neutral.

Trade between India and Russia has significantly increased, especially with India's purchase of discounted Russian oil. However, the trade imbalance, heavily in Russia's favor, and payment issues due to Western sanctions were key discussion points. Solutions like reviving the rupee-rouble payment system were explored.

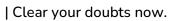
The joint statement from the visit hints at new payment mechanisms and potential growth areas for Indian exports, such as agriculture and automobiles. It also mentions cooperation on maritime and land connectivity projects and setting up production units in India for military supplies.

Overall, the visit suggests that India-Russia relations are not in decline but are being strengthened to adapt to current geopolitical realities. Modi and Putin understand that the future stability of their relationship depends on deeper involvement in each other's development projects.

# Key Takeaways

- 1. **Balanced Diplomacy**: PM Modi's visit to Russia showcased India's ability to maintain strong relations with both global powers amidst conflicts.
- 2. Ukraine Conflict: Modi emphasized peace and dialogue for resolving the Ukraine conflict, reflecting India's balanced stance.
- 3. Return of Indians: Modi secured the return of Indian citizens serving in the Russian armed forces.
- 4. Russia-China Relations: Discussions likely addressed Russia's ties with China and its impact on India-China border disputes.





- 5. Trade Growth: India-Russia trade has significantly increased, especially with India's purchase of discounted Russian oil.
- 6. **Trade Imbalance**: The trade imbalance and payment issues due to Western sanctions were key discussion points.
- 7. New Payment Mechanisms: Solutions like the rupee-rouble payment system were explored to address trade and payment challenges.
- 8. Future Cooperation: Potential growth areas for Indian exports and cooperation on connectivity projects were highlighted.
- 9. Military Supplies: Setting up production units in India for military supplies was discussed.
- 10. Strengthened Relations: The visit indicates efforts to strengthen India-Russia relations amidst current geopolitical realities.

## <u>CrPC & personal law: Divorced Muslim women's right to alimony- IE Explained</u>

Polity

# Easy Explanation

The Supreme Court recently upheld a Telangana High Court decision allowing a Muslim woman to seek maintenance from her exhusband under the Code of Criminal Procedure (CrPC), 1973. This ruling confirms that a divorced Muslim woman can ask for maintenance under Section 125 of the CrPC, which is a secular law, even if they divorced under religious personal law. This decision follows a landmark precedent set 22 years ago and emphasizes the right of Muslim women to seek financial support.

### The Case

Mohd Abdul Samad challenged a 2017 family court order that directed him to pay his ex-wife Rs 20,000 per month as maintenance. The Telangana High Court refused to overturn this order, leading to the Supreme Court case.

Section 125 of the CrPC obligates any person with sufficient means to support his wife or children if they cannot maintain themselves. This section includes divorced women who have not remarried. Justice BV Nagarathna highlighted that Section 125 CrPC is a social justice measure embedded in the Constitution, ensuring support for destitute and deprived women.

The ruling clarified that maintenance under Section 125 CrPC is in addition to the provisions of the Muslim Women (Protection of Rights on Divorce) Act, 1986 (MWPRD Act), not against it. This position was first established in the 2001 Danial Latifi case.

### Shah Bano Case

In 1978, Shah Bano Begum sought maintenance under Section 125 CrPC after being divorced by her husband through 'irrevocable talaq'. Her husband argued that he was only required to support her during the iddat period (three months following divorce) as per Muslim personal law. The Supreme Court upheld Shah Bano's claim, stating that Section 125 CrPC applies to all religions and provides maintenance beyond the iddat period if the woman cannot maintain herself. This decision was overturned by the MWPRD Act enacted by Prime Minister Rajiv Gandhi's government, which placed the maintenance obligation on relatives or the State Wakf Board after the iddat period.

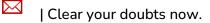
### Challenge to MWPRD Act

The MWPRD Act was challenged by Shah Bano's lawyer, Danial Latifi, who argued that it discriminated against Muslim women and violated their right to equality and dignity. The Supreme Court creatively interpreted the Act to mean that the husband must make provisions for the divorced wife's future needs within the iddat period, but the payment could extend beyond this period. This interpretation ensured that a Muslim husband is responsible for maintenance even beyond the iddat period, upholding the constitutionality of the MWPRD Act.

## Key Takeaways

- 1. **Supreme Court Ruling**: The Supreme Court upheld that a divorced Muslim woman can seek maintenance under Section 125 of the CrPC, confirming a secular approach to maintenance.
- 2. **Case Background**: Mohd Abdul Samad challenged a maintenance order, but both the Telangana High Court and the Supreme Court upheld it, affirming the woman's right to support.
- 3. Section 125 CrPC: This section obligates support for wives, including divorced women, if they cannot maintain themselves.

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- 4. Shah Bano Case: In 1978, Shah Bano's case set a precedent for maintenance beyond the iddat period, which was later challenged by the MWPRD Act.
- 5. **MWPRD Act Challenge**: The Act was challenged for discriminating against Muslim women. The Supreme Court upheld its constitutionality by interpreting that the husband's obligation extends beyond the iddat period.
- 6. **Constitutional Alignment**: The ruling aligns with social justice principles and constitutional provisions for special measures for women.

## Why is India drilling a 6km deep hole in Maharashtra?- TH Science

Science

## **Easy Explanation**

Scientists are still unable to predict exactly when and where an earthquake will happen. Large earthquakes near the boundaries of tectonic plates can cause severe damage and even trigger tsunamis. Smaller earthquakes, however, can occur unexpectedly in densely populated areas, making them hard to predict. This is where scientific deep drilling becomes crucial.

#### What is Scientific Deep Drilling?

Scientific deep drilling involves digging deep boreholes to study the earth's crust. It helps us understand earthquakes, the planet's history, rock types, energy resources, climate change, and more. In India, the Borehole Geophysics Research Laboratory (BGRL) in Karad, Maharashtra, is leading this effort. They aim to drill 6 km deep in the Koyna-Warna region to study earthquakes triggered by the Koyna Dam.

#### **Benefits of Deep Drilling**

Studying earthquakes is difficult from the surface. Deep-drilling allows scientists to conduct unique experiments and monitor seismic activity directly from within the earth. It provides accurate data on the earth's crust, helps validate surface-based models, and informs on geohazards and geo-resources. It also fosters scientific and technological advancements, particularly in seismology.

### Challenges of Deep Drilling

Deep drilling is complex and costly. The earth's interior is hot, dark, and under high pressure, making operations difficult. Despite these challenges, it remains the most reliable method for studying the earth's interior. Researchers can capture rock samples aligned with the earth's timeline, which is not possible with other methods.

#### **Drilling Techniques**

The Koyna project uses a combination of mud rotary drilling and air hammering. Mud rotary drilling uses a steel rod with a diamondembedded drill bit cooled by drilling mud, which also helps bring rock cuttings to the surface. Air hammering uses compressed air to deepen the borehole and flush out debris. The choice of technique depends on the rock type and other conditions.

#### **Discoveries and Future Plans**

The pilot drilling at Koyna has revealed significant geological information, including ancient lava flows and granitic rocks. Downhole measurements have provided insights into the properties of rocks, fluids, gases, and stress regimes. Scientists found water at depths of 3 km, indicating deep percolation. They also discovered that the Koyna region is critically stressed, making it prone to small earthquakes.

Future drilling plans involve reaching 6 km depth, requiring upgraded equipment and careful planning. The data from Koyna will inform future experiments, potentially benefiting various scientific fields, including carbon capture and storage. The Koyna project is a significant step in scientific deep drilling for India, with valuable lessons for future research.

### Key Takeaways

- 1. Unpredictability of Earthquakes: Scientists can't predict exact timings or locations of earthquakes, especially smaller ones in densely populated areas.
- 2. **Importance of Deep Drilling**: Deep drilling helps study the earth's interior, providing valuable data on earthquakes and other geological processes.
- 3. **Koyna Project**: India's BGRL is leading a deep drilling project in Maharashtra to study reservoir-triggered earthquakes, aiming to reach a depth of 6 km.
- 4. **Benefits of Deep Drilling**: It allows direct observation and monitoring of seismic activity, informs on geohazards and georesources, and fosters scientific advancements.
- 5. **Challenges and Techniques**: Deep drilling is complex and costly, requiring specific techniques like mud rotary drilling and air hammering based on conditions.
- 6. **Significant Discoveries**: The Koyna project has provided new geological insights and highlighted the region's critical stress, contributing to earthquake research.
- 7. **Future Plans**: Further drilling and research are planned, with potential benefits for various scientific fields and practical applications like carbon capture and storage.

# India's demographic journey of hits and misses- TH Editorial

Sociology

# Easy Explanation

As we mark World Population Day on July 11, it's a good time to reflect on India's demographic journey. World Population Day was established by the United Nations in 1989 after Dr. K.C. Zachariah proposed the concept. Back then, the global population had reached five billion, and issues like poverty, health, and gender inequality were pressing, especially in developing countries.

In the 1960s and 1970s, there were fears that rapid population growth would lead to widespread poverty and hunger. However, despite these predictions, the following decades showed a different outcome. Global fertility rates dropped significantly, and life expectancy increased due to better living conditions and medical advancements. In India, fertility rates have been falling since the 1970s and are now below the replacement level. The country has made significant progress in health, reducing maternal and child mortality.

In 2015, the UN adopted the Sustainable Development Goals (SDGs), which are important metrics for assessing a country's progress. With the target year of 2030 approaching, it's important to look at India's progress in the SDGs in light of its population dynamics.

## India's Population Dynamics

Three main factors shape India's demographic landscape: fertility, mortality, and migration. India has significantly reduced its fertility rate, which dropped from 3.4 in 1992 to 2 in 2021, below the replacement level of 2.1. Mortality rates have also declined, and life expectancy has increased, leading to an ageing population. By 2050, individuals aged 60 and above are expected to make up 19.5% of the population, up from 8.6% in 2011.

### Impact on Development

These demographic changes have several implications. Lower fertility rates suggest smaller family norms, potentially leading to a demographic dividend where the working-age population is larger than the dependent population. This can boost economic growth if employment opportunities are created. Improved life expectancy indicates better health care and living standards. However, an ageing population requires long-term planning for geriatric care and social security. Rapid urban migration is stressing urban infrastructure, and gender equality remains a significant issue. Women's low participation in the labour force and their absence from political representation could hinder India's progress towards the 2030 goals.

### SDG Journey

India has made progress towards the SDGs, particularly in poverty reduction. The proportion of people living below the poverty line dropped from 48% in 1990 to 10% in 2019, with schemes like MGNREGA playing a crucial role. Health indicators have improved,

with significant reductions in maternal and child mortality rates. However, challenges remain in areas like nutrition. India has a high burden of malnutrition and ranks low on the Global Hunger Index. The country faces a double burden of communicable and noncommunicable diseases, which poses a serious challenge, especially with rising health needs among the elderly.

### What Needs to be Done

To achieve the SDGs, India must address income inequality, create job opportunities for its young population, and tackle changing health needs. Strengthening the safety net to prevent families from slipping into poverty due to health expenses is crucial. Improving the nutrition scenario requires increased budget allocations for health and nutrition. Gender equality is also essential for progress. Empowering women can address many issues and boost India's progress in the SDGs.

Meeting all SDG targets by 2030 will require multi-sectoral collaboration and political will. India's progress in the SDGs is closely linked to the well-being of its population, and understanding and addressing population dynamics is key to achieving sustainable development.

### **Key Takeaways**

- 1. World Population Day: Established in 1989 to address issues like poverty, health, and gender inequality.
- 2. **Demographic Changes**: India's fertility rates have declined, and life expectancy has increased, leading to an ageing population.
- 3. **Impact on Development**: Smaller families and a larger working-age population can boost economic growth. Improved health care and living standards are positive, but ageing and urban migration pose challenges.
- 4. **Progress in SDGs**: Significant progress in poverty reduction and health, but challenges remain in nutrition and disease management.
- 5. **Future Actions**: Address income inequality, create jobs, improve health and nutrition, and promote gender equality to achieve SDG targets by 2030.

Even the odd jobs- TH Editorial

#### Economy

### **Easy Explanation**

For India's gig workers, who are growing in number but are still in a precarious position within the unregulated labor market, the Karnataka Platform-based Gig Workers (Social Security and Welfare) Bill, 2024, offers some relief. However, it still falls short of granting them the security of being recognized as employees. When app-based gig work emerged a decade ago through ride-sharing and food delivery apps, not being labeled as 'employees' was initially seen as a benefit. It allowed 'partners' to maintain their autonomy and earn good money without being tied to rigid contracts. This illusion quickly faded as incomes dropped, working hours increased, and the lack of formal employee status left workers at the mercy of aggregators and algorithms, without safety nets or government regulation. Despite these challenges, the gig economy is expanding. According to a NITI Aayog report, India had 7.7 million gig workers at the start of the decade, and by 2029-30, they are expected to account for 4.1% of income and 6.7% of the non-agricultural workforce.

The draft Bill aims to protect gig workers from arbitrary dismissals, provide human grievance redress mechanisms, and increase transparency in the automated systems that monitor and pay workers. This legislation is an improvement over the Union government's Code on Social Security, 2020. Karnataka's law also promises social security through a welfare board and fund, with contributions from the government and aggregators. These contributions could come from a cut of every transaction on the app or as a percentage of the platform's turnover in the State. Recognizing that many of these platforms report minimal profits, workers' unions have argued that the welfare fee should be charged as a cess on each transaction. Critics point out that other unorganized sector welfare boards have been ineffective, but mandatory registration with such a board will at least make gig workers visible under the law.

Karnataka's Congress government plans to pass the Bill in the monsoon session of the Assembly. It needs to quickly formulate rules and establish the welfare board to ensure the law is in effect by the end of the year. A similar law in Rajasthan, enacted by the previous Congress government, has been sidelined by the BJP government. Nationally, comprehensive legislation is needed to set

# Key Takeaways

- 1. Karnataka Gig Workers Bill: Offers some relief but does not provide employee status.
- 2. Initial Perception: Gig work initially seen as beneficial for autonomy and income; reality proved otherwise.
- 3. **Growing Gig Economy**: India's gig workers are expected to account for a significant portion of the workforce and income by 2029-30.
- 4. **Legislation Goals**: Protects against arbitrary dismissals, provides grievance redress mechanisms, and increases transparency in automated monitoring and payments.
- 5. Social Security Provisions: Proposes a welfare board and fund with contributions from government and aggregators.
- 6. **Implementation Challenges**: Critics highlight the ineffectiveness of similar welfare boards and the need for comprehensive national legislation.

# 12 July 2024

# India and Austria-Indian Express Editorial

# International relations Easy Explanation

The relationship between India and Austria has its roots in trust and friendship, promising a bright future. Prime Minister Narendra Modi's visit to Vienna, the first by an Indian Prime Minister since Indira Gandhi in 1983, was significant. Austria's neutrality made it an ideal place to send a message to both Moscow and the West. Modi emphasized that war and conflict do not solve problems, highlighting India's concern over the Russian missile attack on a children's hospital in Kyiv. Austria's neutrality was established by the 1955 Austrian State Treaty, influenced in part by Jawaharlal Nehru's diplomatic mediation. India and Austria share a history of diplomatic support and evolving ties, with potential for significant collaboration in various sectors. Both nations have taken balanced positions in the Russia-Ukraine war, maintaining commercial ties with Russia while advocating for peace.

# Key Takeaways

- 1. **Historic Visit:** Narendra Modi's visit to Vienna was the first by an Indian Prime Minister since 1983, signaling the importance of India-Austria relations.
- 2. **Neutral Ground:** Austria, a neutral European country not part of NATO, served as an ideal location for Modi to convey messages to both Moscow and the West.
- 3. **Message of Peace:** Modi emphasized that conflicts cannot be resolved through war, reflecting India's concern over recent Russian attacks on Ukraine.
- 4. **Historical Ties:** Austria's neutrality was partly secured through Jawaharlal Nehru's diplomatic efforts in the 1950s, showcasing India's longstanding support.
- 5. **Evolving Relations:** Diplomatic relations established in 1949 have evolved, with both countries recognizing the potential for enhanced bilateral partnerships in various sectors.
- 6. **Balanced Positions:** Both India and Austria have maintained balanced positions in the Russia-Ukraine conflict, with Austria continuing commercial ties with Russia despite EU sanctions.
- 7. **Future Collaboration:** There is a mutual interest in upgrading bilateral partnerships, particularly in areas like infrastructure, renewable energy, e-commerce, fintech, enterprise tech, consumer services, and media and entertainment.

# Chasing Asteroids: Why ISRO wants to venture into planetary defence-Indian Express Editorial

Science and technology

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## Easy Explanation

The Indian Space Research Organisation (ISRO) is considering sending a mission to study the asteroid Apophis when it passes Earth at a distance of 32,000 km in 2029. This mission would mark ISRO's entry into planetary defence, aiming to prevent potential



catastrophic collisions of celestial bodies with Earth. Although Apophis is not a threat, its close approach presents an opportunity for study. ISRO may collaborate with other space agencies, including NASA, which has already planned a mission. This initiative showcases ISRO's growing capabilities and its commitment to global space objectives.

## Key Takeaways

- 1. **ISRO's Interest in Apophis:** ISRO plans to study asteroid Apophis during its close approach to Earth in 2029, potentially launching its own mission or collaborating with other space agencies.
- 2. **Planetary Defence:** This initiative marks ISRO's first step into planetary defence, aimed at preventing asteroid collisions with Earth, which can have catastrophic consequences.
- 3. **Apophis' Initial Threat:** Discovered in 2004, Apophis initially posed a potential collision threat with Earth in 2029, 2036, or 2068. Subsequent observations have ruled out these threats.
- 4. **Frequent Asteroid Entries:** Thousands of asteroids enter Earth's atmosphere daily, with most burning up due to friction. Occasionally, larger asteroids cause damage, such as the 2013 Chelyabinsk event in Russia.
- 5. **Importance of Detection:** The 2013 Chelyabinsk asteroid was detected only after entering the atmosphere, highlighting the need for effective tracking and neutralization of such threats.
- 6. **NASA's Demonstration:** In 2022, NASA successfully altered the trajectory of an asteroid named Dimorphos, demonstrating a key planetary defence technology.
- 7. **Global Interest:** Apophis' approach has generated interest among global space agencies, with several missions expected to study the asteroid closely.
- 8. **ISRO's Evolving Capabilities:** ISRO's participation in studying Apophis reflects its growing confidence and evolution into a comprehensive space agency with advanced capabilities.
- 9. **Understanding Space Objects:** The mission will contribute to the broader understanding of asteroids, meteors, and meteorites, aiding future planetary defence efforts.

HEAT DOME-Indian Express Editorial

#### Geography

### **Easy Explanation**

A heat dome is a weather phenomenon where a high-pressure system in the atmosphere traps warm air like a lid on a pot, preventing it from rising and leading to extended periods of extreme heat. This phenomenon results in clear skies, more sunlight reaching the Earth, and increased warming. The entire western US, especially California, is currently experiencing a massive heatwave due to a heat dome. Scientists are studying the impact of climate change on heat domes, noting that rising global temperatures have made these events more intense.

### Key Takeaways

- 1. **Definition of Heat Dome:** A heat dome occurs when a high-pressure system traps warm air, preventing it from rising and leading to prolonged extreme heat conditions.
- 2. **Mechanism:** The trapped warm air results in clear skies as clouds cannot form, leading to increased sunlight and further warming of the Earth's surface.
- 3. Current Impact: The western US, particularly California, is facing record-breaking temperatures due to a heat dome.
- 4. **Jet Stream Influence:** The formation of heat domes is linked to the behavior of the jet stream. When jet stream waves become stationary, a high-pressure system can get stuck, causing a heat dome.
- 5. **Climate Change Effect:** Rising global temperatures have intensified heat domes. Studies indicate that human-caused climate change has made such extreme temperatures more likely and heat domes more intense.
- 6. Scientific Studies: Research by World Weather Attribution in 2021 found that extreme temperatures during a heat dome in Canada were nearly impossible without climate change. Another study in Nature (2023) showed that heat dome intensity is outpacing the rate of global warming.

# **RIGHTING A WRONG-indian Express Editorial**

Polity
Easy Explanation

In a landmark decision, the Supreme Court of India has ruled that divorced Muslim women can seek alimony under Section 125 of the Criminal Procedure Code (CrPC), marking significant progress from the Shah Bano case of 1985. This judgment by Justices B.V. Nagarathna and A.G. Masih addresses long-standing legal disparities faced by Muslim women due to uncodified personal laws. It overturns previous norms where Muslim women often faced legal discrimination in marital and family matters. The Court emphasized that maintenance is not charity but a fundamental right, reinforcing the notion that all women deserve legal parity, regardless of their religion.

This ruling challenges the patriarchal interpretations that have traditionally limited Muslim women's rights and highlights the necessity for legal reforms that ensure equality and justice. The decision has elicited a mixed response within the Muslim community, with progressive elements welcoming it while conservative factions see it as an intrusion into religious laws. Overall, this verdict is a step toward rectifying gender injustices and enhancing the socio-economic standing of Muslim women, promoting a more inclusive legal framework in India.

## Key Takeaways

- 1. **Historical Context:** The case builds on past controversies, notably the Shah Bano case, where the government initially supported the maintenance verdict but later capitulated to pressure from conservative groups, creating a separate Shariat-compliant law.
- 2. Legal and Social Implications: The verdict emphasizes that alimony is not charity but a fundamental right, aiming to ensure Muslim women can attain legal parity with their Hindu and Christian counterparts who are protected by reformed personal laws.
- 3. **Impact of Patriarchal Norms:** Despite Islamic teachings granting rights to women, patriarchal interpretations often dominate, denying women their legal and religious rights. The ruling challenges these interpretations and supports women's rights as enshrined in the Quran and the Indian Constitution.
- 4. **Community Response:** The decision has received a mixed response within the Muslim community, with progressive segments welcoming it while conservatives view it as an attack on Muslim identity.
- 5. **Broader Legal Framework:** The judgment is part of broader efforts to provide legal frameworks that support women fighting for justice, similar to the outlawing of instant triple talaq in 2017.
- 6. **Religious and Legal Education:** The ruling highlights the importance of educating Muslim women about their rights within the marriage contract (nikahnama) and encouraging a broader understanding of legal protections.
- 7. **Future Implications:** The decision sets a precedent for future legal actions and reforms aimed at eliminating gender disparities and promoting equality within the framework of Indian secular democracy and constitutional rights.

This Supreme Court ruling is seen as a crucial advancement in the fight for gender equality and justice for Muslim women in India, promoting a more inclusive interpretation of legal rights across different religious laws.

# Future investments in India's EV space-The hindu Text and Context

## Science and technology

## Easy Explanation

The Indian government plans to expand its electric vehicle (EV) policy, initially announced in March, to include retrospective benefits. This change aims to incentivize both current and future investments in the domestic EV ecosystem by extending benefits to entities that have already invested in local EV production. The policy's focus on local production and technology adoption is expected to enhance the competitiveness of the Indian EV market, stimulate investment in manufacturing capacity, and reduce costs, thereby accelerating EV adoption in India. The original policy aimed to provide Indian consumers with access to the latest technology and strengthen the EV ecosystem by promoting higher production volumes, economies of scale, and lower production costs. Additionally, the policy mandated that half of the value addition in overall manufacturing be done domestically within five years and reduced import duties on completely built units (CBUs) of EVs. This initiative aligns with India's goals of becoming a global leader in the transition from internal combustion engine vehicles to electric vehicles, ensuring commercial viability and affordability for Indian consumers.

### Key Takeaways

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1. **Policy Expansion:** The government plans to extend the EV policy to include retrospective benefits, incentivizing investments already made in the local EV ecosystem.

- 2. Local Production Incentives: The revised policy will extend benefits to entities that have already invested in local EV production, not just those setting up new facilities.
- 3. **Enhancing Competitiveness:** The policy aims to encourage localization of EV production, boost technology adoption, and enhance the competitiveness of the Indian EV market.
- 4. **Stimulating Investment:** The revised policy is expected to stimulate investment in manufacturing capacity, which will help reduce costs and accelerate the adoption of electric vehicles in India.
- 5. **Import Duty Reduction:** To maintain commercial viability, the import duty on completely built units (CBUs) of EVs was reduced, making EVs more affordable for Indian consumers.
- 6. **Economic Viability:** Ensuring the total cost of ownership is viable for Indian consumers is crucial, with significant capital investment needed in certain EV components.
- 7. **Strategic Localization:** The policy aims to ensure that foreign investments contribute to building core manufacturing capabilities within India, promoting technology transfer and strengthening domestic suppliers.

## Why are dengue cases on the rise worldwide?-The hindu text and context

#### Science

## Easy Explanation

Dengue cases have surged globally, including in India, with significant increases reported in Karnataka, Kerala, and Tamil Nadu. As of April 30, 2024, India recorded 19,447 cases and 16 deaths, with Karnataka showing a notable rise. The World Health Organization (WHO) reported over 7.6 million cases worldwide in 2024, with 90 countries experiencing active dengue transmission. Factors such as urbanization, population movements, and climate change are contributing to the spread of dengue. Dengue is endemic in more than 100 countries, especially affecting regions like the Americas, Southeast Asia, and the Western Pacific. The primary vector is the Aedes aegypti mosquito, and severe cases of dengue can lead to shock, severe bleeding, or organ impairment. The spread of dengue is linked to the changing distribution of mosquitoes, urbanization, human activities, and climate change-induced shifts in weather patterns.

## Key Takeaways

- 1. Surge in India: Dengue cases have significantly increased in Indian states like Karnataka, Kerala, and Tamil Nadu.
- 2. **Global Spread:** As of April 30, 2024, over 7.6 million dengue cases were reported worldwide, with 90 countries experiencing active transmission.
- 3. Endemic Regions: Dengue is endemic in more than 100 countries, with the Americas, Southeast Asia, and the Western Pacific most affected.
- 4. Transmission Vector: The disease is primarily transmitted by the Aedes aegypti mosquito.
- 5. **Factors Contributing to Spread:** Urbanization, population movements, and climate change are major factors contributing to the rise in dengue cases.
- 6. **Impact of Climate Change:** Climate change-induced shifts in weather patterns are affecting the distribution of mosquitoes, increasing the risk of dengue epidemics.
- 7. **Need for Vigilance:** Effective surveillance, immediate response, community empowerment, and education are critical in controlling the spread of dengue.

## Weight loss is among the 'best routes to diabetes remission'-The Hindu Science

#### Science

## Easy Explanation

Recent advancements in hypoglycemic drugs, lifestyle management, bariatric surgery, and dietary interventions have significantly contributed to the potential remission of Type 2 diabetes mellitus (T2DM). Understanding and achieving diabetes remission have become crucial due to the escalating costs and societal burden of treating diabetes. Weight loss, particularly through structured management programs, has proven to be one of the most effective strategies for achieving diabetes remission, significantly reducing healthcare burdens and improving patient quality of life.

### Key Takeaways

- 1. **Importance of Remission:** Diabetes remission involves the reduction of glycated hemoglobin (HbA1c) to below 6.5% for at least three months without the need for glucose-lowering drugs, highlighting the disease's inactivity rather than cure.
- 2. **Effective Weight Loss:** Studies like the DiRECT trial show that significant weight loss (10-15 kg) is highly effective in inducing remission for Type 2 diabetes patients, especially those diagnosed for less than 6 years and not on insulin therapy.
- 3. **Role of Bariatric Surgery:** For patients with a BMI less than 35 kg/m2, bariatric surgery has been effective in achieving better remission rates and glycemic control, with a remission rate of 56.6%.
- 4. **Dietary Interventions:** Low-calorie and low-carbohydrate diets are critical, with studies showing substantial weight loss and remission by reducing fat in the liver and pancreas.
- 5. **Pharmacological Advances:** New hypoglycemic drugs and treatments like GLP1-RA and tirzepatide not only help in managing blood sugar levels but also support significant weight reduction and remission.
- 6. **Continuous Monitoring:** Remission requires ongoing monitoring due to the persistent risk of diabetes recurrence, influenced by factors such as weight gain, stress, and medication effects.
- 7. **Personalized Care Approaches:** Healthcare providers must focus on personalized care strategies that incorporate patient education, regular monitoring, and adjustments in treatment based on individual health statuses and responses.

The concept of diabetes remission represents a transformative approach in diabetes care, emphasizing preventive measures and lifestyle modifications over mere disease management, aiming to reduce long-term healthcare costs and improve patient outcomes.

# Should States get special packages outside Finance Commission allocations?-The Hindu Editorial

Polity

# Easy Explanation

In the context of the Union Budget discussions, the chief ministers of Bihar and Andhra Pradesh have requested special financial packages, a request that brings to light the complex dynamics of fiscal federalism in India. These demands highlight the tension between the need for regional equity and fiscal prudence. The Finance Commission allocates funds based on criteria such as population, income, area, and ecological considerations, yet some states argue that this does not sufficiently address their unique fiscal challenges. The debate encompasses the fairness of the Finance Commission's allocations and the role of central discretionary funds, which are often influenced by political considerations.

# Key Takeaways

- 1. **Finance Commission's Role:** Allocates funds to states based on a formula involving various criteria, ensuring a structured distribution of resources.
- 2. **Demands for Special Packages:** States like Bihar and Andhra Pradesh seek additional funds outside the Finance Commission allocations, citing unique developmental needs and fiscal shocks.
- 3. **Political Influence:** Political alignment with the central government can affect the allocation of discretionary funds, leading to potential biases in fiscal transfers.
- 4. **Impact of GST on Fiscal Autonomy:** The implementation of GST has reduced states' fiscal autonomy by centralizing tax powers, impacting their ability to manage local financial requirements.
- 5. **Economic Impact of Central Aid:** Additional central aid could boost the economic performance of states, but governance quality and the efficiency of fund utilization play crucial roles.
- 6. **Discretion in Fund Allocation:** The central government retains considerable discretion in fund allocation, which can overshadow objective fiscal needs with political priorities.
- 7. **Need for Decentralization:** Experts suggest that greater decentralization and autonomy for states could mitigate the politicization of fiscal transfers and foster more equitable development.

# Reading the tea leaves ahead of China's Third Plenum-The Hindu Editorial

International relations

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## Easy Explanation

The Third Plenum of China's 20th Party Congress is poised to be a defining moment for China's future policies, amidst growing international scrutiny and internal economic challenges. Traditionally a platform for significant policy shifts, the Plenum historically sets China's economic and strategic agenda for the coming years. This year's Plenum is particularly crucial as it follows the economic setbacks from the 'Zero COVID' policy, alongside pressures from an aging population and high debt levels. The international



community, especially Western nations, remains skeptical about China's adherence to a rules-based order, closely watching for signs of a policy shift that might suggest a new direction in China's approach to global engagement and regional security issues, particularly concerning Taiwan and maritime activities. Domestically, there is anticipation that the Plenum might unveil major economic reforms aimed at revitalizing China's economic prospects and stabilizing its socioeconomic landscape. The outcomes of this Plenum will have significant implications not just for China but for global trade, security, and geopolitical dynamics, making it a critical event for both policymakers and global observers.

## Key Takeaways

- 1. **Historical Context:** The Third Plenum has traditionally been a platform for significant economic reforms in China, setting the strategic agenda for years to come.
- 2. **Current Economic Challenges:** China is currently grappling with economic issues intensified by the 'Zero COVID' policy, demographic shifts, and a high debt level, fueling domestic and international pessimism about its economic health.
- 3. **Speculation of Reforms:** There is anticipation that the Plenum might introduce substantial reforms to rejuvenate China's economic trajectory, though the extent and nature of these reforms are still uncertain.
- 4. **Political Implications:** The Plenum occurs against a backdrop of strained relations with Western countries, who view China skeptically and are doubtful about its commitment to a rules-based international order.
- 5. **Security and Regional Dynamics:** The Plenum is also likely to address security concerns, particularly regarding Taiwan and China's maritime activities, which continue to be a point of contention with neighboring countries and the U.S.
- 6. India-China Relations: For India, the outcomes of the Plenum could impact the ongoing strategic and military tensions between the two nations, influencing future diplomatic and military strategies.
- 7. **Global Implications:** The decisions made at this Plenum will not only shape China's economic landscape but also have significant implications for global trade, security, and diplomatic relations.

Overall, the Third Plenum of China's 20th Party Congress is a critical event that could potentially alter China's domestic policies and its international relations, with significant repercussions for global geopolitical dynamics.

# Just a bargaining chip- IE Editorial

13th July 2024

### Polity

The concept of special category status (SCS) was introduced in 1969 by the Planning Commission during the Fourth Five-Year Plan. It aimed to provide higher plan assistance to states that were disadvantaged due to their location and socio-economic factors, with the goal of promoting balanced regional development. Initially, Jammu and Kashmir, Assam, and Nagaland were given this status. Later, all northeastern states, along with Uttarakhand and Himachal Pradesh, received SCS.

The National Development Council used the Gadgil formula to allocate plan assistance, giving higher weightage to population and economic deprivation. The Finance Commission also recognized these states and incorporated the formula to address their budgetary deficits and tax devolution, resulting in higher per capita transfers to SCS states. The Centre paid 90% of the costs for centrally-sponsored schemes as grants to SCS states, while other states received 60-75% grants.

The significant benefits included higher central plan assistance and concessions in taxes. However, with the Planning Commission replaced by NITI Aayog, these benefits are now primarily managed by the Finance Commission. Despite these changes, the demand for SCS has increased, especially with the rising influence of regional parties in central governance, making it a tool for political bargaining.

In February 2014, then Prime Minister Manmohan Singh announced special assistance for the successor state of Andhra Pradesh (excluding Telangana) for five years. However, this did not explicitly grant Andhra Pradesh SCS, leading to questions about the constitutional and fiscal appropriateness of the declaration and its binding nature on future governments.

The 14th Finance Commission did not include special category states in its recommendations but allocated higher funds to the northeastern states, Uttarakhand, and Himachal Pradesh, and proposed continued higher grants and lower cost sharing for central

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The share of these states increased due to weightage given to ecology and forest cover, as well as population indicators based on the 2011 Census. The population growth among SCS states has generally been higher than the national average, except for Himachal Pradesh.

projects. The 15th Finance Commission did not mention SCS but assigned a higher share of devolved taxes to the northeastern and

Changes to the SCS list are likely to be controversial due to the political nature of democracy and the functioning of autonomous institutions in India. While the Planning Commission proposed a framework for identifying SCS, updating it in the current context is challenging.

Leaders of states seeking SCS often do so for political reasons without properly assessing the net benefits. Studies suggest that the benefits of SCS can be achieved through the proper utilization of existing funds and opportunities, supported by a reasonable package from the Centre. Given the stance of the NDA government in 2018, inclusive development should be pursued through strategic interventions and targeted budgetary allocations that are transparent about costs and benefits.

## Key Takeaways

- 1. **Special Category Status (SCS) Origin**: Introduced in 1969 for states disadvantaged by location and socio-economic factors to promote balanced regional development.
- 2. Initial Beneficiaries: Jammu and Kashmir, Assam, and Nagaland; later extended to all northeastern states, Uttarakhand, and Himachal Pradesh.
- 3. Allocation Mechanism: Higher plan assistance through the Gadgil formula; 90% central funding for SCS states in centrallysponsored schemes.
- 4. Political Bargaining Tool: Increased demand for SCS status driven by regional parties and political bargaining.
- 5. **Controversial Changes**: Any change to the SCS list is politically sensitive and challenging to update in the current context.
- 6. **Net Benefits Achievable**: Proper utilization of existing funds and opportunities can achieve similar benefits to SCS, supported by a reasonable package from the Centre.

## FARM AS FACTORY- IE Editorial

#### Economy

### Easy Explanation

The number of workers employed in unincorporated sector enterprises across India has decreased from 11.13 crore in 2015-16 to 10.96 crore in 2022-23, according to data from the National Sample Survey Office. The decline is entirely in manufacturing, where employment has fallen from 3.60 crore to 3.06 crore. Meanwhile, the workforce in trade has slightly increased from 3.87 crore to 3.90 crore, and in "other services" from 3.65 crore to 4 crore. This trend is concerning because the informal sector has historically absorbed unskilled and semi-skilled labor, especially during times of crop failure.

The decline in informal sector employment may be due to the combined impacts of demonetization, the GST rollout, and pandemicinduced lockdowns between 2016-17 and 2021-22. Although some of the job losses in the unincorporated non-agricultural establishments might have been compensated by growth in formal sector employment, there's no reliable data to confirm this. If formalization has indeed occurred, it could be positive, as informal firms typically operate on a small scale with low productivity, resulting in low wages for workers. For instance, the annual emoluments per hired employee in unincorporated sector enterprises averaged just Rs 1,24,482 during 2022-23.

India faces a significant challenge in transforming its employment structure. Many jobs in agriculture and informal sectors, including construction, offer low productivity and subsistence wages. Ideally, surplus labor should move from informal sectors, including agriculture and construction, to formal sectors such as manufacturing and high-productivity services. However, the manufacturing sector is becoming increasingly capital-intensive, with automation and advanced technologies reducing the need for labor.

Conversely, sectors like IT, accountancy, and financial services require skills that most of India's working population does not possess.

A promising solution lies in agriculture and its potential for employment generation. Jobs can be created not only on farms but also in areas close to and supporting farms, such as aggregation, grading, processing, packaging, transporting, warehousing, and retailing of produce, as well as supplying inputs and services to farmers. This approach requires re-imagining agriculture with a vision of the "farm as a factory" that produces crops for further value addition. For example, converting onions and tomatoes to paste and puree can create jobs and add value to agricultural produce, similar to what sugar mills and dairies have achieved.

## Key Takeaways

- 1. **Decline in Employment**: The number of workers in unincorporated sector enterprises fell from 11.13 crore in 2015-16 to 10.96 crore in 2022-23, mainly due to a drop in manufacturing employment.
- 2. Impact of Policies and Events: The decline is attributed to the impacts of demonetization, GST rollout, and pandemic lockdowns between 2016-17 and 2021-22.
- 3. **Informal Sector Characteristics**: Informal sector firms typically have low productivity and pay low wages, with annual emoluments averaging Rs 1,24,482 in 2022-23.
- 4. **Need for Structural Transformation**: There's a need to shift surplus labor from informal sectors, including agriculture and construction, to formal sectors such as manufacturing and high-productivity services.
- 5. **Potential in Agriculture**: Agriculture has potential for job creation through activities related to the aggregation, processing, and marketing of produce, envisioning the "farm as a factory" for value addition.

## The PDS impact on household expenditure- TH Editorial

#### Sociology

#### Easy Explanation:

The Public Distribution System (PDS) in India aims to ensure food security for a large part of the population. Under the National Food Security Act (NFSA) of 2013, a significant portion of the rural and urban population is eligible for subsidized foodgrains. This subsidy allows households to save money on foodgrains and spend more on other nutritious food items. A new survey, the Household Consumption Expenditure Survey (HCES) 2022-23, has been conducted to understand how these free food items impact household spending on other items.

The HCES collected data on food and non-food items received free through various social welfare programs. The survey provides insights into household consumption patterns, though it doesn't precisely measure program coverage. Researchers use this data to compare the number of households consuming PDS items with those eligible under the NFSA, identifying inclusion and exclusion errors.

The NSSO, for the first time, imputed the value of free food and non-food items received by households to provide a clearer picture of their consumption. This imputed value helps calculate the Monthly Per Capita Consumption Expenditure (MPCE) and the MPCE with imputation, which includes free items. This method shows that free items, especially foodgrains from the PDS, significantly impact household consumption.

The survey revealed that the average MPCE for the poorest households in rural and urban areas is ₹1,373 and ₹2,001, respectively. Including the imputed value of free items, many households move to higher consumption categories, indicating an improvement in their living standards. This finding highlights the importance of in-kind social transfers in enhancing the well-being of poorer households.

The report has prompted discussions on measuring poverty, considering whether it should be based on expenditure or total consumption, including free items. In-kind social transfers are crucial for improving the lives of those at the lower end of the income spectrum, emphasizing their role in poverty assessments.

#### Key Takeaways:

- 1. **PDS Objective:** The Public Distribution System (PDS) ensures food security by providing subsidized foodgrains to a large part of India's population under the National Food Security Act (NFSA) 2013.
- 2. HCES 2022-23 Survey: The Household Consumption Expenditure Survey (HCES) 2022-23 collected data on free food and non-food items received through social welfare programs to understand their impact on household spending.
- 3. **Imputed Values:** The NSSO imputed the value of free items to calculate Monthly Per Capita Consumption Expenditure (MPCE) and MPCE with imputation, providing a clearer picture of household consumption.
- 4. **Impact on Poor Households:** The survey showed that free items, especially foodgrains from the PDS, significantly improve the consumption capacity of poorer households.
- 5. **Discussion on Poverty Measurement:** The findings highlight the importance of considering in-kind social transfers when measuring poverty, emphasizing their role in improving the well-being of those at the lower end of the income spectrum.

# 14th July 2024

# Why is militancy on the rise in Jammu- TH FAQ

#### Internal Security

### Easy Explanation:

On July 8, five Army soldiers were killed and five injured in an ambush by militants in Kathua, Jammu and Kashmir. This was part of a series of terror attacks in the Jammu region over the past three years, particularly in areas that had been relatively peaceful for two decades. The increase in attacks in the Jammu region, which includes districts like Doda, Kishtwar, and Rajouri, indicates a possible revival of militancy.

Since 2021, the Jammu region has seen 31 terror incidents, resulting in the deaths of 47 security personnel and 19 civilians. While fewer than in the Kashmir Valley, the frequency and nature of the attacks in Jammu are concerning, particularly as they target security forces and civilians.

There are several reasons for this rise in violence. Following the 2020 Galwan clashes with China, many Army personnel were redeployed from Jammu to the China border, weakening the security presence in Jammu. This, combined with the government's claims of improved security post-Article 370 abrogation, has made Jammu a convenient target for militants aiming to destabilize the region.

Estimates suggest that around 20-25 militants have infiltrated from Pakistan and are operating in specific areas of Jammu. The challenging terrain, forest cover, and poor road and mobile connectivity make it easier for militants to hide and plan attacks.

Infiltration happens through vulnerable patches along the international border and Line of Control, and recent attacks suggest a revival of old infiltration routes. Local support for terrorists is suspected but not conclusively proven, although some locals have been arrested for aiding militants.

Efforts are being made to improve security and revive Village Defence Guards to strengthen local defense against militants. However, recent attacks remain under investigation with few arrests, indicating the need for increased security measures.

### Key Takeaways:

- 1. Increase in Attacks: There has been a significant rise in terror attacks in the Jammu region over the past three years, targeting security forces and civilians.
- 2. Historical Context: The Jammu region, previously free from such incidents for two decades, is experiencing a resurgence of militancy.
- 3. **Security Challenges:** Redeployment of Army personnel to the China border and weakened local security presence have made the region vulnerable.
- 4. Infiltration Routes: Militants are using old infiltration routes and challenging terrain to evade security forces.
- 5. Local Support: Some locals have been arrested for aiding militants, but broader support is not conclusively proven.
- 6. Security Measures: Efforts to improve security include deploying additional forces and reviving Village Defence Guards.

#### 7. Ongoing Investigations: Investigations into recent attacks are ongoing with limited success in apprehending militants.

# How is India's hunt for critical minerals going? TH FAQ

Economy

#### Easy Explanation:

In late June, the Indian government awarded mining rights for six critical mineral blocks, including graphite, phosphorite, and lithium, to private players under a revamped mining law. Critical minerals like copper, lithium, nickel, and cobalt are essential for the global shift to cleaner energy. The demand for these minerals is rising rapidly, with projections indicating a significant increase by 2040. India relies heavily on imports for these minerals, with 100% dependency for lithium, cobalt, and nickel.

Despite having natural reserves, India has not fully explored or utilized them. For example, India has 11% of the world's ilmenite deposits but still imports titanium dioxide. Recently, lithium reserves were discovered in Jammu and Kashmir, offering hope for self-sufficiency. To reduce dependency on imports, the government amended the Mines and Minerals Act in 2023 to grant mining concessions for 24 critical minerals. However, the response to the auctions has been lukewarm, with many blocks not finding bidders due to insufficient data and technological challenges.

Most of the domestic blocks being auctioned are still in the early stages of exploration, so commercial production and benefits are unlikely to be realized by 2030. To ensure mineral security, India is also acquiring overseas assets and has joined the U.S.-led Mineral Security Partnership.

#### Key Takeaways:

- 1. Awarding Mining Rights: India has awarded mining rights for six blocks of critical minerals to private players for the first time under a revamped law.
- 2. **Importance of Critical Minerals:** Critical minerals like lithium, cobalt, and nickel are essential for green energy transitions, with their demand projected to rise significantly by 2040.
- 3. India's Import Dependency: India relies heavily on imports for critical minerals, with 100% dependency for lithium, cobalt, and nickel.
- 4. Untapped Reserves: India has natural reserves of some critical minerals, but they remain underexplored and underutilized.
- 5. **Recent Lithium Discovery:** Lithium reserves were discovered in Jammu and Kashmir, which could help reduce import dependency.
- 6. **Amended Mining Law:** The government amended the Mines and Minerals Act in 2023 to grant mining concessions for 24 critical minerals, aiming to boost domestic production.
- 7. **Challenges in Auctions:** The response to auctions has been low due to insufficient data on reserves and technological challenges in extraction.
- 8. Future Production Timeline: Domestic production from the newly auctioned blocks is unlikely to begin before 2030.
- 9. **Overseas Acquisitions:** India is acquiring overseas assets to ensure mineral security and has joined the U.S.-led Mineral Security Partnership.

## Air pollution harms pollinators more than pests, study finds- TH Science

Science

#### Easy Explanation:

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A recent study shows that air pollution harms bees and other beneficial insects more than crop-destroying pests. Researchers from the University of Reading reviewed data from 120 scientific papers about how 40 types of insects in 19 countries respond to air pollutants like ozone, nitrogen oxides, sulfur dioxide, and particulate matter. They found that pollinators, including bees, moths, and butterflies, had a 39% decline in foraging efficiency when exposed to high levels of air pollution. In contrast, pests like aphids were not significantly affected.

| Clear your doubts now.

The researchers believe that beneficial insects are more impacted by air pollution because they rely on scent-based communication. Air pollutants can alter these scent signals or make them harder for insects to detect, disrupting their ability to find flowers, mates, or prey. Pests, on the other hand, rely more on direct contact or visual cues and are less affected by air pollution.

The study examined how air pollution affects insect behavior and biology, including feeding, growth, survival, reproduction, and locating food. The most significant impact was on insects' ability to find food, which dropped by about one-third on average due to air pollution. Ozone was found to be especially harmful, reducing beneficial insects' ability to thrive by 35%. Even low levels of ozone below current air quality standards can cause significant damage.

The researchers warn that even low levels of air pollution are harmful to insects and that increasing levels of tropospheric ozone could have serious consequences for global insect populations and the ecological services they provide.

### Key Takeaways:

- 1. **Impact on Beneficial Insects:** Air pollution significantly harms bees and other beneficial insects more than crop-destroying pests.
- 2. **Pollutants Studied:** The study reviewed the effects of ozone, nitrogen oxides, sulfur dioxide, and particulate matter on 40 types of insects.
- 3. **Foraging Efficiency Decline:** Pollinators like bees, moths, and butterflies experienced a 39% decline in foraging efficiency due to air pollution.
- 4. **Scent-Based Communication:** Beneficial insects rely on scent-based communication, which is disrupted by air pollutants, while pests rely more on direct contact or visual cues.
- 5. **Ozone's Harmful Effects:** Ozone is particularly harmful to beneficial insects, reducing their ability to thrive by 35%.
- 6. Low Pollution Levels Harmful: Even low levels of air pollution can cause significant damage to beneficial insects.
- 7. Future Risks: Increasing tropospheric ozone could have serious consequences for global insect populations and their ecological services.

Nobel laureate supports India's pursuit for a neutrino lab- TH Science

Science ChatGPT

#### Easy Explanation:

If the India-based Neutrino Observatory (INO) becomes a reality, it will be one of the largest basic science projects in the country. Nobel laureate and neutrino researcher Takaaki Kajita supports the project. Neutrinos are abundant particles that help us understand the origin of matter in the universe. In 1965, Indian, Japanese, and British scientists discovered atmospheric neutrinos in a goldmine in Karnataka. Inspired by this, Japan continued experiments and established the Super-Kamiokande neutrino observatory, which contributed to two Nobel Prizes.

Indian scientists planned their observatory, and in 2011, the Indian government announced Rs. 1,350 crores for INO in Tamil Nadu. Over a decade later, there has been no progress, and the project's fate is uncertain. Meanwhile, Japan made significant discoveries, including neutrino oscillation, leading to another Nobel Prize for Takaaki Kajita in 2015.

Opposition to INO includes concerns about environmental impacts and radioactivity. INO scientists clarify that the underground location will minimize environmental impact, and the experiment won't produce radioactivity. Kajita explains that the Japanese project faced less opposition because it used an existing mine and initially focused on a different experiment. A neutrino observatory in India would benefit the scientific community, providing a world-class facility for research without needing to travel abroad.

Kajita emphasizes the importance of having a local neutrino laboratory for scientific progress. Despite setbacks, he believes the INO project is worth pursuing. He highlights the potential for significant discoveries in neutrino physics and the importance of continued efforts towards establishing an underground lab.

#### Key Takeaways:

- 1. **INO Project:** The India-based Neutrino Observatory (INO) aims to be a major basic science project, supported by Nobel laureate Takaaki Kajita.
- 2. **Neutrinos:** These particles help us understand the origin of matter in the universe. Significant discoveries have been made in this field, leading to Nobel Prizes.
- 3. **Historical Context:** The discovery of atmospheric neutrinos in India in 1965 inspired continued research in Japan, resulting in the establishment of the Super-Kamiokande observatory.
- 4. INO Plans: The Indian government announced funding for INO in 2011, but progress has been stalled.
- 5. **Opposition:** Concerns about environmental impact and radioactivity have hindered the project's progress, despite reassurances from scientists.
- 6. **Benefits of Local Observatory:** A neutrino observatory in India would benefit the scientific community by providing a local, world-class research facility.
- 7. **Kajita's Support:** Takaaki Kajita emphasizes the importance of a local neutrino lab for scientific progress and believes the INO project is worth pursuing despite setbacks.

# Nipah monoclonal antibody trials may begin in India in 2025- TH Science

### Science

## Easy Explanation:

India might start human clinical trials for a new Nipah monoclonal antibody, MBP1F5, next year, pending approval from the drug regulator. This antibody aims to provide immediate protection against the deadly Nipah virus, which has a high mortality rate of 40% to 75%. Similar trials will also be conducted in Bangladesh, where Nipah outbreaks have been frequent. Currently, there is no approved vaccine for the Nipah virus worldwide.

The antibody is undergoing phase-1 trials in the U.S., funded by the Coalition for Epidemic Preparedness Innovations (CEPI) and conducted by ServareGMP and Mapp Biopharmaceutical. The trials in India and Bangladesh will commence after the U.S. phase-1 trial completes. Regulatory authorities in both countries are involved in the trial discussions.

The trial in India is expected to begin in 2025, depending on the Indian drug regulator's review. The trial may either start as phase-1 or move directly to phase-2, with at least 200 participants planned. Multiple sites in both countries will be used for the trial, chosen based on consultations with health and regulatory authorities.

Preclinical studies have shown the monoclonal antibody to be highly effective against the Nipah virus, preventing the virus from entering host cells and causing disease. The antibody offers protection for at least six months, covering both known strains of the virus.

CEPI plans to ensure equitable access to the antibody in case of positive trial results. This includes pricing commitments for countries in the Global South and storing doses in Nipah-affected countries for rapid availability during outbreaks.

### Key Takeaways:

- 1. **Potential Clinical Trials:** India and Bangladesh may start human trials for a new Nipah monoclonal antibody, MBP1F5, next year, pending regulatory approval.
- 2. Nipah Virus: The virus has a high mortality rate of 40% to 75%, with recent outbreaks in both countries.
- 3. **Current Status:** The antibody is in phase-1 trials in the U.S., funded by CEPI and conducted by ServareGMP and Mapp Biopharmaceutical.
- 4. **Timeline and Participants:** Indian trials are expected to begin in 2025 with at least 200 participants, depending on regulatory reviews.
- 5. **Preclinical Success:** Studies show the antibody effectively prevents the Nipah virus from entering host cells, offering protection for at least six months.
- 6. **Equitable Access:** CEPI plans to ensure the antibody is affordable and accessible in Nipah-affected countries, with stored doses for rapid deployment during outbreaks.

# 15th July 2024

# Unmade in America- IE Editorial

International Relations

# **Easy Explanation**

The assassination attempt on Donald Trump by a young man has highlighted the severe issues within the American political system. The incident reveals deep political polarization, the influence of guns, and the radicalizing power of the internet. Historically, several American Presidents have been targeted, but this recent attempt signifies a profound level of anger and alienation in society. The political rhetoric following the attempt remains inflammatory.

The attack shows a need for America to introspect and cleanse its political environment to avoid future incidents. Political violence and domestic terrorism are significant threats, exemplified by the 2021 Capitol attack by Trump supporters. Such acts undermine democracy, leading to fear and reduced public engagement. Social media and the dark web play roles in spreading misinformation and radicalizing individuals.

Strengthening gun control, combating online radicalization, and promoting civic education are crucial steps to prevent future violence. The attempted assassination of Trump can be a pivotal moment for America to address violence's root causes, promote dialogue, and reaffirm democratic values.

# Key Takeaways

- 1. Assassination Attempt: A 20-year-old attempted to assassinate Donald Trump, exposing deep political and social issues in the US.
- 2. **Historical Context**: Previous US Presidents have faced assassination attempts, but the current climate of anger and polarization is unprecedented.
- 3. **Political Polarization**: The attack highlights the severe political divide and the radicalizing influence of the internet and social media.
- 4. **Need for Introspection**: The US needs to deeply introspect and cleanse its political environment to avoid further incidents of political violence.
- 5. **Impact on Democracy**: Political violence undermines democratic principles, reducing political participation and public engagement.
- 6. **Recommendations**: Strengthening gun control, combating online radicalization, and investing in civic education are essential steps.
- 7. **Future Implications**: Addressing the root causes of violence and promoting democratic values are vital to prevent similar incidents in the future.

## Pictured with dignity- IE Editorial

Polity

# Easy Explanation

On July 8, the Supreme Court set guidelines for representing Persons with Disabilities (PwDs) in visual media, responding to criticism against the film *Aankh Micholi*. The SC highlighted the human rights model of disability, which views disability as a natural part of human diversity, emphasizing the need for inclusion. The Court noted the responsibility of private entities under the Rights of Persons with Disabilities Act, 2016, but acknowledged limitations on compelling private parties to create awareness films.

The SC discussed the impact of stereotypes as barriers to dignity and non-discrimination, distinguishing between cinematic speech, hate speech, and group defamation. It stressed that freedom of expression does not include the right to stereotype or disparage marginalized groups, considering the intention and overall message of the film.

The SC's guidelines emphasize sensitivity in portraying disability, advocating for consultation with disability advocacy groups and more nuanced representations in media.

# Key Takeaways

- 1. **Supreme Court Guidelines**: The SC set guidelines for representing Persons with Disabilities (PwDs) in visual media, emphasizing inclusion and sensitivity.
- 2. Human Rights Model: The SC highlighted the human rights model of disability, viewing disability as part of human diversity and stressing inclusion.
- 3. **Responsibility of Private Entities**: The Court noted the responsibility of private entities under the Rights of Persons with Disabilities Act, 2016, but acknowledged limitations.
- 4. **Impact of Stereotypes**: The SC discussed how stereotypes act as barriers to dignity and non-discrimination, affecting marginalized groups.
- 5. **Distinction in Speech**: The SC distinguished between cinematic speech, hate speech, and group defamation, noting different restrictions on freedom of expression.
- 6. **Freedom of Expression**: The SC reiterated that freedom of expression does not include the right to stereotype or disparage marginalized groups.
- 7. **Guidelines for Media**: The SC's guidelines call for consultation with disability advocacy groups and more nuanced portrayals of disability in media.

# Reaffirming a right- IE Ideas

#### Sociology

# **Easy Explanation**

The recent Supreme Court judgment in the case of Mohd Abdul Samad vs. The State of Telangana has reinforced the rights of divorced Muslim women to claim maintenance under Section 125 of the Code of Criminal Procedure (CrPC), 1973. This provision allows women to seek financial support from their husbands if they are unable to maintain themselves after a divorce.

The judgment addressed a case where a woman was awarded Rs 20,000 per month as maintenance by a family court. The husband argued that after divorcing her, she was only entitled to maintenance under the Muslim Women (Protection of Rights on Divorce) Act of 1986 (MWA), which provides for maintenance during the iddat period (three months after divorce) and a fair provision for her future. He claimed that this special law should take precedence over the CrPC.

The Supreme Court clarified that the MWA does not override the rights granted under Section 125 of the CrPC. It stated that the right to claim maintenance under the CrPC is a socially beneficial provision and is not nullified by the enactment of the MWA. The Court emphasized that the secular nature of Section 125 of the CrPC applies to all women, regardless of their religion, and is designed to ensure that divorced women receive adequate financial support.

The judgment referred to the 2001 Supreme Court case of Danial Latifi and Another vs. Union of India, which interpreted the MWA to mean that the husband must provide a fair and reasonable provision for the woman's entire life within the iddat period. This interpretation ensured that divorced Muslim women would receive lifelong maintenance, aligning with the principles of equality and social justice.

The Supreme Court's ruling in the current case further solidified that divorced Muslim women can seek maintenance under the CrPC in addition to the provisions of the MWA, thereby protecting their rights and ensuring their financial well-being.

## Key Takeaways

- 1. **Reinforcement of Rights**: The Supreme Court reinforced that divorced Muslim women can claim maintenance under Section 125 of the CrPC, even after the enactment of the MWA.
- 2. **Secular Provision**: Section 125 of the CrPC is a secular provision that applies to all women, ensuring they receive adequate financial support after divorce.

- 3. **MWA and CrPC**: The MWA does not nullify the CrPC provisions; rather, they complement each other to ensure comprehensive financial support for divorced Muslim women.
- 4. **Social Justice**: The judgment emphasizes the importance of social justice and equality, ensuring that divorced women are not left financially vulnerable.
- 5. **Historical Context**: The decision builds on the 2001 Supreme Court judgment in Danial Latifi, which secured lifelong maintenance for divorced Muslim women under the MWA.

## India's Moscow Connection- IE Ideas

International Relations

# **Easy Explanation**

Prime Minister Narendra Modi's visit to Moscow is a significant diplomatic effort to address Russian concerns about a possible shift in India's policy. Since the conflict with Ukraine began, Russia has faced isolation from Western democracies, while other countries have engaged cautiously. The Global South, especially China, has helped Russia avoid financial collapse and international isolation. India has maintained strong economic ties with Russia, but the highest level of interaction, the annual bilateral summit, stopped after 2021, leading to Russian suspicions that this was due to U.S. pressure.

Modi's visit is important because few global leaders of his stature have visited Moscow in the last two years, except Chinese President Xi Jinping. This visit sends a strong message that India values its relationship with Russia. Despite Western criticism, India has continued to import cheap oil from Russia, arguing that it helps control energy prices and inflation.

However, Russia's growing dependence on China is a concern for India. Moscow and Beijing have developed close ties, raising fears that Russia might become subordinate to China due to their economic and technological differences. Strengthening ties with Russia helps India balance China's influence in Eurasia. By maintaining strong relations with both the U.S. and Russia, India aims to secure a favorable position in the Asian security landscape.

No major agreements were signed during this visit, but it reinforced the strong relationship between India and Russia. Trade imbalance is a significant issue, with India's exports to Russia being much lower than its imports. Addressing this imbalance and ensuring timely defense supplies, including semiconductor chips, are critical concerns for India.

Investing in the International North-South Transport Corridor and discussing a Free Trade Agreement with the Eurasian Union are other important areas. The images of Modi and Putin together send a clear message that Russia is crucial to India's strategic plans, and India will not yield to external pressures. India is ready to withstand Western criticism, indicating that both the West and India need each other equally. Modi's meeting with Putin coincided with NATO's 75th anniversary celebrations in Washington, DC, highlighting the complex geopolitics at play.

# Key Takeaways

- 1. **Diplomatic Effort:** Modi's visit to Moscow aims to address Russian concerns about India's policy shift and reaffirm strong ties.
- 2. **Russia's Isolation:** Since the Ukraine conflict, Russia has faced Western isolation, with China and the Global South providing support.
- 3. **Economic Ties:** India continues strong economic relations with Russia, including importing cheap oil despite Western criticism.
- 4. China Concern: Russia's growing dependence on China is a concern for India, as it might make Russia subordinate to China.
- 5. Trade Imbalance: Addressing the trade imbalance and ensuring defense supplies are critical for India.
- 6. Strategic Projects: Focus on the International North-South Transport Corridor and Free Trade Agreement with the Eurasian Union.
- 7. **Geopolitical Message:** The visit sends a strong message that Russia is crucial to India's strategic plans, despite Western pressures.
- 8. Western Relations: India's relationship with the West remains important, indicating mutual dependence.

## 9. Geopolitical Timing: Modi's visit coincided with NATO's anniversary, highlighting complex geopolitical dynamics.

## <u>'Unlawful activity' in Maharashtra Bill to curb 'urban Naxalism'- IE Explained</u>

Polity

# Easy Explanation

The Maharashtra government has proposed a new law aimed at tackling the growing presence of Naxalism in urban areas. The proposed Maharashtra Special Public Security (MSPC) Bill, 2024, introduced by Deputy Chief Minister Devendra Fadnavis, is designed to address a variety of actions that are seen as threats to public order and law enforcement, such as interfering with law administration, generating fear among the public, and encouraging disobedience of the law.

The bill has been criticized for its broad definitions, which some argue could be used in a draconian manner. The government's rationale for the bill is that Naxalism is not only a problem in remote areas but is also spreading to urban centers through various front organizations that provide support and refuge to armed Naxal cadres. The government argues that existing laws are insufficient to deal with this threat, pointing out that states like Chhattisgarh, Telangana, Andhra Pradesh, and Odisha have enacted similar public security acts.

The bill gives the government the power to declare any organization as unlawful. It outlines four main offenses: being a member of an unlawful organization, raising funds for such an organization, managing or assisting in managing an unlawful organization, and committing an unlawful activity. These offenses carry penalties ranging from two to seven years in prison and fines from Rs 2 lakh to Rs 5 lakh. Offenses under the bill are cognizable, meaning arrests can be made without a warrant, and non-bailable.

The bill differs from the Unlawful Activities Prevention Act (UAPA), 1967, which is India's primary anti-terror law. While both laws allow the government to designate organizations as unlawful, the MSPC Bill has a broader definition of unlawful activities, including actions that disrupt public order, interfere with law administration, and encourage disobedience to law. Additionally, the MSPC Bill allows for quicker prosecution as it permits district magistrates or police commissioners to give permission to prosecute, unlike the UAPA, which requires sanction from higher authorities.

The bill's future is uncertain as it was introduced at the end of the Assembly's term, and its progress will depend on the next government. If the Assembly dissolves, the bill will lapse and would need to be reintroduced unless implemented through an ordinance.

## Key Takeaways

- 1. **Purpose of the Bill**: Address the growing presence of Naxalism in urban areas and support armed Naxal cadres through various front organizations.
- 2. **Main Provisions**: Allows the government to declare organizations as unlawful and outlines four main offenses related to Naxal activities with severe penalties.
- 3. **Criticism**: The bill is criticized for its broad definitions and potential for misuse.
- 4. **Difference from UAPA**: The MSPC Bill has a broader definition of unlawful activities and allows quicker prosecution by local authorities.
- 5. **Uncertain Future**: The bill's progress depends on the next government and may lapse if not implemented through an ordinance.
- 6. **Government's Rationale**: Existing laws are seen as inadequate, and other states have enacted similar laws to address Naxalism.

## How weight loss drugs work- IE Explained

Science Tech

### Easy Explanation

Recently, India's drug regulator moved closer to approving a new drug for obesity treatment, called tirzepatide. This drug has been a game-changer for obesity treatment in the US and Europe but is yet to be available in India. However, an expert committee in India has given the initial green light for tirzepatide, pending final approval.

Tirzepatide was initially approved in the US for treating type 2 diabetes under the name Mounjaro. Like another drug, Ozempic, tirzepatide was found to help with weight loss. This led to the development of Zepbound, which is specifically for obesity treatment. Both drugs have shown promising results in weight loss trials, with tirzepatide resulting in significant weight reductions in participants.

Tirzepatide and semaglutide (the active ingredient in Ozempic and Wegovy) work by boosting hormones in the body that help control weight and manage blood sugar levels. Tirzepatide is particularly effective as it enhances the effects of two hormones, GLP-1 and GIP.

Global trials have shown that tirzepatide can lead to substantial weight loss. For example, participants taking the highest dose of tirzepatide lost about 20.9% of their body weight. These promising results have led to regulatory clearance in India, although further trials will be conducted to ensure its safety and efficacy in the diverse Indian population.

Some common side effects of tirzepatide include nausea, diarrhea, and abdominal pain. There is also a risk of thyroid tumors, so individuals with a history of certain thyroid conditions should not use it. It is important to note that these drugs are not for cosmetic weight loss and must be taken continuously to maintain their effects. Stopping the medication often leads to regaining the lost weight.

# Key Takeaways

- 1. **Regulatory Progress**: India's drug regulator is close to approving tirzepatide for obesity treatment, following an expert committee's recommendation.
- 2. **Background**: Tirzepatide, initially approved for type 2 diabetes, was found to aid in weight loss, leading to its use as an obesity treatment.
- 3. Mechanism: Tirzepatide boosts two hormones, GLP-1 and GIP, which help control weight and manage blood sugar levels.
- 4. **Trial Results**: Global trials showed significant weight loss among participants, with some losing up to 20.9% of their body weight.
- 5. Side Effects: Common side effects include nausea and abdominal pain. There is also a risk of thyroid tumors, making it unsuitable for some individuals.
- 6. Continued Use: The drug needs to be taken continuously to maintain weight loss effects; stopping it leads to weight regain.
- 7. **Regulatory Requirements in India**: Further trials will be conducted in India to ensure safety and efficacy in the local population.

## What caused the rare failure of SpaceX's Falcon 9 rocket?- IE Explained

### Science

# Easy Explanation

The US Federal Aviation Administration (FAA) recently grounded SpaceX's Falcon 9 rocket after a failure with its upper stage engine. This failure left 20 Starlink Internet satellites in a low orbit, which they cannot survive in, ending a long streak of successful flights.

The Falcon 9 rocket, made by Elon Musk's SpaceX, is a reusable rocket designed to carry crew and payloads to low Earth orbit and beyond. It has two stages: the first stage with nine engines that can return to Earth and land vertically, and the second stage with a single engine.

The issue occurred after the rocket was launched from California's Vandenberg Space Force Base. The second stage had a liquid oxygen leak and failed to perform a necessary engine burn, leaving the satellites in a low, unstable orbit. Although the satellites were deployed, they are expected to burn up in Earth's atmosphere.

This failure will delay Falcon 9's busy launch schedule, including missions to the International Space Station (ISS) and other private missions. The rocket will remain grounded until SpaceX investigates and fixes the problem, and the FAA approves the solution.

# Key Takeaways

- 1. Falcon 9 Grounded: The FAA grounded SpaceX's Falcon 9 after an engine failure left 20 Starlink satellites in a low, nonsurvivable orbit.
- 2. Falcon 9 Rocket: Designed by SpaceX, Falcon 9 is a reusable rocket that can transport crew and payloads to low Earth orbit and beyond.
- 3. Launch Failure: The rocket's second stage experienced a liquid oxygen leak, preventing a necessary engine burn to place the satellites in the correct orbit.
- 4. Impact on Schedule: The grounding will delay upcoming missions, including trips to the ISS and other private missions.
- 5. Next Steps: Falcon 9 will remain grounded until SpaceX fixes the issue and receives approval from the FAA.

## Protecting Presidents, ex-Presidents: Who are the US Secret Service?- IE Explained

### Polity

## Easy Explanation:

Former U.S. President Donald Trump, the current Republican candidate for the 2024 Presidential election, survived an assassination attempt during an election rally in Pennsylvania. A 20-year-old man fired multiple shots at Trump, injuring his ear. The Secret Service, responsible for his protection, shot and killed the attacker. This incident has sparked concerns over a major security breach, leading to calls for an explanation from the Secret Service and other security agencies. The FBI has launched an investigation into the matter.

Eyewitnesses reported seeing the shooter climbing a building near the rally venue, armed with a rifle. Despite attempts to alert the police and Secret Service, the shooter managed to get close enough to fire shots. This has raised questions about the effectiveness of security measures in place.

The U.S. Secret Service, founded in 1865, initially combated currency counterfeiting but took on the role of protecting the President after several assassinations. They now protect the President, Vice President, their families, former Presidents, and major presidential and vice-presidential candidates, especially close to elections.

The Secret Service employs around 3,200 special agents and 1,300 Uniformed Division officers. They work under the Department of Homeland Security and have the authority to carry firearms and make arrests. They rely on meticulous planning and threat assessments to protect their charges.

Despite these measures, the shooter got dangerously close to Trump, prompting an inquiry into how this breach occurred. The incident underscores the ongoing risks faced by political figures and the crucial role of the Secret Service in safeguarding them.

### Key Takeaways:

- 1. Assassination Attempt: Donald Trump was shot at during a rally in Pennsylvania but survived with a minor injury.
- 2. **Security Breach:** The incident raised serious questions about security measures and prompted calls for an explanation from the Secret Service.
- 3. FBI Investigation: The FBI has launched an investigation into the assassination attempt.
- 4. Role of Secret Service: The Secret Service, responsible for protecting high-level officials, will be scrutinized for the breach.
- 5. **Historical Context:** The Secret Service took on the role of protecting the President after several assassinations in U.S. history.
- 6. **Operational Tactics:** The Secret Service uses advanced planning, threat assessments, and support from local law enforcement and other security agencies to protect their charges.
- 7. **Upcoming Hearings:** U.S. House panels will hold hearings with officials from the Secret Service, Homeland Security, and FBI to address the security failure.

Science

#### Easy Explanation:

A hundred years ago, researchers discovered bacteria called Wolbachia inside mosquito cells, later found in many insects. Wolbachia can only be transmitted by female insects, not males. To survive and spread, the bacteria manipulate their insect hosts to produce more females. Recently, researchers from China found that Wolbachia bacteria have caused the wasp species Encarsia formosa to completely eliminate its male population.

Encarsia formosa wasps help control whiteflies, major agricultural pests. Normally, in insects like wasps, fertilized eggs become females and unfertilized eggs become males. However, the Wolbachia bacteria in E. formosa cause unfertilized eggs to double their chromosomes and develop into females, eliminating the need for males. When treated with antibiotics, the wasps produced males, indicating the bacteria's role in this process.

The wasp's Wolbachia bacteria acquired a gene called tra, essential for female development, from another insect species. This gene transfer is the first known case of bacteria using a transferred gene to control insect reproduction. The male wasps produced in the lab didn't mate, possibly due to their long absence or the antibiotic treatment.

If E. formosa can no longer produce males naturally, the species might face extinction due to the inability to eliminate harmful mutations. Scientists are investigating whether any naturally produced males can still mate to ensure the species' survival.

### Key Takeaways:

- 1. Wolbachia Discovery: Wolbachia bacteria found in many insects manipulate reproduction to produce more females.
- 2. E. formosa Wasp: These wasps help control agricultural pests like whiteflies by parasitizing their larvae.
- 3. Reproductive Manipulation: Wolbachia bacteria cause E. formosa wasps to produce only females, eliminating males.
- 4. Antibiotic Treatment: Antibiotic treatment led to the production of male wasps, proving the bacteria's role in reproduction.
- 5. Gene Transfer: Wolbachia bacteria acquired a key gene for female development from another insect species.
- 6. Potential Extinction: Without natural male production, the wasp species might face extinction due to genetic issues.
- 7. Ongoing Research: Scientists are studying whether any naturally produced males can still mate to save the species.

## **Unprincipled Alliances- TH Editorial**

#### International Relations

### Easy Explanation:

In Nepali politics, the concept of "no permanent friends or enemies, only permanent interests" is highly relevant due to frequent shifts in political alliances. Recently, Nepal's Prime Minister, Pushpa Kamal Dahal of the Communist Party of Nepal (Maoist Centre) [CPN(MC)], lost a trust vote in the House of Representatives. Only 63 out of 275 members supported him, while 194 voted against him. This outcome was anticipated after the Communist Party of Nepal (Unified Marxist-Leninist) [CPN(UML)] led by Khadka Prasad Oli withdrew support from Dahal's government and allied with the opposition Nepali Congress led by Sher Bahadur Deuba.

Despite finishing third in the November 2022 elections, Dahal managed to form a government by exploiting differences between Deuba's Nepali Congress and Oli's CPN(UML). Dahal's tenure lasted nearly two years, surviving three trust votes by switching political partners. The new coalition between CPN(UML) and Nepali Congress is an arrangement where Oli and Deuba will share the Prime Minister's position for the remaining term.

Nepal's political instability dates back to its transition from an absolute monarchy to a constitutional monarchy in 1990, and then to a republic in 2008. Despite constitutional reforms and efforts to represent marginalized groups, the country remains one of the "least developed countries" due to constant power shifts and poor governance. The leadership of major parties often prioritize power over principles or ideological consistency. This instability suggests that a presidential system with a directly elected head of state might better serve Nepal.

- 2. **Recent Trust Vote**: Prime Minister Pushpa Kamal Dahal lost a trust vote after the CPN(UML) withdrew support and allied with the Nepali Congress.
- 3. **Historical Context**: Nepal has experienced political instability since transitioning from monarchy to a republic, leading to poor governance and development challenges.
- 4. **Coalition Dynamics**: Alliances in Nepal are often driven by power rather than principles, contributing to the country's political instability.
- 5. **Potential System Change**: A shift to a presidential system with a directly elected head of state could potentially provide more stability in Nepali politics.

# Which topics are India's researchers publishing papers on? TH Opinion

## Science

## Easy Explanation

Research publications are often used to gauge scientific and technological progress. Analyzing these publications helps guide policy and shows where scientists in different countries are focusing their efforts. Over the last 20 years, and particularly in the last five years, 'Coronavirus' has been the most published research topic globally. This highlights the global scientific community's ability to produce relevant knowledge quickly in response to crises.

In India, 'Coronavirus' was the top research topic in the past five years and among the top five in the last two decades. However, in China, despite being the origin of the SARS-CoV-2 virus, 'Coronavirus' did not appear among the top research topics. Instead, Chinese researchers have focused extensively on AI, clean energy technologies, and new materials.

Deep learning, photocatalysis, supercapacitors, and oxygen reduction reactions are significant areas of research. Deep learning involves AI algorithms that use multiple layers to process data and has applications in facial recognition, speech recognition, and recommendation engines. Photocatalysis uses light to speed up chemical reactions, useful in generating clean energy. Supercapacitors are advanced batteries that store more energy and release it faster, beneficial for electric vehicles and renewable energy. The oxygen reduction reaction is crucial in next-generation energy devices like fuel cells and metal-air batteries.

Comparatively, China has concentrated on high-impact technological fields and new material development, while the U.S. has taken a more diverse approach, focusing on health, social well-being, and space research. India's significant research output in nanotechnology, due to the successful Nano Mission launched in 2007, has led to advancements in various applications, although it may need to be more aligned with immediate health and climate change needs.

## **Key Takeaways**

- 1. **Coronavirus Research**: The most published topic globally in the last five years and the last two decades, highlighting the scientific community's rapid response to crises.
- 2. Al and Clean Energy: Significant global research focus on Al technologies, photocatalysis, supercapacitors, and oxygen reduction reactions, with China leading in Al research.
- 3. **Diverse U.S. Research**: The U.S. focuses on health, social well-being, and space research, supported by extensive funding from the National Institute of Health.
- 4. India's Nanotechnology: Major focus on nanotechnology due to the Nano Mission, with applications in various fields but potentially needing alignment with health and climate goals.
- 5. **Policy Implications**: Research trends help guide policy, and there may be a need for more strategic allocation of resources to address immediate global challenges.

# The Union government's rein on financial transfers to different States - TH Text&Context

Economy



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## **Easy Explanation:**

Since 2015-16, the Union government of India has been reducing financial transfers to states despite recommendations from the Fourteenth and Fifteenth Finance Commissions to increase these transfers. The Fourteenth Finance Commission recommended devolving 42% of Union tax revenues to states, and the Fifteenth retained this at 41% excluding Jammu and Kashmir and Ladakh. Despite these recommendations, the actual share of states in the Union's gross tax revenue was only 35% in 2015-16 and 30% in 2023-24.

This discrepancy arises because the Union government deducts collections from cess and surcharges before calculating the net tax revenue. The revenue from cess and surcharges, which the Union government does not need to share with states, has increased significantly from 5.9% of gross tax revenue in 2015-16 to 10.8% in 2023-24. This has allowed the Union government to increase its discretionary expenditures, often bypassing state budgets, impacting states differently.

Additionally, the Union government has been increasing allocations for Centrally Sponsored Schemes (CSS) and Central Sector Schemes (CSec Schemes), compelling states to commit their resources as well. Wealthier states can leverage these schemes more effectively, while less wealthy states may have to borrow funds, increasing their liabilities and accentuating inter-state financial inequality.

The Union government's financial transfers through CSS and CSec Schemes are non-statutory and tied to specific schemes, reducing states' fiscal autonomy. Despite retaining more than 50% of gross tax revenue and incurring a fiscal deficit of 5.9% of GDP, the Union government wields significant financial power with limited expenditure responsibilities. This situation poses a challenge to cooperative federalism and could influence future recommendations by the Finance Commission.

Key Takeaways:

- 1. **Reduction in Transfers**: Despite Finance Commission recommendations, the Union government has reduced financial transfers to states since 2015-16.
- 2. **Cess and Surcharge Impact**: Increased collections from cess and surcharges, which are not shared with states, have contributed to this reduction.
- 3. **CSS and CSec Schemes**: The Union government has increased allocations for Centrally Sponsored Schemes and Central Sector Schemes, requiring states to commit matching funds, benefiting wealthier states more.
- 4. **Fiscal Inequality**: This system has led to increased financial inequality among states, with wealthier states better able to leverage Union funds.
- 5. **Non-statutory Transfers**: A significant portion of financial transfers are non-statutory and tied to specific schemes, reducing states' fiscal autonomy.
- 6. **Future Challenges**: The Union government's argument for reducing states' share in tax revenue may continue, challenging the principles of cooperative federalism.

# 16th July 2024

# Watching the rain- IE Editorial

#### Economy

## Easy Explanation:

The latest inflation data presents a challenge for the monetary policy committee (MPC). Retail inflation, measured by the consumer price index (CPI), rose to 5.08% in June from 4.8% in May. This increase is mainly due to rising food prices. Core inflation, which excludes fuel and food, remained low, indicating that the main price pressures in the economy are not severe. Inflation averaged 4.9% in the first quarter (April-June) of the current financial year, matching the Reserve Bank of India's (RBI) forecast, so no immediate policy changes are expected.

Food inflation increased to 9.36% in June from 8.69% in May, driven by higher prices for cereals, fruits, vegetables, and pulses. Vegetable prices have been particularly high due to the heatwave. This impacts poorer households more since food takes up a larger



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portion of their spending. The monsoon's progress is crucial for food prices. While July saw better rainfall, La Nina is expected to affect weather patterns in August, impacting crop yields and prices. Currently, the area sown under kharif crops is 10% higher than last year.

Non-food inflation remains low, with most segments like clothing, housing, and education seeing inflation below 4%. However, there are risks such as recent telecom tariff hikes and higher crude oil prices, which could push prices up.

In the last MPC meeting, two members suggested changing the policy stance to neutral and reducing the policy rate by 25 basis points, but the committee maintained the current stance. RBI Governor Shaktikanta Das emphasized that it is too early to discuss rate cuts, noting that strong economic growth (projected at 7.2% this year) allows the MPC to stay focused on controlling inflation. Future policy decisions will depend on clearer data about the monsoon and food prices.

## Key Takeaways:

- 1. Retail Inflation Increase: Retail inflation rose to 5.08% in June, mainly due to higher food prices.
- 2. Core Inflation Steady: Core inflation, excluding fuel and food, remains low, indicating subdued underlying price pressures.
- 3. Food Inflation Impact: Food inflation increased to 9.36% in June, affecting poorer households more significantly.
- 4. Monsoon's Role: The progress and distribution of the monsoon will affect food prices and inflation.
- 5. Non-Food Inflation Low: Inflation in non-food segments is below 4%, with some exceptions like personal care.
- 6. **Risks from Telecom and Oil**: Recent telecom tariff hikes and higher crude oil prices could exert upward pressure on inflation.
- 7. MPC's Stance: The MPC maintained its current policy stance, with no immediate rate cuts planned.
- 8. Economic Growth: Strong economic growth provides the MPC with flexibility to focus on inflation control.
- 9. Future Decisions: Future policy will be influenced by monsoon clarity and food price trends.

In the name of flood control- IE Ideas

#### Disaster Management

## **Easy Explanation:**

Assam's geography is shaped by the eastern Himalayas, its geology, the southwest monsoon, the Bay of Bengal, rivers, and biodiversity, which contribute to the state's annual floods, especially in July and August. While floods are not new, their intensity has increased since the 1950 Assam earthquake. The earthquake changed Assam's environment and exacerbated its flooding patterns.

To cope with floods, Assam requested embankments from the Indian government in 1950. A committee led by GR Garg advised against it, warning that embankments could cause more harm than good by disrupting natural land-building and drainage processes. Despite this, Assam built thousands of kilometers of embankments between the 1950s and 1970s, inspired by American and Chinese examples. These embankments aimed to prevent floods and protect crops and property, but they also disrupted natural systems and required significant financial resources.

The initial response to embankments was mixed. Some saw the need for artificial manure increase as floodwaters stopped replenishing nutrients, while others felt protected. Over time, the embankments became a part of the landscape, but their effectiveness was limited, and floods continued to breach them.

Despite the failures, efforts to expand embankments persisted, fundamentally altering the relationship between rivers and people. As the connection between rivers and land weakened, floodplains dried, and human habitation moved closer to rivers, increasing risk. This was predicted by Garg in 1951.

After two decades, the National Flood Commission (1976-1980) expressed concern that embankments had worsened Assam's situation by depositing coarse silt and sand, raising river beds above the countryside and increasing devastation risk when embankments breached. New embankment construction has decreased, but the old mindset and institutions continue to pursue flood control, ignoring Assam's complex river history.

- 1. Assam's Geography and Floods: Assam's geography and environmental features contribute to annual floods, particularly in July and August.
- 2. Impact of the 1950 Earthquake: The 1950 earthquake intensified the flooding patterns in Assam by altering its environment.
- 3. **Government Response and Embankments**: Despite warnings against them, Assam built thousands of kilometers of embankments to control floods, drawing inspiration from global examples.
- 4. **Mixed Reactions to Embankments**: Initial reactions were mixed, with some seeing benefits and others noting increased need for artificial manure and disrupted natural processes.
- 5. **Continued Flooding and Breaches**: Flooding continued despite embankments, leading to regular breaches and ongoing efforts to expand them.
- 6. Shift in Human Habitation: As embankments dried floodplains, human habitation moved closer to rivers, increasing risks.
- 7. **National Flood Commission's Warning**: The National Flood Commission warned that embankments had worsened the situation by raising river beds, increasing the risk of devastation.
- 8. **Ongoing Challenges**: Despite reduced new embankment construction, old approaches and institutions continue to seek flood control, neglecting Assam's river history.

# **Rules for Civil Servants- IE Explained**

Polity

# Easy Explanation

The Indian government has set up a committee to review the documents submitted by Puja Khedkar, a probationary IAS officer, to secure her position under the OBC and PH quotas. Khedkar, who ranked 821 in the 2022 UPSC Civil Services Examination, is under scrutiny for allegedly misusing her status and seeking special privileges she isn't entitled to as a probationer. Reports suggest that she used an unauthorized red-blue beacon on her private luxury car and requested special treatment.

The rules governing IAS officers include maintaining absolute integrity and not using their position for personal gain. Specific rules for probationers include not being entitled to certain benefits like an official car or staff, and they can be discharged if found ineligible or unsuitable for the service. The committee will review Khedkar's OBC and PH certificates, and if found falsified, she may be discharged from service.

Khedkar's background and her father's career in the Maharashtra Pollution Control Board raise questions about her eligibility for the OBC (non-creamy layer) status, which is meant for economically and socially disadvantaged individuals. The investigation continues, with a committee set to submit its report within two weeks.

## **Key Takeaways**

- 1. **Committee Investigation**: A single-member committee will review the documents submitted by IAS officer Puja Khedkar regarding her OBC and PH status.
- 2. Allegations: Khedkar faces allegations of misconduct and misuse of her status as a probationer.
- 3. Rules for IAS Officers: Officers must maintain integrity and not misuse their position for personal gain.
- 4. **Probation Rules**: Probationary officers have specific conduct rules and can be discharged if found ineligible or unsuitable.
- 5. **OBC and PH Quotas**: Khedkar's eligibility under these quotas is under scrutiny; if certificates are falsified, she could be discharged.
- 6. **Background Scrutiny**: Khedkar's family background, particularly her father's career, raises questions about her OBC status eligibility.

# Why Government of Pakistan wants to ban Imran Khan's party- IE Explained

International Relations

# Easy Explanation

Imran Khan's party, Pakistan Tehreek-e-Insaf (PTI), faces potential banning by the Pakistani government. This decision comes amid accusations of attempting to create unrest in the country. The former Prime Minister, Imran Khan, along with other notable PTI members like Arif Alvi and Qasim Suri, is also set to be charged with treason. This announcement was made by Information Minister Atta Tarar, who cited several cases against the PTI, including the foreign funding case, the May 9 riots, and the cipher case.

In the foreign funding case, PTI is accused of illegally receiving millions of rupees in foreign funds between 2009 and 2013. This claim was supported by a report from the Election Commission of Pakistan (ECP) in 2022, stating PTI under-reported funds and concealed bank accounts. However, in April 2023, the Islamabad High Court ruled that there wasn't enough evidence to directly connect Imran Khan with the prohibited funding.

The cipher case involves Imran Khan disclosing a classified cable that allegedly contained a threatening message from the US, suggesting American involvement in his removal from office in April 2022. This led to an FIR against Imran under the Official Secrets Act.

The May 9 riots erupted after Imran Khan was arrested in a corruption case. The riots led to significant damage to public and military properties and resulted in deaths and injuries. The Pakistani Army cracked down on PTI leaders and workers following these riots.

# Key Takeaways

- 1. Potential Ban on PTI: The Pakistani government is considering banning PTI due to allegations of creating unrest.
- 2. Charges of Treason: Imran Khan and other PTI members face treason charges.
- 3. Foreign Funding Case: PTI allegedly received illegal foreign funds, as reported by the ECP.
- 4. Cipher Case: Imran Khan disclosed a classified cable, leading to legal actions under the Official Secrets Act.
- 5. May 9 Riots: Widespread riots following Imran Khan's arrest caused significant damage and led to a crackdown on PTI members by the military.

# 'Big brother' to 'Brother', a Nepal-India reset- TH Editorial

## International Relations

# **Easy Explanation**

Relations between India and Nepal have been strained since 2015 when both Narendra Modi and Khadga Prasad Oli were Prime Ministers. However, there is now a chance to improve the relationship with Modi's third term and Oli's collaboration with the Nepali Congress. The tension began with Nepal's adoption of a new Constitution in 2015, which India wanted to be reworked. When Nepal promulgated the draft unamended, India imposed a six-month blockade, causing significant resentment. In retaliation, Oli signed multiple agreements with China.

The two Prime Ministers did meet post-blockade, but the relationship remained strained, with Oli making provocative statements and Nepal amending its Constitution to include disputed territories. India's involvement in Nepalese politics increased, with attempts to push Hindutva ideologies, leading to further tensions.

Modi's third term brings speculation about whether he will adopt a more conciliatory approach. The Prime Ministers need to use their positions to resolve outstanding issues. India should adopt a hands-off policy, promoting political stability and economic growth in Nepal, which benefits both countries.

Nepal, often seen as a poor neighbor, significantly contributes to India's economy through remittances. Indian overreach in Nepalese politics has not yielded positive results and has only strained relations. Nepal's political class, weakened by internal chaos, has struggled to assert itself against Indian interference.

Nepal's new leadership must confidently address bilateral issues, including territorial disputes and economic agreements. Revival of the South Asian Association for Regional Cooperation (SAARC) could also be beneficial. Despite close ties with China, Nepal's relationship with India remains crucial.

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The historical "big brother" attitude of India should shift to a more equal partnership, respecting Nepal's sovereignty and fostering a peaceful and cooperative South Asia.

# Key Takeaways

- 1. **Strained Relations**: India and Nepal's relationship has been tense since 2015 due to political and constitutional disagreements.
- 2. Indian Blockade: India's blockade in response to Nepal's new Constitution caused long-lasting resentment.
- 3. Nepal's China Ties: In retaliation, Nepal strengthened ties with China.
- 4. Political Interference: India's increased political involvement in Nepal has been counterproductive.
- 5. Economic Contributions: Nepal contributes significantly to India's economy through remittances.
- 6. Hands-Off Approach: India should adopt a non-interference policy to promote stability and growth in Nepal.
- 7. Confident Leadership: Nepal's new leadership must address bilateral issues confidently.
- 8. SAARC Revival: Reviving SAARC could benefit regional cooperation.
- 9. Equal Partnership: India needs to move from a "big brother" attitude to an equal partnership with Nepal.

# 100 years of EEG: how does it work and what is its significance?- TH Text&Context

## Science

# **Easy Explanation**

The EEG (electroencephalography) is a significant tool in neurology that allows us to study brain activity without invasive procedures. It was first used on humans by Hans Berger, a German physiologist, in 1924, marking the centenary of this remarkable development.

EEG measures electrical activity in the brain using electrodes placed on the scalp. This electrical activity is generated by neurons exchanging electrically charged particles, like ions. The EEG test is particularly valuable in diagnosing epilepsy, assessing the effects of anesthesia, studying sleeping patterns, and confirming brain death.

During an EEG test, electrodes detect electrical signals from neurons that pass through various layers of the scalp. This process, known as volume conduction, requires the initial data to be corrected for interference and noise before a clinician can interpret it.

The electrodes are placed according to the International 10-20 System, ensuring standardized placement for accurate readings. This system uses specific points on the head, such as the nasion and inion, to guide electrode placement.

EEG records voltage changes over time, displaying this information on a graph. While EEG excels at tracking rapid electrical activity, it is limited in detecting signals deeper within the brain. To improve accuracy, EEG is often used alongside other diagnostic tools like MRI.

EEG tests are relatively affordable, simple to set up, non-invasive, and portable. However, they require precise placement of electrodes and can be affected by factors such as thick hair.

# Key Takeaways

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- 1. EEG Overview: EEG measures brain electrical activity non-invasively, using electrodes on the scalp.
- 2. Historical Background: Developed by Hans Berger in 1924, following earlier research by others on animals.
- 3. Diagnostic Uses: Key in diagnosing epilepsy, studying sleep patterns, effects of anesthesia, and confirming brain death.
- 4. Volume Conduction: Electrical signals pass through scalp layers and need correction for accurate data interpretation.
- 5. Electrode Placement: Standardized using the International 10-20 System for consistent and accurate readings.
- 6. Data Interpretation: Displays voltage changes over time; useful for rapid brain activity but limited for deep brain signals.
- 7. Affordability and Setup: EEG is cost-effective, non-invasive, and portable but requires precise electrode placement.

# 17th July 2024

# Key issue will be back in SC: What constitutes a Money Bill?- IE Explained

Polity

# **Easy Explanation**

The Supreme Court of India is set to decide on petitions challenging the government's use of the "Money Bill route" to pass significant legislation. This route allows a bill to bypass the Rajya Sabha (the upper house of Parliament), which is often more challenging for the ruling party to control.

A Money Bill can only be introduced in the Lok Sabha (the lower house) and, if passed, is sent to the Rajya Sabha for recommendations. However, the Lok Sabha can accept or reject these recommendations. If the Rajya Sabha doesn't return the bill within 14 days, it is considered passed. This process is defined under Article 110 of the Constitution, which specifies that Money Bills should only include provisions related to taxation, government borrowing, and financial matters.

Several important laws have been passed as Money Bills, including amendments to the Prevention of Money Laundering Act (PMLA), the Foreign Contributions Regulations Act (FCRA), and the Aadhaar Act. This has led to concerns about the potential abuse of this legislative route to circumvent the Rajya Sabha's role.

Key cases involving the use of the Money Bill route include:

- 1. Aadhaar Act: In 2018, the Supreme Court upheld the constitutionality of the Aadhaar Act, passed as a Money Bill, by a 4-1 majority. Justice DY Chandrachud dissented, calling it an "abuse of the constitutional process."
- 2. **Finance Act, 2017**: This Act included various provisions unrelated to financial matters, which were challenged in court. A five-judge bench struck down some provisions as unconstitutional but referred the Money Bill question to a larger bench.
- 3. **Pending Cases**: Challenges to the wide powers of the Enforcement Directorate under the PMLA and the Electoral Bond scheme are also awaiting decisions on their classification as Money Bills.

The Supreme Court's upcoming decision on these petitions will clarify the use of the Money Bill route and its implications for the legislative process in India.

# Key Takeaways

- 1. Money Bill Route: Allows legislation to bypass the Rajya Sabha, needing only approval from the Lok Sabha.
- 2. Article 110: Defines Money Bills and restricts them to financial matters like taxation and government borrowing.
- 3. Supreme Court's Role: Will decide on the constitutionality and proper use of the Money Bill route.
- 4. **Key Cases**: Aadhaar Act, Finance Act, 2017, and other pending cases challenge the use of this route for significant legislation.
- 5. **Implications**: The decision will impact how the government can pass laws and the role of the Rajya Sabha in the legislative process.

# India's Quantum Future- IE Explained

Science

# Easy Explanation

India launched the National Quantum Mission last year, joining the ranks of a few countries dedicated to advancing quantum technologies. These technologies exploit the unique properties of sub-atomic particles, promising solutions to problems like clean energy and affordable healthcare. Despite a strong research base, India is behind countries like China and the United States, which have invested significantly more in research and have a larger workforce in this field.

Quantum technologies, such as quantum computing and communication, leverage the counterintuitive behaviors of sub-atomic particles. For instance, particles can exist in multiple states simultaneously (superposition) or influence each other over long distances (entanglement). These properties can solve problems that classical technologies cannot.

India's National Quantum Mission focuses on four domains: computing, communications, sensors, and materials. Although quantum computers exist, their capabilities are currently limited. Advanced quantum computers could perform calculations beyond the reach of classical computers, driving a new economy.

However, India needs to catch up. The country has allocated ₹6,000 crore (\$0.75 billion) to the mission, but this is dwarfed by the investments of other nations, such as China (\$15 billion) and the US (\$3.75 billion). India also lags in the number of research papers and patents in quantum technologies.

Despite this, India has a solid foundation with many senior scientists, post-doctoral fellows, and PhD students working in quantumrelated fields. The country also has the largest number of graduate students in relevant disciplines outside the European Union. The National Quantum Mission aims to identify and nurture young talent, potentially creating a specialized cadre of quantum scientists.

# Key Takeaways

- 1. **National Quantum Mission**: Launched to advance India's capabilities in quantum technologies across four domains: computing, communications, sensors, and materials.
- 2. **Quantum Technologies**: Use unique properties of sub-atomic particles to solve complex problems. Examples include superposition and entanglement.
- 3. Global Comparison: India is behind countries like China and the US in investment, research output, and patents.
- Investment: India has allocated ₹6,000 crore (\$0.75 billion) to the mission, compared to China's \$15 billion and the US's \$3.75 billion.
- 5. **Research and Development**: India has a strong research base with many scientists and students, but it needs to catch up in global rankings.
- 6. Future Goals: The mission aims to nurture young talent and potentially create a specialized cadre of quantum scientists.

PM SHRI, the 'showcase school scheme that Centre is pushing in states - IE Explained

Polity

# Easy Explanation

The central government has stopped funding the Samagra Shiksha Scheme in West Bengal, Punjab, and Delhi because these states have refused to implement the PM SHRI scheme. The Samagra Shiksha Scheme is crucial as it supports the implementation of the Right to Education Act, ensuring free and compulsory education for children.

The withheld funds amount to ₹330 crore for Delhi, ₹515 crore for Punjab, and ₹1,000 crore for West Bengal. Though no official reason was provided, it is suggested that the refusal to implement PM SHRI led to this decision. The PM SHRI scheme aims to develop 14,500 schools to exemplify the National Education Policy (NEP) 2020 and serve as models for other schools.

The PM SHRI scheme selects schools through a "challenge mode" where schools meeting specific criteria can apply online. These schools are evaluated based on infrastructure, teaching staff, and learning outcomes. States must sign an MoU with the Ministry of Education to implement the NEP fully and prefix PM SHRI to the school's name.

Delhi and Punjab have their own similar schemes, while West Bengal objects to prefixing PM SHRI to the school names. Consequently, these states have not received funds under the Samagra Shiksha Scheme.

# Key Takeaways

1. **Funding Halt**: The central government has stopped funding the Samagra Shiksha Scheme in West Bengal, Punjab, and Delhi.

- 2. **Reason**: These states refused to implement the PM SHRI scheme, which aims to develop 14,500 exemplar schools showcasing the NEP 2020.
- 3. Funding Details: Delhi, Punjab, and West Bengal are missing out on ₹330 crore, ₹515 crore, and ₹1,000 crore, respectively.
- 4. **PM SHRI Selection**: Schools are selected through a challenge mode based on infrastructure and educational outcomes. States must sign an MoU and prefix PM SHRI to the school's name.
- 5. State Reactions: Delhi and Punjab prefer their own schemes, while West Bengal objects to the naming requirement.
- 6. **Impact**: The refusal to implement PM SHRI has resulted in these states not receiving funds under the Samagra Shiksha Scheme.

# Glimpses of LUCA, the life-form from which all other life descended- TH Science

Science

# **Easy Explanation**

The origin of life on Earth remains a profound mystery, with several competing theories but no conclusive proof. Scientists generally agree that a mix of geological, climatic, and chemical processes contributed to the creation of life's building blocks.

In the 1920s, Alexander Oparin and J.B.S. Haldane independently suggested that life began from a "primordial soup" of organic molecules in Earth's early, turbulent environment. This theory, known as the Oparin-Haldane hypothesis, gained some support from experiments like the 1952 Miller-Urey experiment. In this experiment, Stanley Miller and Harold Urey showed that inorganic compounds could transform into complex organic compounds under the right conditions, mimicking early Earth's atmosphere.

Another theory posits that meteorites may have brought life's building blocks to Earth. Discoveries such as extraterrestrial organic material dating back 3.3 billion years and amino acids on the asteroid Ryugu support this idea.

The mystery of how life evolved from these initial forms is equally compelling. Scientists believe all life, including bacteria, archaea, and eukarya, originated from a single cell known as the last universal common ancestor (LUCA). Although there is no fossil evidence for LUCA, the shared features in modern genomes provide clues.

Researchers use the "molecular clock" theory to estimate evolutionary timelines by tracking mutation rates. Recently, researchers at the University of Bristol and Exeter estimated that LUCA existed around 4.2 billion years ago, which is significantly earlier than previous estimates. This new timeline suggests that life began shortly after Earth formed, highlighting LUCA's role in creating a secondary ecosystem where other microbes could emerge.

These insights not only deepen our understanding of life's origins on Earth but also enhance our ability to search for life elsewhere in the universe and advance synthetic biology for future applications.

# Key Takeaways

- 1. **Origin Theories**: Several theories exist on the origin of life, with the Oparin-Haldane hypothesis being prominent, suggesting life began from a "primordial soup."
- 2. **Experimental Support**: The Miller-Urey experiment demonstrated that inorganic compounds could form amino acids, supporting the primordial soup theory.
- 3. **Meteorite Theory**: Some scientists believe meteorites brought life's building blocks to Earth, supported by findings of extraterrestrial organic materials.
- 4. LUCA: Life is believed to have originated from a single cell called the last universal common ancestor (LUCA), with recent studies dating LUCA to 4.2 billion years ago.
- 5. Molecular Clock: The molecular clock theory helps estimate evolutionary timelines by tracking mutation rates.
- 6. **Evolutionary Insights**: The study of LUCA and molecular clocks provides significant insights into the evolution of life and potential applications in synthetic biology and extraterrestrial life searches.

# Surprising Acceleration-TH Editorial

Economy



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# **Easy Explanation**

Retail inflation, measured by the Consumer Price Index (CPI), unexpectedly rose to 5.08% in June, up from 4.80% in May. This ended a five-month decline in inflation. The main driver was rising food prices, with food inflation based on the Consumer Food Price Index (CFPI) increasing to 9.36% in June from 8.69% in May. This was the fastest monthly increase in 11 months, with food prices rising by 3.17% from May to June, pushing overall CPI up by 1.33%.

RBI Deputy Governor Michael Debabrata Patra highlighted that the Indian economy is vulnerable to recurring food price shocks, necessitating vigilant monetary policy to prevent these from affecting other inflation components and expectations. All nine food sub-categories in the CFPI saw price increases, with vegetables experiencing the highest year-on-year gain of 29.3% and a significant monthly increase of 14.2%.

Potato, onion, and tomato prices rose sharply, with year-on-year increases of 57.6%, 58.5%, and 26.4%, respectively. The Department of Consumer Affairs' data showed that as of July 15, the average retail prices of potatoes and onions were still significantly higher than the previous year, by almost 56% and 67%, respectively. Tomato prices, although 43% lower than a year ago, were 76% higher than in mid-June.

Cereal prices also remained high, with rice and wheat prices 10% and 6% higher than a year earlier. Additionally, rainfall data from the India Meteorological Department (IMD) revealed a 2% deficit in precipitation since June 1, with 11 out of 36 meteorological subdivisions classified as 'deficient,' meaning they received 20%-59% less rainfall than the long-period average. This uneven rainfall distribution, affecting key food-growing areas like Punjab, presents a challenge for policymakers in controlling inflation.

# Key Takeaways

- 1. **Unexpected Rise in Inflation**: Retail inflation rose to 5.08% in June, up from 4.80% in May, ending a five-month decline.
- 2. Food Prices as Main Driver: Food inflation increased to 9.36%, with significant monthly increases in vegetable prices and staples like potatoes, onions, and tomatoes.
- 3. **RBI's Concern**: The RBI highlighted the economy's vulnerability to recurring food price shocks, stressing the need for vigilant monetary policy.
- 4. **Persistent High Prices**: Despite some seasonal declines, food prices remain high, with cereals like rice and wheat also showing significant year-on-year price increases.
- 5. **Impact of Deficient Rainfall**: Uneven rainfall distribution, particularly in key agricultural areas, poses additional challenges for managing inflation.

# 18th July 2024

# Holding Steady- IE Editorial

## Economy

# **Easy Explanation**

The global economy is expected to grow steadily in the near term, with growth rates projected at 3.2% in 2024 and 3.3% in 2025, according to the International Monetary Fund's (IMF) July update of the World Economic Outlook. These projections are consistent with the IMF's April assessment. Among developed economies, the IMF has raised its growth forecasts for Spain and France while lowering its expectations for Japan. For emerging markets and developing economies, the IMF has lowered growth expectations for the Middle East, Central Asia, and parts of Latin America, but significantly increased its growth forecast for China and India.

The IMF now expects the Indian economy to grow at 7% in 2024, an increase of 0.2 percentage points from its earlier forecast. This positive outlook is partly due to improved prospects for private consumption, especially in rural areas. Other agencies share a similar

view: the Asian Development Bank (ADB) reaffirmed its growth forecast for India at 7%, citing a likely rebound in the agriculture sector due to an above-normal monsoon. The Reserve Bank of India (RBI) projects slightly higher growth at 7.2%, while agencies like Crisil and ICRA have slightly lower projections at 6.8%. These figures suggest that India's economic momentum remains strong, with a bright outlook for the next year. The IMF projects India's growth at 6.5% for 2025, while the ADB expects 7.2%.

The World Economic Outlook also notes that progress on reducing inflation is slowing globally, increasing the risk of prolonged high interest rates. In June, the US Federal Reserve decided to maintain the status quo on interest rates, waiting for favorable data to show that inflation is moving sustainably toward its target. The Fed's dot-plot now suggests only one rate cut this year, down from earlier expectations of three cuts. In Europe, the European Central Bank cut rates in June but is expected to maintain the status quo in July, waiting for more macroeconomic data before making further decisions. Meanwhile, central banks in emerging economies are cautious about lowering rates due to potential impacts on their currencies. In India, despite two monetary policy committee members voting to cut rates, a policy change seems unlikely in the near term due to ongoing uncertainty over inflation, particularly food prices.

# Key Takeaways

- 1. **Global Growth Projections**: The global economy is expected to grow at 3.2% in 2024 and 3.3% in 2025, according to the IMF's latest update.
- 2. Developed Economies: Growth forecasts have been raised for Spain and France but lowered for Japan.
- 3. **Emerging Markets**: The IMF has lowered growth expectations for the Middle East, Central Asia, and parts of Latin America, but raised forecasts for China and India.
- 4. India's Growth Outlook: The IMF projects India's growth at 7% in 2024, up from an earlier forecast, with positive prospects for private consumption in rural areas.
- 5. **Inflation Concerns**: Progress on reducing inflation is slowing globally, leading to the possibility of prolonged high interest rates.
- 6. **Monetary Policy**: The US Federal Reserve and European Central Bank are maintaining a cautious approach to interest rates, while central banks in emerging economies are wary of lowering rates due to currency concerns.
- 7. India's Monetary Policy: Despite some calls for rate cuts, the RBI is likely to maintain the status quo due to inflation uncertainties, especially related to food prices.

# What's needed in Jammu- IE Ideas

### Internal Security

# **Easy Explanation**

Recent terrorist encounters in Jammu have led to significant casualties among Indian security forces. Despite having years of counter-terrorism experience, the Indian Army, especially the Rashtriya Rifles (RR), is facing tough challenges. The terrain in Jammu, with its jungles and mountains, provides excellent hiding spots for terrorists. This area is close to the Line of Control (LoC) and the international border (IB), allowing terrorists to infiltrate and retreat easily. The reactivation of terrorism in Jammu by Pakistan aims to keep its influence in the region and disrupt upcoming assembly elections in J&K.

Pakistan's strategy includes using the challenging terrain to support terrorist activities, which was less feasible in the urban and village areas of Kashmir. The National Investigation Agency (NIA) has had success in curbing terror funding in Kashmir, making it harder for terrorists to sustain hideouts there. However, in Jammu, the geography favors terrorists, and there might be local support systems in place.

To counter this threat, a comprehensive strategy is needed:

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- 1. **Diplomacy:** India needs to make it clear to Pakistan and the international community that reactivating proxy warfare in J&K will have serious consequences. India must communicate that any conventional conflict initiation by Pakistan will be met with strong responses.
- 2. **Political Stability:** Despite the security challenges, conducting assembly elections in J&K is crucial. It shows commitment to democracy and helps integrate J&K further into India.

3. **Military Strategy:** A significant military operation is required to stabilize the region. This includes deploying more forces, focusing on disrupting terrorist logistics and hideouts, and effectively using technology and intelligence. Coordination with local forces and maintaining good relations with the civilian population is also essential.

# Key Takeaways

- 1. **Recent Casualties:** The Indian security forces have faced significant casualties in recent terrorist encounters in Jammu, despite having extensive experience in counter-terrorism operations.
- 2. **Strategic Terrain:** The challenging terrain of Jammu, with jungles and mountains, provides excellent hideouts for terrorists and is close to the LoC and IB, facilitating terrorist activities.
- 3. **Pakistan's Objectives:** Pakistan aims to maintain its influence in the region and disrupt upcoming assembly elections in J&K through increased terrorist activities.
- 4. **Diplomatic Efforts:** India needs to convey the risks of reactivating proxy warfare in J&K to Pakistan and the international community, emphasizing that any conflict initiation will have severe consequences.
- 5. **Political Strategy:** Conducting assembly elections in J&K is essential to demonstrate India's commitment to democracy and further integrate the region.
- 6. **Military Operations:** A major military operation is necessary to stabilize the region, involving additional forces, disrupting terrorist logistics, and using technology and intelligence effectively. Coordination with local forces and maintaining good relations with the civilian population are also crucial.

# State of the informal sector- IE Explained

#### Economy

# Easy Explanation

The informal sector in India, which includes small and medium enterprises (SMEs) and household businesses, makes up almost half of the country's economic output and provides over three-quarters of the employment. However, it faces significant challenges and has seen many businesses shut down, leading to a loss of around 16.45 lakh jobs over the past seven years. This data comes from the Annual Survey of Unincorporated Enterprises (ASUSE) conducted by the National Sample Survey Office (NSSO).

The informal sector has been hit hard by three major shocks: demonetisation in November 2016, the introduction of GST in July 2017, and the COVID-19 pandemic starting in March 2020. The manufacturing sector within the informal economy was the most affected, with a significant decline in employment quality as more jobs were created in own-account enterprises rather than in units hiring workers.

## **Key Findings:**

- 1. **Unincorporated Enterprises:** These include MSMEs, household units, and own-account enterprises in manufacturing, trade, and other services sectors. They play a crucial role in job creation, especially for semi-skilled and unskilled labor.
- 2. **Employment Trends:** The sector saw a decrease in employment despite an increase in the number of enterprises. Own-account enterprises increased while hired-worker enterprises decreased, indicating a decline in job quality.
- 3. Sector-wise Impact: Manufacturing units saw a 9.3% decline, with a 15% drop in employment. The trade sector contracted by 2% in the number of units, but employment increased marginally by 0.8%. The services sector saw an increase in both units and employment.
- 4. **Economic Output:** The Gross Value Added (GVA) per enterprise and per worker increased at current prices but showed slower growth in real terms. The real GVA of the sector grew by only 6.9% in 2022-23, lower than the pre-pandemic level.
- 5. **State-wise Employment:** Sixteen states and Union Territories recorded a decline in informal sector workers in 2022-23 compared to 2015-16. The share of informal sector workers increased in most states immediately after the pandemic, indicating economic distress and a shift from the formal sector.

# Key Takeaways

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1. **Significant Role:** The informal sector is crucial for India's economy, contributing to nearly half of the economic output and employing more than three-quarters of the workforce.



- Major Challenges: The sector has faced significant challenges over the past seven years due to demonetisation, GST implementation, and the COVID-19 pandemic.
- 3. **Decline in Employment:** There has been a decline in employment quality, with a shift towards own-account enterprises and a reduction in hired-worker units.
- 4. Sector-specific Impacts: The manufacturing sector was the worst hit, while the services sector saw growth in both units and employment.
- 5. **Economic Output:** While GVA per enterprise and worker increased nominally, real-term growth was much slower, indicating the sector's struggle to recover.
- 6. **State-wise Trends:** Several states saw a decline in informal sector employment, especially post-pandemic, highlighting economic distress and a shift away from the formal sector.

# Intergenerational equity as tax devolution criterion- TH Editorial

#### Economy

# **Easy Explanation**

**Overview of Devolution of Union Tax Revenue:** The devolution of Union tax revenue to Indian states is a significant topic for both political leaders and economists. The Finance Commission (FC) decides how the tax revenue is distributed among the states every five years, aiming to ensure fairness (equity) rather than efficiency. This process helps redistribute wealth but may also lead to issues of intergenerational inequity within states. Intergenerational fiscal equity refers to the principle that each generation should pay for the public services it uses and not burden future generations with debt.

## Key Concepts:

- 1. Intergenerational Fiscal Equity: This means providing equal opportunities and outcomes to every generation. In finance, it ensures that current public services are paid for by current taxpayers, not future generations through borrowing.
- 2. **Ricardian Equivalence Theory:** This theory suggests that when the government borrows to finance expenditure, people save more to compensate for future tax increases, keeping the overall economy balanced. However, this theory does not hold well in India due to the unequal distribution of taxes and financial transfers among states.
- 3. Horizontal Distribution Formula: Decided by the FC, this formula determines how tax revenue is shared among states. It often prioritizes equity (fair distribution) over efficiency (optimal use of resources).

## Impact on High-income vs. Low-income States:

- **High-income States:** These states, like Tamil Nadu and Maharashtra, generate a significant portion of their revenue through their own taxes and receive less financial aid from the Union. They often face higher deficits as they need to borrow more to balance their budgets.
- Low-income States: States like Bihar and Uttar Pradesh rely heavily on financial transfers from the Union government to meet their expenses. This leads to lower deficits but also indicates a dependency on external support.

## Challenges:

- 1. **Disparity in Tax Effort:** High-income states put in more tax effort but receive less Union financial support, leading to higher deficits.
- 2. **Fiscal Responsibility:** All states have legal limits on deficit and debt, but reduced financial transfers compel some states to breach these limits.

## Recommendations for a Balanced Approach:

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- 1. **Include Fiscal Variables:** The FC should consider more fiscal indicators in the tax devolution criteria to encourage better fiscal discipline among states.
- 2. **Incentivize Efficiency:** Assign greater weight to states' tax efforts and expenditure efficiency to promote sustainable financial practices.

## **Key Takeaways**

- 1. **Redistribution Focus:** The Finance Commission prioritizes equity in distributing Union tax revenue, often leading to disparities between high-income and low-income states.
- 2. **Impact on States:** High-income states face higher deficits due to lower Union financial transfers, while low-income states depend more on Union aid.
- 3. **Need for Balance:** The FC should balance equity and efficiency by including more fiscal indicators in the distribution formula, promoting better fiscal discipline.
- 4. Intergenerational Equity: Ensuring that current public services are paid for by current taxpayers, not future generations, is crucial for sustainable financial management.

## Choosing the right track to cut post-harvest losses- TH Editorial

#### Economy

# **Easy Explanation**

India is one of the top producers of agricultural goods in the world, ranking second. However, when it comes to exporting these goods, India lags behind, holding only 2.4% of the global market and placing eighth worldwide. This disparity is due to several challenges such as low productivity, poor quality standards, and inefficiencies in the supply chain like inadequate transportation networks, which result in significant post-harvest losses. Each year, India loses about ₹1,52,790 crore worth of produce after harvest due to these issues.

A large portion of these losses comes from perishable items like eggs, fish, meat, fruits, and vegetables. During exports, about 19% of perishable food is lost, mainly due to issues at the importing country's end. To improve this, better storage, transportation, and marketing are crucial. Strengthening agricultural logistics is essential to ensure that these perishable products reach consumers in time. The government's Committee on Doubling Farmers' Income (DFI) has recognized this need.

The transportation of perishables involves multiple stages, starting from the farm to wholesale markets and then to consumers. Small and marginal farmers, who make up 86% of the farming community in India, struggle due to small-scale production and lack of assured market connectivity, leading to post-harvest losses and reduced income.

Food price volatility in India is partly due to supply constraints affecting perishables. The Indian Railways, a major player in transporting goods, has taken initiatives to improve freight operations for perishables. Services like the truck-on-train service and Kisan Rail have been introduced to connect surplus production regions with consumption regions efficiently. These efforts have shown promising results, like helping grape growers in Maharashtra gain significant profits.

However, there is a need for better awareness and accessibility of these schemes among farmers. Challenges include multiple touch points during transport, which can lead to spoilage and contamination. Investing in specialized wagons and rail-side facilities for safe cargo handling is crucial to enhance food safety and reduce losses. Prioritizing rail transport over roadways for fruits and vegetables can make transportation more efficient.

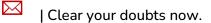
The Indian Railways also has a lower environmental impact compared to road transport, generating up to 80% less carbon dioxide. A systems-based approach that includes public-private partnerships can enhance operational efficiency and strengthen rail infrastructure. The budget for agriculture in 2024 aims to bridge the gap between farms and markets with modern infrastructure and value-addition support, complementing railway initiatives to minimize post-harvest losses.

# Key Takeaways

**India's Agriculture and Export Disparity**: India ranks second in global agriculture production but only eighth in global agricultural exports, with a 2.4% share. This is due to low productivity, poor quality standards, and supply chain inefficiencies leading to significant post-harvest losses.

**Post-Harvest Losses**: Annually, India faces approximately ₹1,52,790 crore in post-harvest losses. The biggest losses come from perishable commodities like eggs, fish, meat, fruits, and vegetables. Improving storage, transportation, and marketing is crucial.

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**Role of Indian Railways**: The Indian Railways has introduced initiatives like truck-on-train service and Kisan Rail to improve freight operations for perishables. These efforts have shown promising results in reducing post-harvest losses and enhancing farmer incomes.

**Challenges and Solutions**: Despite the initiatives, challenges remain, including multiple touch points during transport leading to spoilage. Investing in specialized wagons and rail-side facilities for safe cargo handling is essential. Prioritizing rail transport over roadways for fruits and vegetables promises efficient transportation.

**Environmental Impact and Future Plans**: Railways generate up to 80% less carbon dioxide compared to road transport. A systemsbased approach, including public-private partnerships, can enhance efficiency and infrastructure. The agriculture budget for 2024 aims to modernize infrastructure and support value addition, complementing railway efforts to reduce post-harvest losses.

# 19th July 2024

# All-Win: IE Editorial

Sociology

# **Easy Explanation**

India's Universal Immunisation Programme (UIP) is a significant public health success. It aims to vaccinate 29 million pregnant women and 26 million infants each year against preventable diseases. The government plans to launch a digital vaccination registry, U-Win, on August 15, which will improve the recording and tracking of vaccinations. Currently, data is recorded manually by ASHA workers and takes over a month to be collated. Private healthcare vaccination data is often missed.

The U-Win portal will capture every vaccination event in real-time, providing valuable data for healthcare planning and outbreak prevention. India's immunisation program started in 1978 with four vaccines and now targets 12 diseases. Nearly 80% of children aged 12-23 months receive recommended vaccines. However, disruptions during the COVID-19 pandemic and challenges such as migrant populations missing vaccinations and children dropping out of the program persist.

U-Win can be accessed from anywhere, helping improve vaccine coverage among disadvantaged groups and reducing infant mortality rates. Parents will receive SMS alerts for upcoming vaccinations and can book slots online, eliminating the need for physical records. Ensuring the digital divide doesn't hinder access to U-Win is crucial.

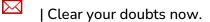
During COVID-19, the CoWIN platform played a key role in vaccine delivery, and another portal, e-Vin, has tracked vaccine logistics since 2015, reducing stock-outs by 80%. U-Win is set to become the world's largest immunisation registry. India's digital systems should help make the UIP more comprehensive, potentially including new vaccines like the HPV vaccine in the future.

# Key Takeaways

**Importance and Scale of UIP**: India's Universal Immunisation Programme (UIP) is a major global public health success. It aims to vaccinate 29 million pregnant women and 26 million infants annually.

**Introduction of U-Win**: The government plans to launch a digital vaccination registry, U-Win, on August 15. This portal will ensure real-time data capture of vaccination events, helping improve planning and responsiveness to outbreaks.

**Historical Context and Current Challenges**: India's first national immunisation program in 1978 included four vaccines. Today, the UIP targets 12 diseases, with 80% of children aged 12-23 months receiving recommended vaccines. However, challenges like the disruption caused by COVID-19, migrant populations missing vaccinations, and high dropout rates remain.



**Potential of U-Win**: U-Win can enhance vaccine coverage among disadvantaged groups, reduce infant mortality rates, and provide parents with SMS alerts for upcoming vaccinations and the ability to book slots online. It aims to bridge the digital divide to ensure accessibility for all beneficiaries.

**Success of Digital Platforms**: The CoWIN platform played a crucial role in COVID-19 vaccine delivery, and e-Vin has been tracking vaccine logistics since 2015, significantly reducing stock-outs. U-Win is poised to become the world's largest immunisation registry, potentially expanding to include vaccines like the HPV vaccine in the UIP.

## Why it's better late than never- IE Ideas

Sociology

# **Easy Explanation**

The Supreme Court of India recently handled a case about implementing menstrual leave policies for women, stating that this decision should be made by the government, not the courts. The petitioner wanted menstrual leave to be included under the Maternity Benefits Act, 1961, as it deals with women's reproductive health and workplace leave. Despite differing opinions, some government initiatives support menstrual leave. Supporters see it as a necessary relief for women, while opponents worry it could stigmatize menstruation and discourage employers from hiring or promoting women. There's also concern about potential misuse of such policies.

The debate on menstrual leave has been ongoing and needs resolution. It's essential to address the inherent sexism and misogyny in opposing such leaves. Misuse of laws is a concern in many areas, but it's crucial to recognize that arguments about misuse often unfairly target gender equality laws and policies.

The previous Minister for Women and Child Development opposed menstrual leave, sparking debate. However, the Ministry of Health and Family Welfare's Draft National Menstrual Hygiene Policy, 2023, aims to be inclusive, recognizing all individuals who menstruate, including cis-women, transgender people, and those with intersex variations. The draft policy aligns with India's commitments to Sustainable Development Goals (SDGs) and seeks to address social taboos, eliminate stigma, and foster a supportive environment. It mentions "support leaves" and accommodations at educational institutions and workplaces but lacks detailed implementation plans.

In 2018, a Member of Parliament introduced a bill for two days of paid menstrual leave and other accommodations, drawing on both the Maternity Benefits Act and the Sexual Harassment of Women at Workplace Act for grievance redressal. Since then, several private member bills have addressed menstrual-related issues, but none have passed.

Culturally, menstruation is both celebrated as a marker of fertility and stigmatized as "dirty" and "impure." It's a natural biological process that can cause discomfort and pain, yet society often conditions those who menstruate to cope without acknowledgment. For true gender equality, menstruation must be openly addressed, starting with accommodations in public spaces like schools and workplaces. Historical policy experiences show that even when menstrual leave is available, it is often underutilized due to stigma and fear of discrimination. This indicates a need to consider diverse needs in our approach to socio-economic participation.

Overall, there's increasing recognition of menstruation as an important policy area. The focus now is on how to provide menstrual leave effectively, ensuring the measures are need-sensitive and rights-based.

# Key Takeaways

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**Supreme Court's Stance**: The Supreme Court of India emphasized that the decision to implement menstrual leave policies should be made by the government, not the courts. The petitioner had sought to include menstrual leave under the Maternity Benefits Act, 1961.

**Government Initiatives and Opinions**: There are mixed opinions on menstrual leave. Some see it as necessary relief for menstruating individuals, while others worry it could stigmatize menstruation and discourage employers from hiring women. Concerns about misuse of such policies also exist.

**Draft National Menstrual Hygiene Policy, 2023**: This policy aims to be inclusive, recognizing all individuals who menstruate, including cis-women, transgender people, and those with intersex variations. It seeks to address social taboos, eliminate stigma, and foster a supportive environment. However, it lacks detailed implementation plans.

**Previous Legislative Efforts**: In 2018, a bill was introduced for paid menstrual leave and other accommodations, drawing on the Maternity Benefits Act and the Sexual Harassment of Women at Workplace Act. Since then, several private member bills have addressed menstrual-related issues, but none have passed.

**Cultural Attitudes**: Menstruation is both celebrated and stigmatized in different cultures. It's a natural process that can cause discomfort and pain, yet society often expects individuals to cope without acknowledgment. For true gender equality, menstruation must be openly addressed, starting with accommodations in public spaces.

**Historical Policy Experience**: Even when menstrual leave is available, it is often underutilized due to stigma and fear of discrimination. This indicates a need to consider diverse needs in our approach to socio-economic participation.

**Growing Recognition**: There's increasing recognition of menstruation as an important policy area. The focus now is on how to provide menstrual leave effectively, ensuring the measures are need-sensitive and rights-based.

## Looking at Trump-Vance: the policy view from New Delhi- IE Explained

International Relations

## Easy Explanation:

Recently, the Supreme Court of India dismissed a petition that requested menstrual leave policies for women, stating that it is the government's responsibility to decide on such matters, not the courts. The petitioner wanted menstrual leave provisions to be included in the Maternity Benefits Act, 1961, arguing that since menstruation is related to reproduction, it should logically fit within this act, which already provides leave for women at the workplace.

There are differing opinions on menstrual leave. Supporters see it as a necessary measure to address the needs of menstruating individuals, providing them relief and support. Critics, however, argue that such policies could lead to further stigmatization of menstruation, discourage employers from hiring or promoting women, and raise concerns about potential misuse.

In 2023, the Ministry of Health and Family Welfare introduced a Draft National Menstrual Hygiene Policy, identifying "all women, girls, and persons who menstruate" as its subjects. This inclusive approach aims to address social taboos, break barriers, eliminate stigma, and foster a supportive environment. The draft policy suggests support leaves and other accommodations but lacks clear guidelines on implementation.

Earlier, in 2018, a Private Member Bill (PMB) proposed by MP Ninong Ering suggested two days of paid menstrual leave, four days of leave for students in Class VIII or above, and rest periods during menstruation. However, this and other similar bills have lapsed.

Menstruation is celebrated as a sign of fertility but also stigmatized as "dirty" or "impure." It is a natural biological process that can cause significant discomfort. Addressing the needs of menstruating individuals is essential for achieving gender equality, and providing accommodations in schools and workplaces is a necessary step. Globally, even where menstrual leave policies exist, they are often underutilized due to stigma and fear of discrimination.

The issue now is not whether menstrual leave should be provided but how it can be effectively implemented. With growing recognition of menstruation as a critical area for policy intervention, it is expected that concrete measures will soon be introduced.

# Key Takeaways:

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**Supreme Court Ruling:** The Supreme Court of India dismissed a petition seeking menstrual leave policies, stating that it is the government's decision, not the courts'.

| Clear your doubts now.

**Proposed Policies:** The petitioner suggested including menstrual leave under the Maternity Benefits Act, 1961. Supporters view menstrual leave as a necessary relief measure, while critics fear it could lead to further stigmatization and discourage employers from hiring women.

**Draft National Menstrual Hygiene Policy 2023:** This policy, introduced by the Ministry of Health and Family Welfare, aims to address social taboos, break barriers, eliminate stigma, and foster a supportive environment for all menstruating individuals. It suggests support leaves and other accommodations but lacks clear implementation guidelines.

**Private Member Bills:** In 2018, MP Ninong Ering proposed a bill for paid menstrual leave and rest periods during menstruation, but it lapsed along with other similar bills.

**Socio-Cultural Context:** Menstruation is both celebrated and stigmatized. It is a natural biological process that can cause discomfort. Addressing the needs of menstruating individuals is crucial for achieving gender equality.

**Implementation Focus:** The debate now is on how to implement menstrual leave policies effectively. With growing recognition of menstruation as a critical area for policy intervention, concrete measures are expected to be introduced soon.

## Green revolution in maize- IE Explained

Economy

## Easy Explanation:

India's Green Revolution made the country self-sufficient in wheat and rice production, largely due to high-yielding varieties developed by institutions like CIMMYT and IARI, with the help of scientists like Norman Borlaug and MS Swaminathan. Another less celebrated revolution has occurred in maize production. Between 1999-2000 and 2023-24, India's maize output has more than tripled, with average yields per hectare almost doubling.

Most of India's maize is not used for direct human consumption. About 60% of it is used as feed for poultry and livestock. This maize indirectly becomes food as chicken, eggs, or milk. For instance, a market-ready broiler chicken, which consumes maize-based feed during its rearing cycle, is essentially "maize with wings."

Maize is also used industrially, especially for producing ethanol for blending with petrol. Recently, the government stopped using surplus rice for ethanol production, increasing the focus on maize. IARI has developed India's first "waxy" maize hybrid, which has high amylopectin starch content, making it better for ethanol production. The new hybrid, Pusa Waxy Maize Hybrid-1, has a higher starch recovery rate compared to normal maize, leading to more ethanol production.

CIMMYT has also made advancements with a maize doubled haploid (DH) facility in Karnataka. This technology speeds up the breeding process of maize by producing genetically pure inbred lines faster. These advancements in maize breeding and production show significant potential for both food security and industrial uses.

## Key Takeaways:

**Green Revolution and Maize Production:** India's Green Revolution, led by institutions like CIMMYT and IARI, made the country selfsufficient in wheat and rice. A similar revolution has taken place in maize production, with India's maize output more than tripling from 1999-2000 to 2023-24.

**Maize Usage:** Unlike wheat and rice, only a small portion of India's maize is used for direct human consumption. About 60% is used as feed for poultry and livestock, indirectly becoming food as chicken, eggs, or milk. Maize is also used for industrial purposes, including ethanol production.

**Waxy Maize Hybrid:** IARI has developed a new "waxy" maize hybrid with high amylopectin starch content, making it better for ethanol production. This new hybrid has a higher starch recovery rate, leading to more ethanol production.

**CIMMYT's Advancements:** CIMMYT has established a maize doubled haploid (DH) facility in Karnataka. This technology speeds up the breeding process by producing genetically pure inbred lines faster, improving maize breeding efficiency.



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**Private Sector Involvement:** The green revolution in maize has been largely driven by the private sector, with private sector-bred hybrids accounting for over 80% of the maize area in India. CIMMYT shares its improved inbred lines with both public institutions and private seed companies.

**Future Potential:** These advancements in maize breeding and production show significant potential for food security and industrial uses, positioning maize as a crucial crop for India's agricultural and industrial future.

## Time to make climate part of green impact reports- TH Science

Environment

# **Easy Explanation:**

The changing weather over the past few years has shown us extreme conditions like intense heat, storms causing floods in cities, and very cold winters. These changes in weather, linked to climate change, are affecting human lives and health. The World Health Organization (WHO) warns that climate change threatens clean air, safe drinking water, nutritious food, and safe shelter, potentially undoing progress in global health. WHO estimates that from 2030 to 2050, climate change could cause 250,000 more deaths each year due to malnutrition, malaria, diarrhea, and heat stress. The direct health costs could reach \$2-4 billion annually by 2030, especially affecting regions with weak health infrastructure.

A recent study in India found that working in extreme heat can double the risk of stillbirth and miscarriage for pregnant women. This highlights the severe impact of climate change on health.

A significant public interest litigation was filed in the Madras High Court, emphasizing the need to include a climate change component in Environmental Impact Assessments (EIA). These assessments are required for large construction or development projects to evaluate their environmental impact. The petitioner, G. Sundarrajan from the NGO Poovulagin Nanbargal, argues that any EIA should also assess the project's climate change impact, including carbon footprint and greenhouse gas emissions, from the start of construction to the project's end. An Environmental Management Plan should be prepared to mitigate these impacts and submitted for government evaluation before granting clearance.

The Madras High Court acknowledged the validity of this plea and asked the Centre to respond within two weeks. This case could become significant as it aligns with the global recognition that climate change is an urgent issue that cannot be ignored. Countries like the Bahamas, France, Chile, the United States, China, and Australia have already enacted laws to address climate change. Given that India will be deeply affected by climate change, it would be wise to enact similar laws to prevent further environmental degradation.

# Key Takeaways:

**Impact of Climate Change on Health:** Climate change is increasingly affecting human health by threatening clean air, safe water, nutritious food, and shelter. The WHO predicts that from 2030 to 2050, climate change could cause an additional 250,000 deaths annually due to malnutrition, malaria, diarrhea, and heat stress. The direct health costs are estimated to be \$2-4 billion per year by 2030, with developing regions being the most vulnerable.

**Study on Extreme Heat in India:** A study by the Sri Ramachandra Institute of Higher Education and Research in Chennai found that extreme heat can double the risk of stillbirth and miscarriage for pregnant women. This emphasizes the severe health impacts of climate change, especially on vulnerable populations.

**Public Interest Litigation in Madras High Court:** A public interest litigation filed by G. Sundarrajan of the NGO Poovulagin Nanbargal in the Madras High Court calls for including a climate change component in Environmental Impact Assessments (EIA). The petitioner argues that EIA should assess a project's climate change impact, including its carbon footprint and greenhouse gas emissions, from the start of construction to the project's end. An Environmental Management Plan should be prepared and submitted for government evaluation before granting clearance.

**Court's Acknowledgment and Potential Impact:** The Madras High Court acknowledged the validity of this plea and asked the Centre to respond within two weeks. This case could become significant as it aligns with the global recognition that climate change is an



urgent issue. Countries like the Bahamas, France, Chile, the United States, China, and Australia have already enacted laws to address climate change. India, being deeply affected by climate change, would benefit from similar laws to prevent further environmental degradation.

# India and a case for strategic autonomy- TH Editorial

International Relations

# **Easy Explanation:**

On July 11, 2024, Prime Minister Narendra Modi had just finished his first visit to Moscow since Russia invaded Ukraine in 2022. Two days later, the U.S. Ambassador to India, Eric Garcetti, made a statement implying that in times of conflict, countries need to align closely and that strategic autonomy doesn't hold up during crises. This comment came after the U.S. had expressed its concerns about Modi's visit to Russia, particularly as it coincided with a NATO summit in Washington. The U.S. officials had reportedly asked India to postpone the visit, but India went ahead with it, causing some friction with the Biden administration.

Historically, India has maintained a policy of strategic autonomy, meaning it makes decisions that best serve its national interests without being influenced by external pressures. This approach has been consistent through different governments since India's independence. It started with non-alignment during the Cold War and evolved into a multi-directional foreign policy. This allowed India to balance its relationships with different global powers.

Recently, the biggest stress point in India-U.S. relations has been India's stance on the Russia-Ukraine war. Unlike the U.S. and its allies, who imposed sanctions on Russia and supported Ukraine with military aid, India continued its strategic partnership with Russia. India expanded its energy cooperation with Russia and avoided condemning the invasion outright, which the West interpreted as support for Russia. This divergence caused some strain in the India-U.S. relationship.

The U.S. sees India's close ties with Russia, especially in the context of the Ukraine war, as problematic. However, from India's perspective, maintaining its strategic autonomy is crucial. India's defense relationship with Russia is significant, with Russia being a major supplier of military equipment. Additionally, India values its partnership with Russia for economic and security reasons in Eurasia.

India's balanced approach in foreign policy aims to keep good relations with multiple powers without being part of any alliance system. This allows India to maintain flexibility in its international relations. The U.S., however, views this with skepticism, especially as it seeks allies in its strategic competition with China and Russia.

Despite these tensions, India's policy of strategic autonomy is not meant to be unfriendly towards the U.S. Instead, it is aimed at ensuring that India's interests are best served. This includes advocating for a more representative global order where voices from the Global South, including India, are heard.

# Key Takeaways:

**Historical Context and Strategic Autonomy:** India has followed a policy of strategic autonomy since its independence, allowing it to make foreign policy decisions based on national interests. This approach started with non-alignment during the Cold War and has evolved into a multi-directional foreign policy, balancing relations with major global powers.

**Recent Tensions with the U.S.**: The biggest recent stress point in India-U.S. relations is India's stance on the Russia-Ukraine war. Unlike the U.S. and its allies, India has maintained its partnership with Russia, expanded energy cooperation, and avoided condemning the invasion. This has caused some friction with the U.S., which views India's actions as support for Russia.

**Importance of Strategic Autonomy for India:** For India, maintaining strategic autonomy is crucial for balancing relations with major powers without joining any alliance system. This allows India to maintain flexibility and serve its national interests effectively. India's defense relationship with Russia is significant, and it values the partnership for economic and security reasons in Eurasia.

| Clear your doubts now.

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**U.S. Perspective and Concerns:** The U.S. is concerned about India's close ties with Russia, especially in the context of the Ukraine war. The U.S. sees India's actions as problematic and has expressed its concerns both publicly and privately. However, India's strategic autonomy is not meant to be unfriendly towards the U.S. but rather to ensure that India's interests are best served.

**Global and Regional Implications:** India's balanced approach in foreign policy aims to keep good relations with multiple powers, advocating for a more representative global order. This approach is important for India to maintain its strategic space and influence in the international system.

# Trade Tact- TH Editorial

Economy

# **Easy Explanation:**

In June 2024, India's exports of goods increased for the third month in a row, rising by 2.55% to \$35.2 billion. Imports also went up by 5% to \$56.2 billion, although they were lower than the nearly \$62 billion seen in May. The trade deficit, which measures the gap between exports and imports, grew by 9.4% from last June but was slightly lower than in May. One major concern is the oil deficit, which, despite decreasing from a record \$13 billion in May to \$10 billion in June, is still significant. This is partly because oil exports dropped by 18.3% to \$5.5 billion, and the volume of exports fell. At the same time, oil imports increased by 19.6%, indicating higher domestic demand.

In the first quarter (April to June), oil imports rose by over 23%, with global prices about 9% higher than last year. The oil deficit made up nearly half of the trade deficit, which was \$62 billion, an increase of 10.9% from the previous year. On the other hand, the value of gold imports fell by 38.7% in June to \$3.06 billion, the lowest for this fiscal year, while silver imports jumped by 377%. This suggests a need for the government to look into potential issues in India's bullion market due to duty-free imports through the GIFT City under the free trade agreement with the UAE.

Additionally, India's gems and jewelry exports have been declining for seven consecutive months. The overall import bill, excluding oil and gold, increased by about 3% this year, reversing a 10% dip in the same period last year. This growth, which sped up to 7% in June, signals a recovery in domestic demand, which is a positive sign for the economy.

India's trade policy should focus on boosting exports rather than just managing the trade deficit, which is expected as the country grows faster than the global average. Notably, at least 19 out of India's top 30 export sectors saw growth in May and June, up from just 13 in April. With global inflation decreasing and possible interest rate cuts on the horizon, the International Monetary Fund has increased its forecast for trade volume growth to 3% in 2024, up from 0.3% last year. To fully leverage this opportunity, the government needs to provide sufficient resources and stability for exporters, including support for schemes like duty remission and interest equalization. Sudden policy changes, such as the recent cancellation of the interest equalization scheme for all exporters except small firms, should be avoided.

# Key Takeaways:

**Exports and Imports Trends:** In June 2024, India's exports grew for the third consecutive month, reaching \$35.2 billion, while imports rose by 5% to \$56.2 billion. This resulted in a trade deficit that, despite increasing by 9.4% from last June, was lower than the previous month.

**Oil Deficit Concerns:** The oil deficit, although reduced from May's record \$13 billion to \$10 billion in June, remains a significant worry. Oil exports fell by 18.3%, and imports rose by 19.6%, indicating a spike in domestic demand. Overall oil imports for the first quarter increased by over 23%.

**Gold and Silver Imports:** Gold imports decreased by 38.7% in June to \$3.06 billion, while silver imports surged by 377%. This highlights the need for government investigation into potential market disruptions due to duty-free imports under the UAE free trade agreement.

**Gems and Jewelry Exports Decline:** The decline in gems and jewelry exports for seven consecutive months needs attention. The overall import bill, excluding oil and gold, increased by about 3% this year, indicating a recovery in domestic demand.

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Focus on Boosting Exports: India should focus on boosting exports rather than just managing the trade deficit, which is a natural outcome of faster growth. The IMF has raised its trade volume growth forecast to 3% for 2024, suggesting a potential increase in global demand.

**Government Support Needed:** To fully capitalize on export opportunities and create more jobs, the government must provide adequate resources and stability for the sector. This includes support for duty remission and interest equalization schemes. Avoiding sudden policy shifts is crucial to maintaining sector confidence.

# What is the role of the Finance Commission?- TH Text&Context

Economy

# **Easy Explanation:**

The Sixteenth Finance Commission, led by Arvind Panagariya, has started its work and is inviting public suggestions. This Finance Commission, consisting of five members, was established in December 2022 and will provide its recommendations by October 2025. These recommendations will be effective for five years starting April 1, 2026.

The Finance Commission is a constitutional body that advises how the Central government's tax revenue should be shared with the States. However, the Central government is not legally required to follow these recommendations. The Commission is set up every five years and takes about two years to make its suggestions.

The Commission decides how much of the Centre's tax revenue will go to the States overall (vertical devolution) and how this share will be distributed among the various States (horizontal devolution). The horizontal devolution is based on a formula that considers factors like population, income level, and geography. Vertical devolution, on the other hand, is not based on a fixed formula. Recent Commissions have suggested giving a larger share of tax revenue to the States. For example, the 13th, 14th, and 15th Finance Commissions recommended sharing 32%, 42%, and 41% of the divisible pool of funds with the States, respectively. The Finance Commission can also suggest additional grants for specific schemes that the Centre and the States fund together.

The 16th Finance Commission is also expected to suggest ways to increase the revenues of local bodies like panchayats and municipalities. Currently, only about 3% of public spending in India happens at the local level, compared to over 50% in countries like China.

There has been friction between the Centre and the States over sharing tax revenues. The Centre collects significant taxes like income tax and GST, while States mainly rely on taxes from goods like liquor and fuels. States argue they have more responsibilities, such as providing education and healthcare, but not enough funds to fulfill these duties. They believe the Centre should give them more money than what the Finance Commission recommends. Additionally, States claim that the Centre doesn't always share the full recommended amount. For instance, during the 15th Finance Commission period, the Centre devolved an average of only 38% of funds instead of the recommended 41%.

Another issue is what portion of the Centre's overall tax revenue should be shared with the States. Taxes collected as cesses and surcharges are not shared with the States, leading to significant revenue losses. These can make up as much as 28% of the Centre's tax revenue in some years. Therefore, even if the Finance Commission recommends more funds for States, the rise in cess and surcharge collections might negate these increases.

States like Karnataka and Tamil Nadu feel they contribute more in taxes than they receive back from the Centre. For instance, Tamil Nadu gets only 29 paise for every rupee it contributes, while Bihar receives over ₹7 for each rupee it contributes. This disparity leads to claims that well-governed States are being penalized to support poorly governed States. Some critics also argue that the Finance Commission, whose members are appointed by the Centre, might not be entirely independent and free from political influence.

# Key Takeaways:

**Formation and Role of the Finance Commission:** The Sixteenth Finance Commission, led by Arvind Panagariya, has started its work, inviting public suggestions. Established in December 2022, it will provide recommendations by October 2025, effective for five years from April 2026. The Finance Commission is a constitutional body advising on the distribution of the Central government's tax

revenue among States. While the Centre is not legally bound to follow its recommendations, the Commission plays a crucial role in shaping fiscal federalism in India.

**Distribution of Funds:** The Commission determines the vertical devolution (overall share of States in Central tax revenue) and horizontal devolution (distribution among States based on factors like population and income level). Recent Commissions have suggested increasing the States' share in tax revenue, with the 13th, 14th, and 15th Commissions recommending 32%, 42%, and 41%, respectively. The 16th Commission is also expected to recommend ways to boost local body revenues, which currently account for only 3% of public spending in India.

**Centre-State Friction:** There is ongoing friction between the Centre and States over revenue sharing. While the Centre collects major taxes, States argue they have greater responsibilities but insufficient funds. States believe they should receive more than the Finance Commission's recommendations and claim the Centre often devolves less than the recommended amount. For example, during the 15th Finance Commission period, the Centre devolved an average of 38% instead of the recommended 41%.

**Issues with Cesses and Surcharges:** A significant issue is the portion of tax revenue not shared with States, such as cesses and surcharges, which can constitute up to 28% of the Centre's revenue. This reduces the effective share of States in the overall tax revenue. Even if the Finance Commission recommends higher devolution, increased collections through cesses and surcharges can offset these gains.

**Concerns of Developed States:** Developed States like Karnataka and Tamil Nadu feel they contribute more to the Central exchequer than they receive. For instance, Tamil Nadu receives only 29 paise per rupee contributed, while Bihar gets over ₹7. This creates a perception that well-governed States are penalized to support poorly governed ones. Critics also argue that the Finance Commission may not be entirely free from political influence, given its members are appointed by the Centre.

# 20th July 2024

Living in denial about unemployment- TH Editorial

Economy

# **Easy Explanation**

Prime Minister Narendra Modi recently cited a report from the Reserve Bank of India (RBI) stating that 8 crore jobs were created in the last 3-4 years. He used this to counter the opposition's claims about high unemployment. He also mentioned upcoming infrastructure projects that will generate more jobs. This was in response to reports from financial institutions like Citigroup, which highlighted inadequate job creation in India.

The RBI report called "The India KLEMS Database" was released on July 7. It includes data on various economic measures like Gross Value Added, labour employment, and capital stock. The State Bank of India (SBI) also released its report to counter financial institutions' claims, stating that 8.9 crore jobs were created in manufacturing and services from FY14 to FY23. However, the Centre for Monitoring Indian Economy (CMIE), a private data agency, reported that the unemployment rate rose to 9.2% in June 2024, contrary to the government's claims.

The confusion arises because different sources use various databases and methods to estimate employment. The KLEMS data relies on official data from the Periodic Labour Force Survey (PLFS) and the Annual Survey of Unincorporated Sector Enterprises (ASUSE). The KLEMS data should not be considered an independent source of employment data.

India's economy is complex, with a large unorganised sector employing 94% of the labour force. Data for this sector is sparse and difficult to collect. The Census, conducted every 10 years, and the ASUSE survey, conducted every five years, provide some data, but the last Census was in 2011. The ASUSE survey depends on outdated data, which poses problems, especially after economic shocks like demonetisation, GST introduction, and the COVID-19 pandemic.

The PLFS and CMIE data differ significantly due to their definitions of employment. CMIE uses the International Labour Organization's definition, counting only those who earn income from work. PLFS includes those working without income, leading to higher employment figures. This discrepancy results in a difference of about 90 million in labour force participation rates between the two sources.

On the ground, unemployment is a significant issue, as evidenced by large numbers of applicants for limited job openings and frequent protests. However, the government often denies these problems and uses data that may not accurately reflect the employment situation. Admitting the problem and addressing it is crucial to prevent growing frustration among the youth.

# Key Takeaways

**Prime Minister's Claim:** Prime Minister Narendra Modi recently cited an RBI report stating that 8 crore jobs were created in the last 3-4 years to counter the opposition's claims of high unemployment. He also mentioned upcoming infrastructure projects that will generate more jobs.

**Conflicting Reports:** While the RBI and SBI reports suggest significant job creation, the Centre for Monitoring Indian Economy (CMIE) reported a rise in the unemployment rate to 9.2% in June 2024. This discrepancy highlights the conflicting nature of various employment data sources.

**Data Sources:** The KLEMS database relies on official data from surveys like the PLFS and ASUSE, which are outdated and based on pre-shock periods. This raises questions about the accuracy of current employment figures, especially in the unorganised sector, which employs 94% of the labour force.

**Complex Economy:** India's economy has a large unorganised sector with sparse and outdated data. The Census, conducted every 10 years, and the ASUSE survey, conducted every five years, provide some data, but the last Census was in 2011. Economic shocks like demonetisation, GST introduction, and the COVID-19 pandemic have further complicated the data collection process.

**PLFS vs. CMIE Data:** The PLFS and CMIE data differ significantly due to their definitions of employment. The PLFS includes those working without income, leading to higher employment figures, while the CMIE uses the International Labour Organization's definition, counting only those who earn income from work. This discrepancy results in a difference of about 90 million in labour force participation rates between the two sources.

**Ground Reality:** Unemployment remains a significant issue, as evidenced by large numbers of applicants for limited job openings and frequent protests. However, the government often denies these problems and uses data that may not accurately reflect the employment situation. Admitting the problem and addressing it is crucial to prevent growing frustration among the youth.

# The budget's dilemma- IE Editorial

Economy

# **Easy Explanation**

The sixteenth Finance Commission of India, headed by Arvind Panagariya, has started its work by seeking suggestions from the public. This Commission, formed in December last year, includes five members and is expected to present its recommendations by October 2025. These recommendations will be valid for five years from April 1, 2026.

The Finance Commission is a body set up to recommend how tax revenues collected by the Central government should be shared with the States. While the Centre is not legally bound to follow these recommendations, the Commission is reconstituted every five years to make these suggestions.

The Finance Commission decides two main things: how much of the Centre's tax revenue should be given to all the States combined (vertical devolution), and how this amount should be divided among the individual States (horizontal devolution). The horizontal division is usually based on factors like a State's population, fertility rate, income level, and geographical features. The vertical division, however, is not based on a fixed formula.



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The last few Commissions have recommended giving a larger share of tax revenues to the States. For example, the 13th, 14th, and 15th Finance Commissions recommended that the Centre should share 32%, 42%, and 41% of its funds, respectively, with the States. Additionally, the Centre may provide extra funds to States for certain joint projects.

The 16th Finance Commission is also expected to suggest ways to increase the revenues of local bodies such as panchayats and municipalities. Currently, only about 3% of public spending happens at the local body level in India, compared to over 50% in China.

There have been ongoing disagreements between the Centre and the States over the sharing of tax revenues. The Centre collects major taxes like income tax, corporate tax, and GST, while the States mainly rely on taxes from the sale of goods like liquor and fuels. States argue that they should receive more funds from the Centre to match their responsibilities in providing services like education, healthcare, and police. They also point out that the Centre does not always share the recommended amount of funds.

Furthermore, there are disagreements over what portion of the Centre's overall tax revenue should be shared with the States. For example, cesses and surcharges collected by the Centre are not shared with the States and can make up a significant part of the Centre's revenue. This has led to claims that even if the Centre increases the share of tax revenues for the States, the rise in cesses and surcharges offsets this benefit.

Some more developed States, like Karnataka and Tamil Nadu, have also argued that they receive less money from the Centre compared to what they contribute in taxes, whereas less developed States receive more. This is seen as penalizing better-governed States to help those with poorer governance.

# Key Takeaways

### **Commission's Formation and Role**

The sixteenth Finance Commission, led by Arvind Panagariya, began its work in December last year. It seeks public suggestions and will provide recommendations valid for five years starting April 1, 2026. The Finance Commission is a constitutional body recommending the distribution of tax revenues between the Centre and the States.

#### **Decision-Making Process**

The Finance Commission decides on the vertical and horizontal devolution of tax revenues. Vertical devolution refers to the overall share of the Centre's tax revenue that goes to the States, while horizontal devolution refers to the distribution of this share among individual States based on factors like population and income level. Recent Commissions have recommended increasing the States' share of tax revenues.

#### **Revenue Distribution and Local Bodies**

The 16th Finance Commission is expected to suggest ways to increase local body revenues. Currently, only about 3% of public spending in India happens at the local level, compared to over 50% in China. The Centre and States have ongoing disagreements over the share of tax revenues, with States arguing they need more funds to fulfill their responsibilities.

#### **Disagreements and Issues**

Disagreements include the actual delivery of funds and the portion of the Centre's revenue considered part of the divisible pool. Cesses and surcharges collected by the Centre are not shared with the States, reducing the States' effective share of tax revenues. More developed States argue they receive less money compared to what they contribute in taxes, while less developed States receive more, which is seen as penalizing better-governed States.

A process more punishing- IE Ideas

#### Polity

## Easy Explanation

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The Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS), has replaced the Code of Criminal Procedure, 1973 (CrPC). This change introduces significant modifications to the procedural protections that an accused person has enjoyed, specifically concerning "police custody."

The CrPC is crucial legislation, often viewed as the "Accuseds' Constitution," providing essential protections for those detained by the police. It limits the period of police custody, mandates judicial oversight, and ensures access to legal representation. Unlike colonial-era laws, the CrPC was a post-colonial reform aimed at safeguarding individual rights.

Custody of an accused can be either police custody or judicial custody. Police custody means the police have direct control over the accused, while judicial custody usually involves detention in a jail with specific rules and regulations. Police custody is often the harsher experience.

Previously, under the CrPC, police custody was limited to a maximum of 15 days. However, the new BNSS removes this 15-day limit. Now, a magistrate can authorize police custody for up to 90 days, depending on the severity of the offense. This change raises concerns about the potential for increased police excesses and violations of the rights of the accused, as prolonged police custody can lead to physical and mental health issues and risks of custodial violence or torture.

This extension in police custody under the BNSS contrasts sharply with even harsh statutes like the Unlawful Activities (Prevention) Act, 1967 (UAPA), which limits police custody to 30 days and requires justifications for extending custody. The BNSS allows for a significantly longer period of police custody without similar safeguards.

The new provisions in the BNSS could undermine the protection against torture and cruel treatment guaranteed under Article 21 of the Indian Constitution, which the Supreme Court has interpreted to include the right to live with dignity and protection against inhuman treatment.

## **Key Takeaways**

#### BNSS Replaces CrPC

The Bharatiya Nagarik Suraksha Sanhita, 2023, has replaced the Code of Criminal Procedure, 1973, introducing significant changes to the protections for accused individuals, particularly regarding police custody.

#### Importance of CrPC

The CrPC has been seen as the "Accuseds' Constitution," providing crucial protections, limiting police custody to 15 days, and ensuring judicial oversight and access to legal representation.

#### Types of Custody

Custody can be either police or judicial, with police custody being more severe. The CrPC previously limited police custody to 15 days to protect against police excesses.

#### **Changes Under BNSS**

The BNSS removes the 15-day limit, allowing police custody up to 90 days, raising concerns about potential violations of rights and increased risks of custodial violence and torture.

#### Comparison with UAPA

The new law contrasts with the UAPA, which limits police custody to 30 days and requires justifications for extending custody. The BNSS allows a significantly longer period without similar safeguards.

#### **Constitutional Concerns**

The extended police custody under the BNSS could undermine protections under Article 21 of the Indian Constitution, which guarantees the right to live with dignity and protection against inhuman treatment.

## **Easy Explanation**

Taking psilocybin, the hallucinogenic compound in magic mushrooms, can temporarily alter the way neurons in the brain communicate, affecting a person's sense of time and self. A new study showed that while most changes last for a few hours, one specific connection in the brain remains disrupted for weeks. This disruption occurs between the default mode network, which is active during rest or daydreaming, and the anterior hippocampus, involved in creating our sense of space, time, and self.

Researchers used functional magnetic resonance imaging (fMRI) to track brain activity in seven healthy adults before, during, and after taking a high dose of psilocybin. They compared these scans with images taken when participants were not on any drug or took a stimulant.

The study found that psilocybin desynchronizes neurons that usually fire together in the default mode network, but most of these neurons return to normal once the drug's effects wear off. However, the connection between the default mode network and the anterior hippocampus remains weakened for weeks.

Additionally, a mental exercise called 'grounding,' often used in psychedelic therapy to reduce unpleasant drug effects by focusing on surroundings, was found to lessen psilocybin's impact on the brain. This suggests grounding techniques may influence neurological signals.

Although the study does not pinpoint exactly how psilocybin provides therapeutic benefits, it offers clues that the drug may cause brain-network changes that lead to altered brain behavior.

#### Key Takeaways

#### Psilocybin's Effect on the Brain

Taking psilocybin, the active compound in magic mushrooms, can temporarily reset networks of neurons in the brain, affecting a person's sense of time and self.

#### Study Details

Researchers tracked brain activity using functional magnetic resonance imaging (fMRI) in seven healthy adults before, during, and after taking a high dose of psilocybin.

#### **Desynchronization of Neurons**

Psilocybin caused groups of neurons in the default mode network, which is active during rest or daydreaming, to become desynchronized. Most neurons returned to normal after the drug's effects wore off.

#### Long-lasting Effects

The communication between the default mode network and the anterior hippocampus, which helps create our sense of space, time, and self, remained disrupted for weeks.

#### **Grounding Techniques**

Mental exercises like 'grounding' reduced psilocybin's effect on the brain, indicating that these techniques may influence neurological signals.

#### **Therapeutic Insights**

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While the study does not fully explain how psilocybin provides therapeutic benefits, it suggests the drug may cause changes in brain networks that alter brain behavior, offering potential insights into treatments for neurological conditions.



# Windows Outage: Howa Faulty Software Update Hit Businesses Globally - IE Explained

Science

# Easy Explanation

A major disruption in Microsoft's cloud services recently affected many businesses worldwide, including in India. The problem was traced to a configuration change in Microsoft's Azure cloud computing platform, which caused connectivity failures affecting Microsoft 365 services. This issue was linked to a malfunctioning software update from CrowdStrike, a cybersecurity firm, which impacted its Falcon software deeply embedded in Windows systems.

Falcon is an endpoint detection and response (EDR) software that monitors computer activity and scans for potential threats. Because it's integrated deeply with Windows, the faulty update caused widespread issues, primarily on Windows PCs. The outage significantly affected the aviation sector in India, leading to flight delays and cancellations. Airlines like Indigo, Akasa Air, and Air India Express had to revert to manual operations due to the system failures.

Other sectors like banking also faced minor disruptions, but critical financial systems remained largely unaffected. Windows PC users experienced the "blue screen of death," indicating serious system errors. In response, the Indian government, through the Ministry of Electronics and IT (MeitY) and the Indian Computer Emergency Response Team (Cert-In), coordinated with Microsoft to address the issues and provide workarounds.

# Key Takeaways

**Cause of Outage** The disruption in Microsoft's cloud services was caused by a configuration change in Azure, linked to a malfunctioning update from CrowdStrike affecting its Falcon software embedded in Windows systems.

**Impact on Sectors** The aviation sector in India experienced significant disruptions, with airlines reverting to manual processes. Banking sector disruptions were minor, and critical systems remained insulated.

**Response from Government** The Indian government, through MeitY and Cert-In, coordinated with Microsoft to address the issue and provided advisories and workarounds to affected entities. The National Informatics Centre's operations were not impacted.

**Technical Details** Falcon, an endpoint detection and response software by CrowdStrike, monitors computer activity and scans for threats. The faulty update led to system downtimes and issues with Windows PCs, including the "blue screen of death."

**Global Disruptions** Major airlines in the US, Europe, and Asia-Pacific reported disruptions. However, the Indian financial sector remained largely unaffected due to the limited use of cloud services for critical systems.

**Mitigation Efforts** Manual backup systems were implemented in the aviation sector to maintain operational continuity, and extra staff was deployed to assist passengers during the outage.

# 21st July 2024

# What is the gender gap in education?- TH FAQ

Sociology

# Easy Explanation

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The World Economic Forum (WEF) recently ranked India 129th out of 146 economies in its 2024 report on global gender gaps. One of the main reasons for India's drop in ranking is a decline in the education sector. The WEF report highlighted that while a high



percentage of women are enrolled in primary, secondary, and tertiary education, the gap between men's and women's literacy rates remains significant at 17.2 percentage points.

India's educational statistics show a varying gender gap at different levels of schooling. Girls make up 48% of the school population, but this percentage changes at different education stages. More girls drop out after primary school, and the gender gap widens further in secondary school. However, the gap decreases again at the higher secondary level and continues to improve in higher education. According to the All India Survey on Higher Education (AISHE) for 2021-22, women's enrolment in higher education has increased by 32% since 2014-15.

The increased number of schools and the presence of women teachers have significantly impacted girls' education. Additionally, transport facilities like free bus passes and cycles for girls have improved enrolment. However, sanitation issues remain a major obstacle, especially after puberty, causing many girls to drop out after Class 8.

Despite progress, challenges remain. Some states have closed the gender gap in higher classes, but there is concern about boys dropping out before completing school. Also, in higher education, women are still underrepresented in STEM subjects, and adult literacy rates for women lag behind those for men.

# Key Takeaways

WEF 2024 Report and India's Ranking The World Economic Forum's 2024 report ranked India 129th out of 146 economies, citing a decline in the education sector as a key reason. The gap in literacy rates between men and women is 17.2 percentage points.

**Educational Statistics in India** The Union Education Ministry tracks school and college enrolment through UDISE+ and AISHE. Girls make up 48% of the school population, but their enrolment percentage varies at different educational stages, with a significant dropout rate after primary school.

**Impact of Infrastructure and Policies** The increase in the number of schools and the presence of women teachers have significantly improved girls' enrolment. Transport facilities like free bus passes and cycles have also helped. However, sanitation issues remain a major barrier, especially after puberty.

**Challenges in Higher Education** While the gender gap in higher education has narrowed, women are still underrepresented in STEM subjects. The adult literacy rate for women is also significantly lower than for men, highlighting the need for improved foundational literacy and education for rural women.

**Future Challenges** Some states have successfully closed the gender gap in higher classes, but concerns remain about boys dropping out before completing school. Encouraging more girls to pursue STEM subjects and improving adult literacy rates for women are ongoing challenges.

# What are the rules for IAS probationers?- TH FAQ

#### Sociology

## Easy Explanation:

The Union Public Service Commission (UPSC) recently filed a criminal case against Puja Khedkar, an Indian Administrative Service (IAS) officer on probation from the 2022 batch. She is accused of faking her identity and exceeding the permissible number of attempts for the Civil Services Examination by altering her name, her parents' names, her photograph, signature, email ID, mobile number, and address. This led to a show cause notice being issued to cancel her candidature.

Earlier in July, Khedkar was transferred from Pune to Washim, Maharashtra, due to complaints of misuse of power. Allegedly, she demanded special privileges she was not entitled to. Further investigations revealed that she had submitted fake disability and Other Backward Class (OBC) certificates to clear the civil services exam. Despite missing multiple medical examinations to prove her disability, she was inducted into the services after reappearing for the exams in 2022.

The UPSC conducts examinations and interviews, after which candidates are recommended for various services. Candidates must submit documents supporting their reservation claims, and PwBD candidates must appear before a medical board to determine the



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level of disability. The first phase of document scrutiny is done by the UPSC, followed by a medical check-up and further verification by the Department of Personnel and Training (DOPT).

Probation typically lasts two years but can be extended if the candidate needs improvement. During this period, candidates are assessed for their suitability for the service. If found unsuitable, probationers can be discharged from service.

#### Key Takeaways:

**Criminal Case and Candidature Cancellation:** The UPSC filed a criminal case against Puja Khedkar and issued a show cause notice to cancel her candidature for fraudulently exceeding the permissible number of exam attempts by altering her identity and related details.

Allegations of Misuse of Power: Khedkar was transferred from Pune to Washim, Maharashtra, following complaints of misuse of power and demanding special privileges. Further allegations included submitting fake disability and OBC certificates.

**Document Verification Process:** The UPSC conducts exams and interviews, followed by document verification. PwBD candidates must appear before a medical board to determine the level of disability. Initial document scrutiny is done by the UPSC, with further verification by the DOPT.

**Probation Period and Discharge:** Probation typically lasts two years, extendable up to four years. Probationers are assessed for suitability, and if found unsuitable, they can be discharged from service.

## Prevalence of NCDs tripled, infectious diseases doubled- TH Science

Science

### Easy Explanation:

A recent study examined changes in health issues (morbidity) across Indian states from 1995 to 2018, using data from the National Sample Survey Organisation (NSSO). The surveys involved a large number of households and categorized health problems into infectious diseases, non-communicable diseases (NCDs), disabilities, and injuries.

The study found that the overall rate of reported health issues doubled from 56 per 1,000 people in 1995 to 106 per 1,000 in 2014, before dropping to 79 per 1,000 in 2018. Non-communicable diseases like diabetes and heart conditions increased significantly, especially in states like Kerala, Andhra Pradesh, and Karnataka, while infectious diseases also saw an increase. Kerala consistently reported the highest morbidity rates, while states in the northeast reported the lowest.

The study highlighted that non-communicable diseases have increased over the years, but the prevalence of these diseases has started to decline in several states from 2014 to 2018. The study aligns with India's demographic and health transitions, noting significant disparities in health issues across different states due to various demographic, social, and economic factors.

#### Key Takeaways:

**Study Overview:** A study analyzed self-reported health issues in India from 1995 to 2018 using data from the National Sample Survey Organisation (NSSO). The surveys included a large number of households and categorized health issues into infectious diseases, non-communicable diseases, disabilities, and injuries.

**Morbidity Trends:** There was a steady increase in reported health issues from 56 per 1,000 people in 1995 to 106 per 1,000 in 2014, before a decline to 79 per 1,000 in 2018. Non-communicable diseases significantly increased, with Kerala showing the highest rates, while states in the northeast had the lowest rates.

**Non-Communicable Diseases:** Non-communicable diseases, such as diabetes and heart conditions, saw a significant rise, increasing from 8.6 per 1,000 people in 1995 to 30 per 1,000 in 2018. Kerala reported the highest prevalence of these diseases.

**Regional Variations:** The study highlighted significant disparities in health issues across different states due to demographic, social, and economic factors. Kerala consistently had high morbidity rates, while northeastern states like Manipur and Meghalaya had much

lower rates



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**Demographic and Health Transitions:** The study aligns with India's demographic and epidemiological transitions, noting that the aging population and rising life expectancy are contributing to the increase in non-communicable diseases without displacing existing infectious diseases.

**Research Contribution:** The study provides additional insights by conducting a meticulous analysis at the state level, highlighting the nuanced landscape of health challenges across India.

## Rise and shine: morning sunlight and your wellbeing- TH Science

Science

#### **Easy Explanation:**

Humans are affected by the cycle of light and darkness that occurs every day. Our bodies follow a 24-hour rhythm (circadian rhythm) that influences physiological processes such as hormone secretion, which drive our actions. To stay in sync with the environment and perform activities at the right time, light acts as an alarm clock. This light synchronization happens in the brain through light signals received from the eyes.

Many species also rely on light cues for their daily routines. Disruption in these light patterns can affect their natural rhythms and behaviors. For instance, in the Maldives, tourism operators shine bright lights on the ocean surface at night to attract biological activity, making it seem like morning for the underwater creatures, which tourists can then observe.

Human vision is enabled by rods and cones, photoreceptor cells in the outer retina. Rods are sensitive to light but not to color, useful in dim light, while cones work best in bright light and provide color vision. These cells convert light into electrical signals that are processed and sent to the brain by retinal ganglion cells.

About 20 years ago, scientists discovered a new class of light-sensitive cells in the inner retina called intrinsically photosensitive retinal ganglion cells (ipRGC). These cells contain melanopsin, allowing them to respond directly to light. They play crucial roles in regulating sleep, alertness, and mood, and send signals to the brain area that controls circadian rhythms.

People with a morning diurnal preference prefer to sleep early and wake up early. They perform best earlier in the day and have a lower risk of obesity and depression. Exposure to morning light helps reset the circadian clock, enhancing physical and mental health.

#### Key Takeaways:

**Circadian Rhythms and Light:** Humans have a 24-hour circadian rhythm influenced by light and darkness. Light acts as an alarm clock, synchronizing our internal clock with the environment.

**Impact on Other Species:** Many species rely on light for their daily routines. Disruptions in light patterns can affect their natural rhythms and behaviors. An example is tourism operators in the Maldives using bright lights to attract biological activity in the ocean.

**Human Vision:** Vision is enabled by rods and cones in the retina. Rods are sensitive to light but not color, useful in dim light, while cones work best in bright light and provide color vision. These cells convert light into electrical signals that are processed and sent to the brain.

**Photosensitive Cells:** Intrinsically photosensitive retinal ganglion cells (ipRGC) in the inner retina respond directly to light and play important roles in regulating sleep, alertness, mood, and circadian rhythms.

**Morning Diurnal Preference:** People who prefer early sleep and waking have a reduced risk of obesity and depression. Exposure to morning light helps reset the circadian clock, improving physical and mental health.

| Clear your doubts now.

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# 22nd July 2024

# How children win with U-WIN, govt's new online vaccine portal-Indian Express Explained

Science and technology

## **Easy Explanation**

The U-WIN portal, part of the Indian government's 100-day health agenda, is set to revolutionize childhood vaccination management. Similar to the CoWIN platform used during the Covid-19 pandemic, U-WIN will digitize and individualize immunization records for children up to six years old and pregnant mothers. Using government IDs and mobile numbers, it registers individuals and tracks the administration of all required vaccines. Features include a color-coded vaccination certificate, SMS reminders for upcoming doses, and the ability to book vaccination slots at any location in the country, thus ensuring portability and continuity of care, especially for migrant families.

Health workers benefit from automated due-lists of children needing vaccinations, while the platform also prevents errors by alerting workers if they attempt incorrect or premature vaccinations. The integration with eVIN, an inventory management system, allows for real-time tracking of vaccine stocks, usage, and storage conditions, ensuring vaccine integrity and availability.

U-WIN aims to enhance vaccination compliance, reduce the number of zero-dose children, and provide granular data for better policy-making. By registering births and linking records through the ABHA ID, the platform ensures a comprehensive approach to health management, facilitating long-term improvements in vaccination coverage and public health outcomes.

## Key takeaways

**Digitized Immunization Records**: U-WIN will provide digitized and individualized immunization records for children and pregnant mothers, facilitating easy access and management of vaccination history.

**SMS Reminders**: The platform sends SMS reminders to parents before their children are due for the next dose, aiming to improve vaccination compliance and timely administration.

**Portability of Vaccination**: Children can receive vaccinations anywhere in the country, ensuring continuity of care, especially for families who move frequently or are migrant workers.

**Error Prevention**: U-WIN acts as a decision support system, alerting health workers to potential errors such as incorrect doses or administering shots prematurely, thereby reducing human error.

**Granular Data for Policy-Making**: The platform provides detailed, individualized data on childhood immunization, which can help the government track coverage, identify gaps, and make informed policy decisions.

**Integration with eVIN**: U-WIN will be linked to the existing eVIN platform for efficient inventory management, tracking vaccine vials, and ensuring proper storage conditions, enhancing the overall vaccine supply chain management.

# The Governor's immunity-Indian Express Explained

#### Polity

## **Easy Explanation**

The Supreme Court of India will review Article 361 of the Constitution, which grants immunity to the President and Governors from criminal prosecution and judicial scrutiny for their official actions. This scrutiny arises from a petition by a West Bengal Raj Bhavan employee alleging sexual harassment by Governor C V Ananda Bose. The petition challenges the interpretation of "criminal proceedings" under Article 361, questioning whether it includes FIRs, preliminary inquiries, or magistrate cognizance. Historically, cases like the Babri Masjid demolition and Vyapam scam have upheld such immunity, delaying trials until the Governor leaves office. Rooted in English legal traditions, this provision was minimally debated by the Constituent Assembly. The review aligns with global discussions on executive immunity, including a recent US Supreme Court ruling on presidential immunity, and aims to clarify whether this immunity is absolute or limited, especially amid concerns of political misuse.

## Key Takeaways

1. Article 361 Immunity: Article 361 grants immunity to the President and Governors from criminal prosecution and judicial scrutiny for actions in their official capacity.

- Supreme Court Review: The Supreme Court is reviewing this provision to determine the scope of "criminal proceedings" and the extent of immunity.
- 3. **Historical Interpretations**: Previous cases, such as the Babri Masjid and Vyapam scam cases, have upheld immunity, preventing trials until the Governor leaves office.
- 4. **Constituent Assembly Debates**: The immunity provision stems from English legal traditions and was adopted by the Constituent Assembly with minimal debate.
- 5. **Global Context**: The review is influenced by global debates on executive immunity, including a recent US Supreme Court ruling on presidential immunity.
- 6. **Potential Ramifications**: The outcome of the review could significantly impact the role and accountability of Governors, particularly in opposition-ruled states.

# PREDICTING 'ROGUE WAVES' USING AI: WHAT A NEW STUDY FOUND-Indian Express Explained

## Science and technology Easy Explanation

A new study by University of Maryland mathematicians Thomas Breunung and Balakumar Balachandran has developed an AI program capable of predicting rogue waves up to five minutes in advance. Rogue waves, unusually large waves that can pose significant threats to ships, coastal infrastructure, and human lives, have historically been unpredictable. Using billions of data points from 172 ocean buoys, the AI was trained to recognize patterns preceding rogue waves. The program accurately predicted 75% of rogue waves one minute in advance and 73% five minutes in advance. The study suggests that with more data and advanced AI architectures, the accuracy and warning times could be further improved, potentially leading to near-perfect predictions in the future. The research findings, published in the journal Scientific Reports on July 18, offer a promising advancement in oceanography and maritime safety.

# Key Takeaways

- 1. Al-Powered Predictions: University of Maryland researchers developed an Al program to predict rogue waves up to five minutes in advance.
- 2. Data Utilization: The AI was trained using billions of data points collected from 172 ocean buoys.
- 3. Prediction Accuracy: The AI predicted 75% of rogue waves one minute in advance and 73% five minutes in advance.
- 4. **Universal Applicability**: The AI demonstrated predictive capabilities near buoys at varying depths not included in the training data, indicating potential universal applicability.
- 5. **Future Improvements**: Incorporating additional physical data and using more powerful AI architectures could enhance prediction accuracy and advance warning times.
- 6. **Significant Advancement**: The study represents a significant step forward in oceanography and maritime safety, potentially reducing the deadly impact of rogue waves.

# What ICJ said about Israel's occupation of West Bank and East Jerusalem-Indian Express Explained

## International relations

# **Easy Explanation**

On July 19, the International Court of Justice (ICJ) declared that Israel's occupation of the West Bank and East Jerusalem violates international law and must end "as soon as possible." This occupation began after the Six-Day War in 1967. The ICJ's opinion was in response to a 2022 UN General Assembly resolution seeking clarification on the legal consequences of Israel's policies and practices in these territories. The court found that Israel's prolonged occupation, settlement policies, annexation of territories, discriminatory legislation, and actions undermined the Palestinian right to self-determination. The ICJ recommended Israel end its illegal occupation, cease settlement activities, evacuate settlers, and make reparations. It also advised international organizations and states not to recognize or support the occupation. Although the ICJ's opinion is advisory and not legally binding, it carries significant moral and political weight.

## Key Takeaways

- 1. Violation of International Law: The ICJ declared Israel's occupation of the West Bank and East Jerusalem illegal and called for its immediate end.
- 2. **Prolonged Occupation**: The court noted that the duration of the occupation affects its legality, emphasizing the negative impact of Israel's policies and practices.
- 3. **Settlement Policy**: The ICJ found Israel's settlement activities in occupied territories violate international law, specifically the Fourth Geneva Convention.
- 4. **Annexation**: The court concluded that Israel's actions amount to de facto annexation, contravening international prohibitions on the use of force.
- 5. **Discriminatory Legislation**: The ICJ identified systemic discrimination against Palestinians based on race, religion, or ethnic origin, violating international covenants.
- 6. **Self-Determination**: The occupation infringes on Palestinians' right to self-determination, undermining their ability to exercise this right in the future.

# Quota's edge-Indian Express Editorial

# International relations

# **Easy Explanation**

The student unrest in Bangladesh over the reservation policy highlights deep political and social tensions in the country. The protests began on June 5 after the High Court Division of the Supreme Court nullified the government's decision to scrap the quota system, reinstating 30% reservations for freedom fighters and their descendants. This decision angered opposition parties and protesting students, who felt the policy violated constitutional values of equality and meritocracy. Historically, student movements have played a significant role in Bangladesh's political landscape, from the Language Movement to the Liberation War and beyond. The current protests saw violent clashes between pro-government student groups, the police, and anti-quota demonstrators, resulting in over 100 deaths and 2,500 injuries. The government views the protests as an attempt to destabilize the ruling Awami League, which has appealed the decision. The Supreme Court ruled that 93% of jobs must be based on merit, reducing the quota for Liberation War veterans to 5%. As Bangladesh faces significant unemployment, balancing merit and social equity is crucial. The country needs to foster greater dialogue and reforms to address these issues and maintain stability.

# Key Takeaways

- 1. **Student Protests**: Protests erupted after the High Court reinstated the quota system, leading to violent clashes and significant casualties.
- 2. **Historical Context**: Student movements have historically influenced Bangladesh's political landscape, including the Language Movement and Liberation War.
- 3. **Constitutional Debate**: Protesting students argue the quota system violates constitutional principles of equality and merit, while the ruling party views it as a tool for social justice.
- 4. **Supreme Court Ruling**: The court ruled that 93% of jobs must be based on merit, reducing the quota for veterans to 5%.
- 5. **Political Tensions**: The government sees the protests as an effort to destabilize the ruling party, reflecting deeper political and ideological divides.
- 6. **Economic Implications**: With high unemployment and economic transition, balancing aspirations and social equity is critical for Bangladesh's future stability.

# Data gaps beyond India are holding monsoon forecasts back-The Hindu Science

# Geography Easy Explanation

India's monsoon forecasts face significant challenges due to data gaps beyond its borders, affecting accuracy at the local level. While the India Meteorological Department (IMD) has improved its forecasting abilities, uncertainties persist, especially for farmers, water managers, and energy companies. The 2024 monsoon has shown unexpected rainfall patterns, underscoring the need for more accurate hyperlocal forecasts. Monsoon circulation involves not only India but also neighboring regions like Pakistan, West Asia, Nepal, Bhutan, Bangladesh, and Myanmar. These areas contribute to the monsoon's variability and require comprehensive data for accurate forecasting. Although India has a long history of rainfall monitoring, the lack of real-time weather data from these regions limits forecast accuracy. To improve predictions, a broader monitoring network across the subcontinent is essential.



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Enhanced forecasts would support food, water, and energy security, as well as national security, by mitigating the impacts of natural disasters.

# Key Takeaways

**Challenges in Forecasting**: India's ability to accurately predict monsoon patterns is limited by data gaps in neighboring regions, impacting hyperlocal forecasts.

**Impact of Regional Dynamics**: The monsoon's behavior is influenced not just by local conditions but also by atmospheric conditions across a broader region, including Pakistan, West Asia, Nepal, Bhutan, Bangladesh, and Myanmar.

**Need for Comprehensive Data**: Effective monsoon forecasting requires comprehensive real-time data from these neighboring regions to improve accuracy.

**Importance of Hyperlocal Forecasts**: As monsoon patterns show increasing variability, there is a heightened demand for precise, localized weather predictions to aid farmers and resource managers.

**Infrastructure Enhancement**: There is a pressing need to expand and enhance weather monitoring networks across the subcontinent to gather more robust data for forecasting.

**Security and Economic Implications**: Better forecasts can mitigate the impact of natural disasters, contributing to national security and supporting sustained economic growth through improved management of agricultural and water resources.

# Focus on female employment to counter unemployment-The Hindu Editorial

Economics

## Easy Explanation

The difficulty in securing jobs combined with inflation significantly influenced the 2024 Lok Sabha Elections results, highlighting the growing importance of unemployment as a critical national issue, as per the Lokniti-CSDS pre-poll survey. The India Employment Report 2024 shows a worrying trend of rising unemployment and underemployment, despite a recovery in the labor force participation rate (LFPR) in recent years. Interestingly, there has been a notable increase in the female LFPR, particularly in rural areas, which presents a potential opportunity for addressing employment issues.

Traditional employment roles, especially in rural settings, heavily involve women in unpaid family labor. Given the rigid gender norms and limited access to resources, women often remain confined to low-income traditional occupations. However, efforts like those by the Kutch Mahila Vikas Sangathan (KMVS) and other initiatives aim to empower women through skill development and direct market access, enhancing their income potential and economic autonomy.

## Key Takeaways

- 1. **Election Influence**: Unemployment and inflation were significant factors affecting voter behavior in the 2024 Lok Sabha Elections.
- 2. **Rising Female Employment**: There has been a substantial increase in female labor force participation, especially in rural India, which suggests untapped potential for boosting employment.
- 3. Gendered Employment Challenges: Employment opportunities for women are often limited to traditional, low-income roles due to societal norms and lack of access to capital.
- 4. **Economic Empowerment Initiatives**: Programs like those by KMVS are crucial for empowering women by providing skills training and linking them to markets, thus helping them transition from unpaid family labor to economically beneficial activities.
- 5. **Importance of Infrastructure**: Enhancing infrastructure, such as irrigation systems and market access, can significantly empower women in agricultural and non-agricultural sectors.
- 6. **Policy Recommendations**: Public policies should focus on improving female LFPR by ensuring safety, creating better work environments, and providing access to necessary resources and markets to foster economic independence among women.

# The importance of both Quad and BRICS-The Hindu Editorial

International relations
Easy Explanation

The upcoming Quad Foreign Ministers' meeting in Japan highlights significant geopolitical shifts and challenges, with the backdrop of a paralyzed United Nations Security Council and escalating global conflicts such as the Ukraine war and the Gaza assault. Amidst these tensions, the Quad, consisting of the U.S., India, Japan, and Australia, is seen as a crucial element in addressing the strategic security needs in the Indo-Pacific, especially in response to Chinese influence and the emerging axis of Russia, China, North Korea, and Iran.

India plays a unique role in the Quad, striving to expand the alliance's focus beyond mere military security to include broader techno-economic issues affecting the region, like global supply chains and digital infrastructure. However, India's engagement with BRICS (Brazil, Russia, India, China, South Africa) presents a contrasting scenario where geopolitical and economic ambitions often conflict, especially with China's growing influence within the group.

India's dual involvement in both Quad and BRICS showcases its strategic balancing act in global affairs, emphasizing the need for a nuanced approach to international relations that accommodates both security concerns and economic cooperation.

## Key Takeaways

- 1. **Strategic Importance of Quad**: The Quad alliance is increasingly vital in maintaining balance in the Indo-Pacific amidst growing Chinese influence and geopolitical uncertainties.
- 2. India's Role in Quad: India is leveraging its position in Quad to broaden the coalition's agenda beyond military concerns to include significant economic and technological cooperation.
- 3. **Contrasting Engagement with BRICS**: While India benefits from economic initiatives within BRICS, such as the New Development Bank, it remains cautious of China's dominant influence in directing the group's agenda.
- 4. **Need for Balanced Engagement**: India must navigate its involvement in both Quad and BRICS carefully, advocating for its interests to prevent domination by any single power, particularly in BRICS.
- 5. **Global Supply Chain Reorientation**: One of Quad's strategic objectives under India's influence includes diversifying and securing global supply chains, crucial for technological and economic security.
- 6. **Diplomatic Challenges**: India's independent foreign policy, especially its relations with Russia and stance on the Ukraine conflict, highlights the complex diplomacy involved in participating in both Quad and BRICS.



# Govt servants and RSS activities: what Rules say-Indian Express Explained

#### Polity

## Easy Explanation

The Indian government has revised long-standing guidelines that previously barred central government employees from participating in Rashtriya Swayamsevak Sangh (RSS) activities. These restrictions, established in circulars dating from 1966, 1970, and 1980, categorized the RSS alongside other organizations as political, thus prohibiting government employees from engaging with them. The Department of Personnel and Training (DoPT) issued a directive on July 9 that rescinds these restrictions, based on a review of the earlier instructions. This directive removes the mention of RSS from the list of political organizations in the cited Official Memorandums, effectively allowing government employees to participate in RSS activities without risking disciplinary action under the existing conduct rules. This change does not extend to Jamaat-e-Islami, which remains classified as a political organization and hence off-limits for government employees. The decision marks a significant shift in policy and reflects the changing political landscape, addressing long-standing issues of political and communal biases within government service guidelines.

# Key Takeaways

## Historical Ban Context:

• Initial circulars by the Ministry of Home Affairs prohibited government employees from engaging with organizations like RSS, deemed political. This stance was reiterated in subsequent directives.

**DoPT's Recent Directive:** 

• The DoPT removed the RSS from its list of political organizations on July 9, allowing government employees to participate in its activities without fear of disciplinary action under the conduct rules.

## Legal Precedents:

• Historical legal challenges, including a 1982 Supreme Court ruling, have defended the employment rights of individuals with RSS affiliations, emphasizing that political affiliations should not affect employment unless they impact job performance.

## State vs. Central Guidelines:

• The removal of restrictions applies only to central government employees; state governments maintain their own rules, leading to varying policies on RSS participation based on the state's political leadership.

## Selective Reclassification:

• The new directive specifically reclassifies RSS as non-political, leaving Jamaat-e-Islami in the political category, thus continuing restrictions for government employees' involvement with it.

## **Ongoing Political and Social Debates:**

• The decision reflects ongoing tensions in India's political landscape between secular policies and communal affiliations, continuing to provoke debates on the secular and political positioning of government employees.

# Why today's Budget matters-Indian Express Explained

## Economics

## Easy Explanation

Finance Minister Nirmala Sitharaman is set to present the first budget of Modi's third government, following an interim budget earlier this year. This budget is critical as it will outline the government's economic direction and priorities. The presentation comes after a significant change in Parliament's composition, with the BJP no longer holding a majority in the Lok Sabha. The Union Budget will provide a detailed account of the government's financial health, covering income, expenditure, and borrowing, and will offer estimates for the coming financial year. This transparency is essential for understanding how taxpayer money is managed and the fiscal strategies in place. The budget will also indicate the government's approach to addressing economic challenges and opportunities, particularly in the context of the changed political landscape. Key areas of focus will likely include tax policies, spending priorities, and strategies to bridge the gap between income and expenditure. This budget is especially noteworthy as it sets the tone for the new government's term, with potential shifts in economic policy to address current economic stress and boost overall growth.

## Key Takeaways

## **Revealing Government Priorities:**

• The budget will highlight the government's fiscal priorities and strategies, including spending plans and resource allocation, providing insights into the sectors and initiatives that will be emphasized during the term.

## **Taxation Changes:**

• Adjustments in tax structures and rates will be closely watched, as these can influence business operations, consumer behavior, and overall economic growth. Changes in tax policy could incentivize specific industries or provide relief to taxpayers.

## Fiscal Health Disclosure:

• The budget will detail the government's financial health through reports on income, expenditure, and borrowing, offering a clear picture of the fiscal balance and economic stability.

#### Impact of Political Shifts:

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With the BJP no longer holding a majority in the Lok Sabha, the budget could reflect new political compromises or shifts in
policy to accommodate the broader and possibly more diverse interests of the new parliamentary composition.

## Economic Recovery and Stimulus:

• Measures to stimulate economic recovery, particularly post-pandemic and in light of recent global economic pressures, will be crucial. This may include increased spending in key areas like infrastructure, healthcare, and education.

## Focus on Underprivileged Sectors:

• The budget may introduce or enhance support for vulnerable sections of society and stressed sectors of the economy, such as small businesses and rural areas, which are vital for inclusive growth and development.

## Long-term Economic Strategy:

• As the first budget of the new government term, it will set the stage for long-term economic policies and may signal major shifts or continuations of past initiatives, impacting the country's economic trajectory and investment climate.

# Key takeaways from Economic Survey-Indian Express Explained

## Economics

## **Easy Explanation**

The Economic Survey for 2023-24 highlights the realistic challenges facing India's economic growth, despite a robust GDP growth of over 8% in FY 2023-24, with an expected slowdown to between 6.5% and 7% in FY 2024-25. Key challenges include adverse global investment conditions, over-dependence on China for imports, and the threat of automation through AI on jobs, especially in the BPO sector. The survey also emphasizes the tepid response from the corporate sector to tax cuts intended to spur capital formation, and the crucial need for massive job creation to accommodate the rising workforce. Additionally, it points out significant data gaps that impair a thorough analysis of employment trends and highlights lifestyle choices that could undermine public health and productivity.

## Key Takeaways:

## 1. Global Economic Headwinds:

• High interest rates in developed countries are making foreign investment in India less attractive, compounded by competitive industrial policies from these nations.

## 2. China's Economic Influence:

• India remains highly dependent on China for critical imports, particularly in renewable energy, limiting its manufacturing ambitions.

## 3. Al and Automation Risks:

• The surge in AI and technological advances poses a risk to traditional jobs in sectors like telecommunications and BPO.

## 4. Corporate Sector's Lackluster Investment:

 Despite significant tax cuts by the government, corporate India's investment in capital formation has not met expectations, with profits not translating into proportionate hiring or wage increases.

## 5. Employment Challenges:

 India needs to create approximately 78.5 lakh jobs annually until 2030 to keep up with its growing non-farm workforce.

## 6. Data Deficiency in Employment:

There is a critical lack of high-quality, timely data on employment, particularly in differentiating between formal and informal sectors, which hampers effective policy-making.

# 7. Public Health Concerns:

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• Lifestyle issues like excessive screen time, sedentary habits, and unhealthy eating are noted as detrimental to public health and economic potential.

## **Recommended Solutions:**

- **Private Sector Job Creation:** The survey stresses the need for the private sector, particularly corporates, to take a more active role in creating employment opportunities.
- Lifestyle Changes: It advocates for a return to traditional Indian lifestyle and dietary practices, which have potential global market appeal.
- Agricultural Sector as a Key Driver: Suggests a reemphasis on agriculture for economic growth, moving away from the traditional shift toward manufacturing and services due to global challenges like protectionism and AI.
- **Regulatory Reforms:** Calls for significant reductions in the regulatory burdens faced by businesses, especially MSMEs, to spur economic activity.
- **State Capacity Building:** Emphasizes improving government efficiency and capability to implement and sustain economic reforms effectively.

# No adults left in the room-Indian Express Editorial

## International relations

## **Easy Explanation**

The article examines the profound complexities and consequences of the ongoing conflict in Gaza, focusing on the international and legal repercussions of Israel's actions as scrutinized by the International Court of Justice (ICJ). The ICJ has declared Israel's practices in the West Bank and East Jerusalem as violations of international law, specifically citing issues with the use of force and discriminatory measures against Palestinians. This situation is further aggravated by the U.S. support for Israel, which the article criticizes for undermining international law and diminishing the U.S.'s moral authority on global issues. The narrative under scores the lack of a strategic exit plan in Israel's military responses, which not only fails to secure its safety but also exacerbates the humanitarian crisis in Gaza. This ongoing conflict not only deepens the humanitarian impact but also poses severe long-term geopolitical risks, emphasizing the need for a significant reevaluation of current approaches to international conflicts and diplomacy.

# Key Takeaways

## ICJ's Legal Assessment:

• The International Court of Justice (ICJ) has found Israel's actions in the Palestinian territories, including the occupation and treatment of Palestinians, to be in violation of international law, highlighting issues like the use of force and systemic discrimination.

# Humanitarian Crisis in Gaza:

• The conflict has led to a severe humanitarian crisis in Gaza, characterized by widespread suffering and deprivation, which risks fostering further radicalism and violence.

# U.S. Role Criticized:

• The United States' support for Israel in this context is criticized for diminishing its moral and legal standing in the international community and hindering the resolution of the conflict.

## Security Backfire:

• Israel's military strategies, aimed at securing the region, are portrayed as counterproductive, potentially making Israel less secure by perpetuating the conflict and failing to address root causes.

## **Global Implications:**

• The ongoing conflict has broader global implications, affecting international relations and shaping global perceptions of justice and law enforcement.

## Strategic Irrationality:

• The strategies employed by both Israel and the U.S. are seen as lacking rationality, focusing on short-term military engagements rather than sustainable, long-term solutions.

## Need for New Approaches:

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• The article calls for a critical reevaluation of current conflict resolution strategies, advocating for more thoughtful and effective approaches to address and resolve long-standing regional and international issues.

## Who's the greenest of all?-Indian Express Editorial

Environment

#### **Easy Explanation**

The article utilizes the allegory of the magic mirror from Snow White to frame the global climate debate, emphasizing how developed countries are often perceived as the greenest despite questionable environmental strategies. As the climate debate intensifies, developing nations like India find themselves at the forefront, grappling with the challenge of balancing rapid economic growth against the need for sustainable environmental practices. The Economic Survey's special essay critically examines these dynamics, highlighting the flaws in the strategies adopted by developed countries and advocating for a more holistic approach that includes inherent sustainable practices.

India, poised to become the third-largest economy, faces increasing energy demands, which necessitate a delicate balance between development and environmental commitments. The essay criticizes the superficial pledges of developed nations and underscores the potential of India's traditional sustainable practices as models for policy. It argues for the adoption of comprehensive and culturally embedded strategies rather than solely relying on technological solutions, emphasizing the importance of individual responsibility through initiatives like Mission LiFE to foster a global climate strategy that is both effective and equitable.

#### Key Takeaways

- 1. **Perception of Developed Nations**: Developed countries are often seen as the leaders in sustainability, but their approaches sometimes prioritize economic benefits over genuine green initiatives.
- 2. India's Dual Challenge: As one of the fastest-growing economies, India faces the dual challenge of managing its soaring energy demands while adhering to international climate commitments.
- 3. **Criticism of Global Policies**: The global climate policies, often shaped by the developed world, are critiqued for not being optimal or sufficiently inclusive of all stakeholders' interests.
- 4. **Sustainability in Indian Culture**: India's traditional practices embody sustainability, offering a blueprint for environmental policies that incorporate cultural habits and local wisdom.
- 5. **Mission LiFE's Role**: Prime Minister Narendra Modi's Mission LiFE emphasizes individual responsibility in climate action, promoting small sustainable behaviors as significant to global efforts.
- 6. **Economic Implications**: The article discusses the economic and sustainable implications of resource use, like the land and energy required for meat production, suggesting a reevaluation of consumption patterns.
- 7. **Need for Comprehensive Strategies**: There's a call for a multifaceted approach to climate strategy that includes traditional sustainable practices, technological solutions, and global cooperation to ensure optimality and effectiveness.

## A case for regulating gig-based work-The Hindu Text and Context

#### Economy

#### **Easy Explanation**

Karnataka's draft Bill for regulating gig-based work introduces significant reforms to address challenges faced by gig workers in the platform economy. The Bill counters three pervasive myths in the industry: the illusion of having no boss, the so-called flexibility of gig work, and the misconception of gig workers as primarily part-time. It acknowledges the control exerted by algorithms over workers' lives and mandates transparency from aggregators about how work is allocated and how workers are categorized. Moreover, it enforces fair contracts, income security, and the right to refuse work without penalties, moving away from the unregulated flexibility that actually places all control with the employer. This legislative move is a crucial step in extending social security and labor protections to gig workers, who constitute a significant portion of the workforce relying on such jobs for their primary income.

#### Key Takeaways:

#### 1. Algorithmic Control:

• The Bill requires aggregators to disclose the criteria used by their algorithms in work allocation and performance evaluation, reducing the opaque control of algorithms over gig workers.

## 2. Real Flexibility:

• Contrary to claims of flexibility, gig workers face strict conditions that limit real choice and autonomy. The Bill proposes mechanisms to ensure fairer contracts and genuine flexibility for workers.

## 3. Income Security:

 Provisions for mandatory income security are included to protect workers from unpredictable work patterns and income instability, ensuring minimum earnings and the possibility to refuse unfair work without sanctions.

#### 4. Social Security Mandate:

• Recognizing the full-time commitment of most gig workers, the Bill mandates social security, covering risks such as old age, death, and health shocks, acknowledging gig work as primary employment.

## 5. Addressing Part-Time Worker Myth:

• The Bill counters the myth that gig work is mostly part-time, supporting data that many rely on it as their sole income source, working long hours without adequate protections.

## 6. Legislative Leadership by States:

• Karnataka, following Rajasthan and other states, is taking the lead in providing legislative protections for gig workers, showing a progressive shift towards recognizing the rights and needs of this segment of the workforce.

## 7. Scope for Improvement:

• While the Bill makes significant advancements, there remains room for improvement in areas like minimum wage, occupational safety, working hours, and collective bargaining rights.

## How and when can a bill be defined as a money Bill?-The Hindu Text and Context

## Polity

## Easy Explanation

The Chief Justice of India (CJI) has decided to bring before Constitution Benches the challenges to using the money Bill route for passing certain laws. This spotlight on money Bills arises from their definition under Article 110 of the Constitution, which specifies that a money Bill involves issues like taxation, government borrowing, and expenditures from state funds. The procedure for passing a money Bill, restricted to introduction and approval only in the Lok Sabha with the Rajya Sabha having limited input, underscores its significance in financial governance and reflects the necessity for rapid legislative action on crucial financial matters, originating from historical practices in the UK Parliament.

#### Key Takeaways:

#### 1. Definition and Scope:

• A money Bill is defined strictly by the Constitution and can only include provisions directly related to financial matters such as taxation, government borrowing, and expenditure from government funds.

#### 2. Special Legislative Procedure:

• Money Bills have a special approval process where they must be introduced in the Lok Sabha, and the Rajya Sabha has limited power, only able to suggest amendments, which the Lok Sabha may accept or reject within 14 days.

#### 3. Judicial Review and Controversy:

 The classification of certain bills as money Bills has led to controversy, notably with the Aadhaar Act and the Finance Act, 2017, leading to debates about whether these bills truly qualify under the strict definitions provided by the Constitution.

#### 4. Constitutional and Judicial Implications:

The Supreme Court's involvement and the call for a larger bench to provide an authoritative judgment on what constitutes a money Bill highlight the ongoing judicial scrutiny and the need for clarity in legislative processes.

## 5. Way Forward:

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• There is a push for a more stringent adherence to the constitutional definition of money Bills to prevent misuse of this legislative route and ensure that financial governance remains transparent and accountable.

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## International relations Easy Explanation

The paper by Shiv Nath Sinha, Hanish Rajpal, and Gyanda Girisha delves into the role of women on corporate boards and the necessity of gender diversity quotas in governance, comparing legislative and cultural approaches in Europe and India. Despite the proven benefits of diverse boards in enhancing corporate performance, women's representation remains low due to traditional biases and systemic barriers. European countries have actively implemented mandatory gender quotas, leading to significant increases in women's participation in boardrooms. In contrast, India's progress has been slower, with minimal legislative support until the mandatory inclusion of at least one woman director in certain companies by 2013. This comparative analysis emphasizes the effectiveness of legislative measures in promoting gender inclusivity in corporate leadership, showcasing Europe's proactive stance and suggesting a path forward for India to follow similar practices to bridge the gender gap effectively.

#### Key Takeaways:

- 1. Impact of Gender Diversity:
  - Gender diversity on boards is linked to improved corporate performance and better governance, as diverse boards can address a wider range of perspectives and needs.

#### 2. Legislative Approaches in Europe:

- European countries have increasingly adopted mandatory quotas for women on corporate boards, with requirements typically ranging from 20% to 40%, significantly enhancing female representation and board independence.
- 3. India's Gradual Progress:
  - India has been slower in adopting gender quotas, with legislation only mandating a minimum of one woman director on the boards of certain companies. The progress, while notable, lags behind Europe's more aggressive policies.
- 4. Cultural and Systemic Barriers:
  - Persistent stereotypes and the "old boys' network" continue to hinder women's full participation in corporate leadership roles both in India and globally.

#### 5. Effectiveness of Quotas:

• The analysis supports the effectiveness of quotas in achieving gender balance on boards, particularly in settings with deeply ingrained gender biases.

#### 6. Need for Stronger Commitment in India:

• The paper advocates for stronger legislative and corporate commitment in India to enhance gender diversity, suggesting that adopting practices similar to those in Europe could accelerate progress.

#### 7. Global and Regional Comparisons:

 The study provides a comprehensive comparison of gender diversity initiatives in the corporate sector across different countries, highlighting successes and areas for improvement, with a call for global alignment on gender inclusivity standards.

#### In painstaking steps, scientists piece the neutrino universe together-The hindu Science

#### Science

#### **Easy Explanation**

The exploration of neutrinos, subatomic particles abundant in the universe, represents a pivotal shift in understanding the cosmos and could revolutionize technology and communication. Recent experiments like NOvA in the U.S. and the Large Hadron Collider in Europe have provided deeper insights into neutrino properties, such as their mass and oscillation behavior. Neutrinos' unique ability to interact minimally with matter makes them prime candidates for transmitting information across vast distances, potentially surpassing the capabilities of electromagnetic waves. The pursuit of understanding neutrinos involves global efforts, with numerous observatories and experiments dedicated to unraveling their mysteries and determining their role in the universe's evolution.

#### **Key Takeaways**

1. **Neutrino Properties and Behavior:**Neutrinos are nearly massless, chargeless particles that are abundant in the universe. Their ability to change types, or "oscillate," as they travel has challenged previous assumptions about their masslessness, suggesting they have mass and require adjustments to the Standard Model of particle physics.

- Global Research Efforts: International experiments like NOvA, the Large Hadron Collider, and observatories in Japan, Canada, the U.S., France, China, Switzerland, and Antarctica are at the forefront of neutrino research. These efforts aim to solve the neutrino mass hierarchy problem and understand their role in cosmic phenomena.
- 3. **Technological and Communicative Potential:**Neutrinos could revolutionize long-distance communication due to their ability to pass through matter, including lead and oceans, without interference. This characteristic could make them more effective than electromagnetic waves in certain contexts.
- 4. **Impact on Understanding the Universe:**Studying neutrinos can provide unparalleled insights into cosmic events like supernovae, which are difficult to study through traditional means due to the diffusion of light and radio waves over long distances. Neutrinos could carry information directly from these events, offering a clearer picture of the universe's past.
- 5. **Challenges and Future Prospects:**Despite their potential, the practical application of neutrinos in communication and other technologies is limited by the current challenges in detecting and manipulating them. Advances in these areas could open up new avenues for using neutrinos in various scientific and technological fields.
- 6. **Political and Logistical Challenges:**Projects like the India-based Neutrino Observatory face challenges due to procedural issues and political resistance, highlighting the complex interplay between science and governance in advancing cutting-edge research.
- 7. **Potential for Future Discoveries:**As research continues and technologies develop, the potential for breakthroughs in using neutrinos to understand fundamental physical laws and develop new technologies remains high, promising a significant impact on both science and society.

## 24th July 2024

## Making sense of the Budget-Indian Express Explained

## Economics Easy Explanation

The 2024-25 Union Budget of India, presented by Finance Minister Nirmala Sitharaman, signifies a notable shift in economic strategy in response to the political feedback from recent Lok Sabha elections and the underlying economic challenges. The budget recognizes that despite seemingly healthy GDP figures, there are deep-seated issues like high unemployment and low consumer spending, exacerbated by the COVID-19 pandemic.

This budget strategically focuses on inclusive growth and regional development, with special initiatives aimed at coalition partners' states such as Bihar and Andhra Pradesh. It emphasizes transforming agricultural practices, boosting crop production, and directly addressing rural distress. The transition from production-linked to employment-linked incentives marks a significant policy shift aimed at enhancing job creation and skills development.

Additionally, the budget prioritizes support for MSMEs, acknowledging their critical economic role and the adverse impacts of previous policies like GST and demonetization. It also promotes a decentralized approach to policy implementation, encouraging collaboration between the central government and states to effectively deploy national policies and support infrastructure investments, crucial for stimulating economic activity across various regions.

## Key Takeaways

- 1. **Recognition of Economic Challenges**: The budget acknowledges that India's real economic situation is not as robust as the GDP numbers suggest, with issues like high unemployment and stagnant consumer spending, particularly worsened by the COVID-19 pandemic.
- 2. Strategic Political and Economic Shifts:

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- **Regional Focus**: Proposals aim to benefit states like Bihar and Andhra Pradesh, reflecting a strategic alignment with coalition partners.
- Agricultural Enhancements: There's an emphasis on transforming agricultural practices and increasing the production of vital crops, addressing both rural and agrarian distress.
- **Employment Initiatives**: The budget shifts from production-linked to employment-linked incentives, focusing on job creation and skills development.

- 3. **Support for MSMEs**: Recognizing the pivotal role of MSMEs in the economy, the budget introduces measures to alleviate the financial challenges faced by this sector due to past policy impacts like GST and demonetization.
- 4. **Decentralization of Policy Implementation**: The budget calls for greater collaboration between the central and state governments to effectively implement reforms, promoting competitive federalism.
- 5. **Infrastructure and Services Expansion**: Significant investments are planned for infrastructure, including road connectivity and the development of new airports and industrial parks, aiming to stimulate economic activity and improve regional connectivity.

## Prudence and plumbing-Indian Express Explained

## Economics Easy Explanation

This year's budget navigates complex global and domestic economic challenges, focusing on fiscal prudence and stimulating private sector investment. With global growth stable but slow, and interest rates high amid geopolitical uncertainties, the budget aims to maintain fiscal discipline with a deficit target of 4.9% of GDP. It balances this with conservative revenue assumptions and a focus on debt sustainability.

Recognizing the limits of public sector investment, the budget shifts focus to private consumption and exports as new demand drivers, critical for absorbing India's growing workforce. It introduces Employment-Linked Incentives to boost formal sector employment, enhancing the balance between capital and labor.

Reductions in customs duties aim to improve the competitiveness of Indian exports. Concurrently, new skilling and education initiatives are intended to make labor a more attractive production factor. The budget also outlines necessary structural reforms in land, labor, and capital markets to enhance economic efficiency.

Overall, the budget adopts a strategic approach to foster sustainable growth through structural adjustments and sectoral support, addressing both immediate fiscal challenges and long-term economic competitiveness.

## Key Takeaways:

- 1. **Fiscal Prudence**: The budget commits to fiscal consolidation, targeting a deficit of 4.9% of GDP, and uses conservative revenue assumptions. This cautious approach aims to ensure long-term debt sustainability without overly suppressing economic growth.
- 2. Stimulation of Private Sector: With public sector investment reaching its limits, the budget seeks to pass the investment baton to the private sector. This shift is critical as firms require clear demand visibility to invest confidently, a challenge compounded by global manufacturing capacities and competition, notably from China.
- 3. **Support for Private Consumption and Exports**: The budget emphasizes the need to structurally enhance private consumption and exports as the new drivers of demand, crucial for absorbing the demographic influx into the workforce.
- 4. **Employment-Linked Incentives**: Acknowledging the increasing capital intensity of manufacturing, the budget introduces incentives aimed at boosting formal employment, thus addressing the balance between capital and labor in the economy.
- 5. Sectoral Reforms and Reductions in Customs Duties: The budget reduces customs duties in several sectors to enhance the competitiveness of Indian exports, aligning with the principle that import tariffs indirectly tax exports.
- 6. **Skilling and Education Initiatives**: New programs for skilling and internships, along with education loans, aim to make labor a more viable factor of production relative to capital, which is essential for fostering quality employment.
- 7. **Structural Reforms**: The budget outlines necessary reforms in land, labor, and capital markets in conjunction with state governments and emphasizes developing a vision for the financial sector and reviewing the Income Tax Act.
- 8. Strategic Vision for Sustainable Growth: In a world of limited cyclical policy space and external uncertainties, the budget stresses the importance of structural adjustments to improve competitiveness and equitable distribution of growth benefits.

## Responsible and inclusive-Indian Express Editorial

Economics



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#### **Easy Explanation**

The FY25 Union Budget of India focuses on being fiscally responsible while also pushing for growth and inclusivity. It projects a fiscal deficit of 4.9% of GDP, aiming for the largest annual reduction in deficits since 2013. The budget highlights a strategic commitment to capital spending, with increased allocations aimed at generating substantial economic multipliers.

Key sectors such as agriculture and MSMEs are emphasized for their critical role in employment and supporting low - and middleincome populations. Initiatives to promote sustainable agricultural practices and enhance MSME productivity through digital footprints and improved credit systems are notable. The budget also addresses infrastructure development through significant capital injections for states, encouraging spending on critical sectors like health and education.

#### Key Takeaways:

- 1. **Fiscal Prudence**: The budget aims for a substantial deficit reduction, signaling responsible fiscal management while maintaining growth-oriented expenditures.
- 2. **Capital Expenditure**: A sharp increase in capital spending, particularly through interest-free loans to states, focuses on long-term investments in infrastructure and essential services.
- 3. Sectoral Focus:
  - **Agriculture**: Increased funding for sustainable practices, with a push towards enhancing agricultural exports through better quality and safety standards.
  - **MSMEs**: Enhanced support for MSMEs includes measures to leverage digital platforms and extend credit facilities, boosting productivity and growth.
- 4. Education and Health: Although the budget boosts investment in education and skilling, the overall allocation for health and education remains relatively low compared to global standards.
- 5. **Digital and Infrastructure Initiatives**: Steps like the introduction of a unique land parcel identification number (ULPIN) aim to improve the efficiency of agricultural credit systems and support the digital transition of land records.
- 6. **Green Economy Commitment**: The budget supports India's transition to a Green Economy with mechanisms that facilitate capital flows into climate adaptation and mitigation efforts.
- 7. **Regional Development**: Special allocations for economically weaker states like Bihar highlight a move towards reducing inter-state disparities and promoting balanced regional development.

Overall, the budget balances fiscal responsibility with growth and inclusivity, aiming to position India on a sustainable development trajectory while addressing key sectoral and regional disparities.

## A SETBACK FOR THE FARM-Indian Express Editorial

## Economy(Agriculture) Easy Explanation

Despite India's overall GDP growth, the agriculture sector has seen a significant decline, and the Budget 2024 has not provided the necessary boost for agricultural growth and food security. The marginal increase in the budget for agricultural research and development (R&D) falls short of expectations and is likely to impact long-term productivity and climate resilience negatively. While there are some increases in allocations for specific sectors like fisheries, the overall support for agriculture relies heavily on welfare measures and subsidies, which do not directly address the needs of farmers. The government recognizes the need to reorient agricultural policies, but the current budget does not reflect significant steps towards this transformation.

## Key Takeaways

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- 1. Decline in Agriculture Growth: Agriculture sector growth dropped from 4.7% in FY23 to 1.4% in FY24.
- 2. **Insufficient Budget for Agri-R&D**: Marginal increase of 0.7% in the budget for the Department of Agricultural Research and Education, insufficient for substantial growth and innovation.
- 3. Agriculture Research Intensity (ARI): ARI has declined from 0.75% in 2008-09 to 0.43% in 2022-23, indicating reduced investment relative to Agri-GDP.
- 4. **Overall Budget Allocation**: The agriculture and allied sectors received Rs 1.52 trillion, with the Ministry of Agriculture and Farmers' Welfare seeing a minimal 5% increase, barely covering inflation.

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- 5. Fisheries and Animal Husbandry: A positive increase of 27% in budget allocation, signaling support for this growing sector.
- 6. Welfare and Subsidies: Focus remains on welfare measures and subsidies like PM-KISAN, credit subsidies, PM-Fasal Bima Yojana, and food subsidies, amounting to Rs 5.52 trillion.
- 7. **Food Subsidy**: Budgeted at Rs 2.05 trillion, mainly benefiting consumers through the PM-Garib Kalyan Yojana, raising questions about its necessity for such a large population.
- 8. **Need for Policy Reorientation**: The government acknowledges the need for better agricultural policies to boost productivity, improve soil fertility, and support sustainable farming practices.
- 9. **Future Outlook**: Effective policymaking and subsidy reorientation are essential for long-term agricultural growth, higher value addition, and boosting farmers' incomes.

## A five-year roadmap-Indian Express Editorial

Economy

## **Easy Explanation**

The Budget 2024 presents a structured approach to addressing key economic challenges over the next five years, with a strong emphasis on fiscal consolidation, employment generation, infrastructure development, and tax reform. The budget outlines a reduced fiscal deficit target and aims for a declining debt-to-GDP ratio, reflecting a commitment to fiscal responsibility. It introduces several initiatives to boost employability and support job creation, alongside proposing significant changes to the GST and customs duties to streamline tax regimes for greater efficiency and predictability. Additionally, the budget proposes a comprehensive review of the Income Tax Act to simplify the tax code and reduce litigation, signaling a shift towards more transparent and straightforward tax administration. Overall, the budget aims to lay down a medium-term economic policy framework that ensures stability and fosters predictable economic growth.

## Key Takeaways

**Fiscal Consolidation Commitment**: The budget reaffirms the commitment to fiscal consolidation, reducing the fiscal deficit target to 4.9% of GDP and aiming to reduce it further to 4.5% in the coming fiscal year.

**Medium-Term Economic Policy Framework**: The budget outlines a framework for medium-term economic policy, focusing on key areas such as employment, infrastructure, and tax rationalization to provide predictability and stability.

**Enhancement of Employment Opportunities**: Initiatives to boost employability through skilling programs and financial incentives for provident fund contributions are introduced to tackle employment challenges.

**GST and Customs Duties Rationalization**: Indications of changes in GST rates and the base, along with recalibrations in customs duties, suggest efforts to create a more efficient and stable tax environment.

**Income Tax Act Review**: The proposal to review and simplify the Income Tax Act aims to make it more user-friendly, reducing disputes and easing the tax compliance burden.

**Vivad se Vishwas, 2024 Scheme**: This scheme is introduced to reduce litigation and unlock revenue, focusing on dispute resolution to improve the efficiency of tax collections.

**Increased Taxation on Capital Gains**: Adjustments in the taxation of capital gains are aimed at addressing income inequality and tempering speculative activities in the capital markets.

#### Drug used to treat clots can protect against cobra venom damage-The Hindu Science

Science Easy Explanation Researchers have discovered that tinzaparin, a drug typically used to prevent blood clots, can significantly reduce cellular and skin damage caused by spitting cobra venom. This breakthrough was detailed in a study published in July 2024 in "Science Translational Medicine," involving a collaborative team from Australia, the UK, Canada, and Costa Rica. Utilizing the CRISPR-Cas9 gene-editing technology, the researchers identified genes linked to venom damage by observing which human cells survived after venom exposure. These genes were found to be involved in the production of heparan sulphate, a compound critical in blood vessel and clot formation. Tinzaparin mimics heparan sulphate, leading the body to halt its natural production pathways, thereby mitigating the venom's toxic effects. The study has paved the way for potential human clinical trials and a new direction in antivenom treatment, focusing on molecular mechanisms rather than traditional antivenom methods derived from animal antibodies.

## Key Takeaways:

- 1. **New Antivenom Approach**: Tinzaparin reduces the damage caused by spitting cobra venom by interfering with the biological pathways that the venom exploits, offering a novel approach to snakebite treatment.
- 2. **CRISPR-Cas9 Utilization**: The study employed CRISPR-Cas9 to pinpoint specific genes involved in the body's response to venom, showcasing the tool's utility in developing targeted therapies.
- 3. **Potential for Clinical Use**: The findings have led to a patent filing and the anticipation of human clinical trials, indicating the potential for widespread clinical application.
- 4. **Global Health Impact**: The discovery could significantly impact regions with high rates of snakebite incidents, offering a more accessible and potentially safer treatment option compared to traditional antivenoms.
- 5. **Scientific Interest Renewal**: This study's innovative approach may reinvigorate global scientific interest in understanding and mitigating snake venom toxicity, potentially leading to enhanced research funding and new therapeutic strategies.

## The rationale for the tax proposals-The Hindu Editorial

## Economics Easy Explanation

The 2024-25 Budget includes strategic tax proposals aimed at addressing key economic areas while transitioning towards a more streamlined tax regime. The tax proposals are divided into two categories: specific incentives for certain sectors and general proposals affecting broader tax policies.

## 1. Sector-Specific Incentives:

 Changes in customs duties aim to protect domestic industries and foster competition, aspiring to create "national champions" in key sectors. A review of the rate structure has been promised to ensure a predictable policy environment.

## 2. General Proposals:

- **Capital Markets**: Concerns over high returns in capital markets have led to proposals for increasing taxes on capital gains and derivatives transactions. This is intended to moderate speculative activity and stabilize the markets, ensuring they serve as effective tools for real investment.
- **Old vs. New Tax Regimes**: The Budget encourages a shift from the old to a new tax regime. The new regime offers fewer exemptions but lower tax rates, aiming to simplify the tax system and broaden the tax base. Changes such as an increased standard deduction and expanded income slabs under the new regime are designed to nudge taxpayers towards this simpler system.

## Key Takeaways:

- 1. **Tax Simplification**: The introduction of a new tax regime aims to simplify the tax code by reducing exemptions and lowering rates, hoping to make the old regime redundant over time.
- 2. **Fiscal Prudence**: Despite the encouragement to transition to the new regime, the fiscal impact of this transition could be significant, as evidenced by the still considerable use of the old regime by taxpayers.
- 3. Market Stabilization: Increased taxation in capital markets, particularly in derivatives, is likely to reduce speculative trading, contributing to more stable and productive financial markets.
- 4. Sectoral Support: The specific tax incentives for certain industries aim to boost domestic capabilities and competitiveness on a global scale.

5. **Future Considerations**: The possibility of setting a terminal date for the old tax regime suggests a move towards greater fiscal efficiency and tax system simplicity, though this could come with challenges in managing transitional impacts.

## For the social sector, it is old wine in an old bottle-The Hindu Editorial

Sociology Easy Explanation

The Budget 2024 shows a continuation of decreased allocations for various social sector schemes in real terms, despite identifying youth, farmers, women, and the poor as key focus groups. The nominal increases in budgets for education, health, and welfare schemes fail to match inflation and demand, signaling a trend towards privatization and commercialization of these services. Critical schemes for vulnerable populations receive inadequate funding, with no significant increases in benefits or salaries. The employment strategy relies heavily on private sector responses and CSR funds, focusing on supply-side measures rather than addressing fundamental issues like stagnant wages and low demand.

## Key Takeaways

- 1. **Decreased Allocations in Real Terms**: The Budget 2024 continues the trend of reduced funding for social sector schemes when adjusted for inflation.
- 2. Education and Health: Slight increases in budget allocations for school and higher education, and health, but not enough to cover rising costs and demand.
- 3. **Critical Schemes Underfunded**: Schemes like POSHAN, Saksham Anganwadi, and Samarthya see minor increases, insufficient to address current needs and inflation.
- 4. **Stagnant Social Security**: National Social Assistance Programme's budget remains unchanged, reducing its real value and coverage.
- 5. **Privatization and Commercialization**: Increased emphasis on cost-effectiveness and market principles, shifting focus to contributory schemes and privatization.
- 6. **Employment Strategy**: The Prime Minister's Package for Employment and Skilling relies on private sector participation and CSR funds, focusing on supply-side measures without addressing core employment issues.
- 7. Equity and Long-term Returns: The approach overlooks equity considerations and the long-term economic benefits of improving human development outcomes.

## 25th July 2024

## Why SC couldn't agree on environmental release of GM mustard-Indian Express Explained

## Science and technology

## Easy Explanation

A two-judge Bench of the Supreme Court of India delivered a split verdict on the environmental release of Genetically Modified (GM) mustard. Justices BV Nagarathna and Sanjay Karol disagreed on whether the approval given by the Genetic Engineering Appraisal Committee (GEAC) for field trials was proper. Justice Nagarathna highlighted procedural lapses and the lack of long-term impact studies, while Justice Karol emphasized the necessity of field trials to understand the plant's performance and safety. The case will now be referred to a larger Bench. Both judges directed the Union of India to develop a National Policy on GM crops with inputs from various stakeholders.

## Key Takeaways

- 1. **Split Verdict**: The Supreme Court's two-judge Bench had a split decision on the environmental release of GM mustard, requiring referral to a larger Bench.
- 2. Disagreement on GEAC's Process:
  - Justice Nagarathna: Criticized GEAC for not conducting promised field tests and for lacking application of mind, violating the precautionary principle.

- **Justice Karol**: Supported GEAC's process as independent and reasoned, emphasizing the importance of field trials for assessing safety and performance.
- 3. **National Policy Directive**: Both judges directed the Union of India to create a National Policy on GM crops, consulting experts, farmers, and state governments.

4. Background:

- The Centre for Genetic Manipulation of Crop Plants (CGMCP) at Delhi University sought GEAC's approval for GM mustard (DMH-11) in 2015.
- After several reviews and revisions, the GEAC recommended the environmental release of GM mustard in 2017.
- Following further examinations and deferrals, the proposal was finally accepted by the Centre in October 2022.
- 5. Environmental and Safety Concerns:
  - **Justice Nagarathna**: Highlighted the absence of studies on the long-term effects on future generations and environmental safety.
  - Justice Karol: Argued that field trials are necessary to study the impact on human health and biodiversity.
- 6. **Precautionary Principle**: Central to the disagreement, the precautionary principle is a facet of the right to a clean environment under Article 21 of the Indian Constitution

## Mitigation vs adaptation-Indian Express Explained

#### Environment

## **Easy Explanation**

The Economic Survey critiques the global climate action regime, highlighting its ineffectiveness and inequities, and suggests alternative approaches focusing on lifestyle and behavioral changes. The Survey argues that the excessive focus on achieving the 1.5°C or 2°C targets places unrealistic pressures on developing countries, diverting resources from immediate developmental needs. It emphasizes that adaptation to climate change should be prioritized alongside mitigation, given the inevitable impacts already unfolding. The Survey underscores the historical responsibilities of developed nations, particularly the United States, for their significant contributions to greenhouse gas emissions and their failure to meet emission reduction targets or financial commitments to developing countries. The dismantling of the Kyoto Protocol in favor of the Paris Agreement is criticized as a move to maintain the dominance of rich countries. The Survey calls for India to build climate-resilient infrastructure and promote Mission Life for lifestyle changes. It also points out that scientific assessments, often influenced by developed countries, present unrealistic scenarios for achieving climate targets, thus increasing pressure on developing nations.

## Key Takeaways

#### 1. Critique of the Global Climate Action Regime:

- The current international framework has been ineffective, with none of its targets met.
- The system is inequitable, putting impossible pressure on developing countries.

#### 2. Focus on Adaptation:

- Adaptation should receive at least as much importance as mitigation.
- Rapid improvement in incomes and overall well-being is seen as the best insurance against climate change.

#### 3. Inequities in Climate Action:

- Developed countries, especially the United States, have not fulfilled their emission reduction targets or financial commitments to developing nations.
- The dismantling of the Kyoto Protocol in favor of the Paris Agreement is viewed as a move to perpetuate the dominance of the rich countries.

#### 4. Alternative Pathways:

- The Survey suggests lifestyle and behavioral changes to reduce greenhouse gas emissions.
- India should build climate-resilient infrastructure and promote Mission Life, advocating for lifestyle changes.

#### 5. Scientific Community and Policy:

- The IPCC is seen as reinforcing the developed countries' narrative, often presenting unrealistic scenarios for achieving climate targets.
- Research has shown biases in the models used by the IPCC, overlooking the historical responsibility of developed countries and future energy needs of developing nations.

## 6. India's Climate Strategy:

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• India has potential to build among the most climate-resilient infrastructures globally but progress is slow.

- Initiatives like Smart Cities and new railway stations include elements of climate proofing but are not at their best potential.
- Mission Life needs to become a mass movement to have a significant impact.

By addressing these points, the Economic Survey emphasizes a more balanced approach to climate action, integrating both mitigation and adaptation, while calling out the inequities and hypocrisies in the current global framework.

## The politics around Panchamasali Lingayat quota demands in Karnataka-Indian Express Explained

## Polity

## **Easy Explanation**

The Panchamasali Lingayats, a prominent sub-caste within Karnataka's Lingayat community, have been pushing for inclusion in Category 2A of the Other Backward Classes (OBC) to benefit from a 15% quota in government jobs and college admissions, instead of their current 5% under Category 3B. Their demand, ongoing for over three years, intensified in 2020 and became a significant political issue. The BJP attempted to address this by increasing the overall Lingayat quota, but the Panchamasalis remained unsatisfied. This dissatisfaction contributed to the BJP's poor performance in the May 2023 assembly elections. The Congress, currently in power, is deferring a decision until the findings of the Karnataka Social, Economic, and Caste Survey are made public. The Congress may also consider including all Lingayats in the central OBC list to balance the interests of the Panchamasalis and existing Category 2A communities. This situation highlights the complex dynamics of caste-based reservations and political strategies in Karnataka.

## Key Takeaways

- 1. Demand for Inclusion in Category 2A:
- Panchamasali Lingayats seek to move from Category 3B (5% quota) to Category 2A (15% quota) in Karnataka's OBC matrix.
- This demand has been ongoing for over three years and has intensified since 2020.
- 2. Political Influence:
- Lingayats hold sway in 90-100 of Karnataka's 224 assembly seats.
- Panchamasalis, making up 70% of the Lingayat population, feel under-represented in politics and economically disadvantaged compared to other Lingayat sub-castes.
- 3. Reservation System:
- Karnataka's 32% OBC quota is divided among five categories.
- Category 2A, which includes 102 castes, has the largest quota.
- 4. Political Agitation and Responses:
- The demand gained momentum in 2020 but saw little progress despite assurances from political leaders.
- The BJP tried to placate the Panchamasalis by increasing the overall Lingayat quota from 5% to 7%, but this did not satisfy the specific Category 2A demand.
- 5. Impact on Elections:
- Lingayat dissatisfaction contributed to the BJP's loss in the May 2023 assembly elections.
- The Congress won a significant number of seats with Lingayat candidates, including those from the Panchamasali sub-sect.
- 6. Current Status and Congress Strategy:
- The Congress is awaiting the Supreme Court's guidance and the results of the Karnataka Social, Economic, and Caste Survey before making any decisions.
- The Congress may consider including all Lingayats in the central OBC list to maintain support from existing Category 2A communities while appeasing Lingayats.

## A Budget that places health on the margins-The Hindu Editorial

## Sociology

## Easy Explanation

The Union Budget shifted focus to economic growth, infrastructure, and employment, while health received marginal attention despite ongoing COVID-19 concerns. Announced health initiatives like HPV vaccination, U-WIN programme, and inclusion of ASHA and Anganwadi workers in PMJAY were not detailed in the main Budget. Comparing budgetary estimates (BE) from this year to last, the overall Health Ministry budget saw a modest 1.98% increase, with NHM and PMJAY getting only 1.16% and 1.4% increases

respectively. This is insufficient for expanding coverage and addressing rising non-communicable diseases and tuberculosis. The lack of substantial investment in universal health coverage, a multi-skilled healthcare workforce, and drug price control mechanisms were missed opportunities. Positive steps include waiving customs duties on some anti-cancer drugs and investing in climate-resilient agriculture.

## Key Takeaways

- 1. Shift in Budget Focus: The Budget focused on economic growth, with minimal emphasis on health despite ongoing COVID-19 risks.
- 2. Insufficient Health Funding: Modest increases in the Health Ministry budget (1.98%), NHM (1.16%), and PMJAY (1.4%) fall short of what is needed for expanding healthcare coverage and addressing major health issues.
- 3. Universal Health Coverage: Limited budget increases hinder the goal of achieving universal health coverage by 2030.
- 4. **Healthcare Workforce**: The need for a multi-layered, multi-skilled healthcare workforce was not addressed, missing an opportunity for employment generation.
- 5. **Drug Price Control**: Waiving customs duties on some anti-cancer drugs was positive, but broader drug price control mechanisms were not established.
- 6. **Climate-Resilient Agriculture**: Investment in climate-resilient agriculture is a welcome step towards ensuring nutrition security and reducing environmental impact.

## The government's focus is on ease of paying taxes-The Hindu Editorial

#### Economy

#### **Easy Explanation**

The Union Budget focuses on promoting economic growth while simplifying and rationalizing the tax structure to enhance ease of doing business. Key measures include the removal of the 2% equalization levy on e-commerce transactions, streamlining transfer pricing assessments, reducing corporate tax rates for foreign companies, and abolishing the angel tax. Additional steps include rationalizing the withholding tax regime, adjusting TDS offenses, and introducing measures to reduce capital gains tax complications. Provisions for tax relief to middle-class individuals, promoting domestic manufacturing through customs duty adjustments, and addressing GST payment issues are also highlighted. The Budget aims to reduce litigation with the 'Vivad se Vishwas Scheme, 2024' and enhance digitization of taxpayer services, demonstrating a commitment to improving the overall business environment.

#### Key Takeaways

- 1. **Tax Simplification and Rationalization**: The Budget aims to simplify the tax structure, reduce disputes, and enhance ease of doing business through measures like streamlining transfer pricing assessments and rationalizing withholding tax regimes.
- 2. **International Tax Compliance**: The removal of the 2% equalization levy on e-commerce transactions aligns with the OECD BEPS Action Plan, showing India's commitment to combating tax avoidance globally.
- 3. **Corporate Tax Adjustments**: The reduction of corporate tax rates for foreign companies from 40% to 35% is intended to attract more foreign investments and improve investor sentiment.
- 4. **Abolition of Angel Tax**: The removal of the angel tax is aimed at boosting the Indian startup ecosystem by resolving funding issues and encouraging investor confidence.
- 5. **Middle-Class Tax Relief**: Increased standard deductions, raised tax slabs, and enhanced deductions for family pensions and new pension schemes are designed to provide tax relief to middle-class individuals and stimulate economic consumption.
- 6. Litigation Reduction: The introduction of the 'Vivad se Vishwas Scheme, 2024' is expected to settle pending tax appeals, reduce litigation, and release funds stuck in tax disputes.
- 7. **Digitization and Efficiency**: Enhanced digitization of taxpayer services, including the digitization of major services and reducing the time limit for reassessment, is aimed at improving efficiency and ease of doing business.

## An outlining of urban transformation strategies-The Hindu Editorial

Sociology

#### Easy Explanation

The Budget emphasizes the development of urban areas as growth hubs, recognizing the need for substantial investments in housing, infrastructure, and digitization. Key initiatives include extending the Pradhan Mantri Awas Yojana (Urban) to construct one crore housing units, developing rental housing for industrial workers, and upgrading core infrastructure under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT). The Smart Cities Mission receives reduced funding, but a new National Urban Digital Mission (NUDM) is introduced for digitizing property and tax records. The Budget also focuses on planned city development, mass rapid transit systems, solid waste management, and the creation of street-vending zones. State governments and municipalities are encouraged to utilize these provisions effectively for urban transformation.

## Key Takeaways

## 1. Housing Initiatives:

- Expansion of the Pradhan Mantri Awas Yojana (Urban) to build one crore housing units with an investment of ₹10 lakh crore.
- Introduction of rental housing for industrial workers through public-private partnerships with Viability Gap Funding (VGF).

## 2. Infrastructure Development:

- $\circ$  Core urban infrastructure improvements under AMRUT with a budget of ₹8,000 crore.
- ₹11.11 lakh crore allocated for capex in infrastructure, with states getting ₹1.50 lakh crore interest-free loans for infrastructure development.

## 3. Digital and Smart Cities:

- Reduction in funding for the Smart Cities Mission from ₹8,000 crore to ₹2,400 crore.
- Launch of the National Urban Digital Mission (NUDM) with ₹1,150 crore for digitizing property and tax records using GIS mapping.

## 4. Planned Urban Development:

- ₹25,653 crore allocated as Finance Commission Grants for municipalities.
- Focus on transit-oriented development and orderly development of peri-urban areas with enhanced economic and transit planning.

## 5. Solid Waste Management:

- Special thrust on bankable projects for solid waste management in collaboration with state governments and financial institutions.
- Utilization of VGF for solid waste management projects.

#### 6. Electric Bus Systems:

 Encouragement of electric bus systems in cities with a provision of ₹1,300 crore, promoting economical and ecofriendly urban mobility.

## 7. Street Vending Zones:

- Development of 100 weekly 'haats' or street food hubs in select cities.
- Facilitation of street-vending plans and zones to make street vending safe and organized.

The Budget outlines a comprehensive strategy for urban transformation, requiring the active participation of state governments, municipalities, and citizens to effectively utilize the resources and provisions offered.

## On increase in electricity tariff in T.N.-The Hindu Text and Context

#### Economy

## Easy Explanation

On July 15, the Tamil Nadu Electricity Regulatory Commission (TNERC) announced an average 4.83% hike in electricity tariffs for all consumers, effective retroactively from July 1. This increase, part of a multi-year tariff framework set in September 2022, was influenced by rising consumer price inflation and the growing financial support needed for the Tamil Nadu Power Distribution Corporation Limited (TNPDCL). Despite the government absorbing the burden for around one crore domestic consumers, Micro, Small, and Medium Enterprises (MSMEs) have strongly protested, citing significant financial strain. Additionally, the TNPDCL was recently in the spotlight due to allegations of irregularities in coal imports, leading to a preliminary inquiry by the Directorate of Vigilance and Anti-Corruption (DVAC).

- 1. **Electricity Tariff Hike**: The Tamil Nadu Electricity Regulatory Commission (TNERC) announced a 4.83% average increase in electricity tariffs for all consumers, effective retroactively from July 1.
- 2. **Protests from MSMEs**: Over 25 lakh Micro, Small, and Medium Enterprises (MSMEs) have protested the tariff hike, citing significant financial burdens and increased operational costs, which affect their competitiveness.
- 3. **Domestic Consumers Shielded**: The State government has protected about one crore domestic consumers from the tariff increase, maintaining free power schemes for certain categories, including 100 units bi-monthly for domestic users and free power for huts and agriculture.
- 4. **Multi-Year Tariff Framework**: The tariff hike is part of a multi-year tariff framework set in September 2022, considering consumer price inflation and capping the annual increase at 6%.
- Financial Impact: The tariff increase is expected to generate an additional ₹2,720 crore in revenue for the Tamil Nadu Power Distribution Corporation Limited (TNPDCL), though the corporation is projected to end the year with a ₹12,280 crore loss.
- 6. Allegations of Corruption: The Directorate of Vigilance and Anti-Corruption (DVAC) has launched a preliminary inquiry into allegations of irregularities in coal import tenders by TNPDCL, involving losses of ₹6,066 crore between 2012 and 2016.
- 7. **Government's Firm Stance**: Despite protests from MSMEs and political condemnation, the State government remains resolute in implementing the tariff increase to address financial and operational challenges within TNPDCL.

## Is immunity for the President and Governors absolute?-The Hindu Text and Context

#### Polity

## **Easy Explanation**

The Supreme Court of India is reviewing whether the immunity granted under Article 361 to the President and Governors from criminal proceedings while in office undermines fairness and constitutional morality. This review was prompted by a petition from a female employee accusing West Bengal Governor C.V. Ananda Bose of sexual harassment. The petitioner contends that the immunity provided by Article 361(2) should not shield illegal acts that violate fundamental rights. The court seeks to clarify the extent and implications of this immunity, considering whether it is "unfettered or unbridled" and how it aligns with constitutional principles and citizens' rights.

#### Key Takeaways

- 1. **Supreme Court Review**: The court is examining if the immunity under Article 361 for the President and Governors from criminal proceedings is absolute and fair.
- 2. **Petition Origin**: The case arose from a petition by a woman accusing West Bengal Governor C.V. Ananda Bose of sexual harassment, challenging the immunity that prevents investigation while he is in office.
- 3. Article 361 Details: Article 361(1) and (2) provide immunity to the President and Governors from court proceedings for acts done in the exercise of their powers, with exceptions for civil cases and impeachment.
- 4. **Petitioner's Argument**: The petitioner argues that immunity under Article 361(2) should not cover illegal acts that violate fundamental rights, particularly the right to life under Article 21 of the Constitution.
- 5. **Historical Concerns**: Constituent Assembly debates on Article 361(2) highlighted concerns about its vagueness and the possibility of it allowing constitutional authorities to evade criminal charges by remaining in office.
- 6. **Previous Interpretations**: The Supreme Court in Rameshwar Prasad vs. Union of India interpreted that civil immunity under Article 361(4) does not prevent challenges to the President's or Governors' actions on grounds of mala fide intentions, suggesting a similar interpretation might apply to criminal immunity.
- 7. **Impact of Decision**: The Supreme Court's decision could redefine the scope of immunity for constitutional authorities, ensuring accountability and protecting citizens' fundamental rights.

| Clear your doubts now.

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## 26th July 2024

## Mining and power of states-Indian Express Explained

#### Polity

#### **Easy Explanation**

The Supreme Court of India has clarified that royalties collected from mining leaseholders are not taxes, thereby empowering states to impose additional taxes on mining activities. This landmark ruling emerged from the Mineral Area Development Authority v. M/s Steel Authority of India case, resolving a legal question pending for over 25 years. The case centered on whether royalties, as defined under Section 9 of the Mines and Minerals (Development and Regulation) Act, 1957, constituted a form of taxation. The Court corrected a longstanding typographical error from a previous ruling, definitively stating that royalties are distinct from taxes. This distinction allows states to levy taxes on mining beyond the royalties, without overstepping federal regulations. The decision was passed with an 8-1 split, with Justice B.V. Nagarathna dissenting, arguing that treating royalties as taxes is crucial for the uniform development of mineral resources. This judgment not only clarifies the fiscal landscape for mining operations but also underscores the nuanced separation of powers between state and federal jurisdictions in tax legislation.

#### Key Takeaways

**Royalties Are Not Taxes:** The Supreme Court clarified that royalties paid by mining leaseholders are not taxes but fees for the usage rights of minerals.

**States Can Tax Mining Activities:** States have the authority to impose taxes on mining activities separate from collecting royalties, providing them with additional revenue streams.

**Clarification of Previous Rulings:** The Court addressed and corrected a historical typographical error from a previous ruling, which had long caused ambiguity about whether royalties were considered taxes.

**Federal vs. State Powers:** The ruling delineates the powers between the central government and state governments, confirming that while the central government regulates mineral development, states can levy taxes related to mining.

**Legal Precedent:** This decision settled a legal debate that had been unresolved for over a quarter of a century, providing clarity and stability to the mining industry's regulatory framework.

**Impact on Revenue Collection:** By affirming states' ability to tax mining operations independently of royalties, the decision potentially increases the financial resources available to states for public welfare and infrastructure projects.

**Dissenting Opinion:** Justice B.V. Nagarathna provided a dissenting opinion, arguing that considering royalties as taxes would better serve the national interest in uniform mineral development and prevent states from imposing additional burdensome levies on mining operations.

#### Why Paris Olympics will be the most climate friendly in history-Indian Express Explained

Environment

#### **Easy Explanation**

Paris 2024 is set to be the greenest Olympic Games ever, with the organizing committee committed to halving the event's carbon emissions compared to previous games. Utilizing renewable energy sources such as geothermal and solar power, Paris aims to revolutionize the ecological impact of global sporting events. Key initiatives include promoting plant-based, locally-sourced food, enhancing public transportation accessibility, minimizing new construction by using existing or temporary venues, and employing sustainable materials in athletes' living arrangements. However, the massive influx of tourists, anticipated to number over 10 million, presents a significant challenge in terms of air travel-related greenhouse gas emissions. Despite efforts to offset these emissions through environmental projects, critics argue that these measures may amount to greenwashing, emphasizing the need for genuine reductions in carbon footprints.

- 1. Halved Carbon Emissions: Paris 2024 aims to cut the carbon emissions of the Olympics by half, from 3.5 million tonnes to 1.75 million tonnes.
- 2. Renewable Energy: The Games will predominantly utilize renewable energy, including geothermal and solar power.
- 3. **Sustainable Eating:** Efforts to promote sustainable dining options are underway, reducing reliance on high-emission meat and dairy products.
- 4. **Public Transport and Cycling:** Enhanced public transport options and the introduction of additional cycling lanes aim to reduce the carbon footprint of transportation.
- 5. **Minimal Construction:** Paris 2024 will largely use existing or temporary venues to avoid the high emissions typically associated with new construction.
- 6. **Sustainable Living Arrangements:** Athletes' accommodations will feature recycled materials and rented furniture, promoting reusability.
- 7. **Challenge of Offsetting:** While Paris 2024 includes plans to offset unavoidable emissions, there is skepticism about the effectiveness and integrity of carbon offset projects, highlighting a potential area for greenwashing concerns.

Why Al's present and future bring some serious environmental concerns-Indian Express Explained

Science and technology

## **Easy Explanation**

Al technology, while transformative across various sectors, is raising significant environmental concerns due to its substantial energy and resource demands. Google's recent environment report highlighted a 13% increase in its emissions footprint in 2023, primarily due to heightened electricity usage in data centers—expected to escalate as Al tools like those from OpenAl become more prevalent. These data centers not only consume vast amounts of electricity but also place a heavy demand on water resources for cooling purposes. For instance, the data center serving OpenAl's GPT-4 in Iowa reportedly used 6% of the local water supply in July 2022. With Al's deployment set to expand, particularly in countries like India, there is a crucial need to plan its growth in an environmentally conscious way. However, there's also an optimistic view from studies like the one by Boston Consulting Group, which suggests that Al could significantly reduce global emissions by 2030 through efficiencies and emission monitoring.

## Key Takeaways:

- 1. Increased Energy Consumption: Al's expansive data processing significantly raises electricity usage in data centers.
- 2. Environmental Impact: AI's deployment intensifies demands on electricity and water resources, exacerbating environmental pressures.
- 3. **Global Electricity Demand:** Data centers are projected to consume between 1.5% and 3% of global electricity by 2026, a significant increase from current levels.
- 4. **Regional Impact:** In regions like Ireland, data centers already account for a substantial portion of national electricity demand due to favorable tax conditions.
- 5. Water Usage Concerns: The cooling of data centers, crucial for AI operations, requires substantial water resources, impacting local supplies.
- 6. **Potential for Emission Reductions:** Despite the challenges, AI could potentially reduce global emissions by optimizing existing processes and reducing inefficiencies.
- 7. **Need for Efficient Planning:** As AI's utility grows, there's an urgent need for strategic expansion plans that minimize environmental impacts and encourage sustainable practices among operators.

## LISTERIOSIS OUT BREAKS IN US AND CANADA:WHAT YOU NEED TO KNOW-Indian Express Explained

Science

#### **Easy Explanation**

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Recent outbreaks of listeriosis have been reported in the US and Canada, caused by the bacterium Listeria monocytogenes, found in contaminated food items like milk, raw sprouts, soft cheeses, and deli meats. In the US, 28 people have been hospitalized across 12

states, with two fatalities, while Canada has reported 12 cases with two deaths across three provinces. Listeriosis primarily affects vulnerable populations such as the elderly, those with compromised immune systems, and pregnant women. Treatment typically involves antibiotics for intestinal infections, but more severe cases may require hospitalization.

#### Key Takeaways:

- 1. **Source of Outbreaks:** In the US, the outbreak is linked to raw or undercooked meat from delis, whereas in Canada, it is associated with contaminated plant-based refrigerated beverages from the Silk brand by Danone.
- 2. **Vulnerability and Symptoms:** Vulnerable groups include the elderly, immunocompromised individuals, and pregnant women. Symptoms range from vomiting and nausea to severe headaches and fever.
- 3. **Treatment and Prognosis:** Treatment involves antibiotics; however, invasive listeriosis, which occurs when the infection spreads beyond the intestines, may require urgent hospitalization. The mortality rate for non-pregnant individuals with invasive listeriosis is approximately 17%.
- 4. **Preventive Measures:** The CDC advises high-risk groups to avoid unheated deli meats and to heat all deli meats to an internal temperature of 165 degrees Fahrenheit before consumption. Surfaces in contact with potentially contaminated food should be thoroughly sanitized.
- 5. **Historical Context:** The current outbreaks recall a significant 2008 event in Canada involving contaminated cold cuts that resulted in 22 deaths and 57 illnesses, underscoring the potential severity of such outbreaks.

## Kamala, an American story-Indian Express Editorial

## International relations

## **Easy Explanation**

The recent, rapid developments in American politics have positioned Kamala Harris as the Democratic nominee for President, following an assassination attempt on Donald Trump and the unexpected resignation of Joe Biden. Harris's candidacy brings the potential for the first woman President of the United States, who also possesses African and Asian heritage. Her diverse background, however, is being politicized by opponents who label her as a "DEI" (Diversity, Equity, and Inclusion) candidate, framing her through a lens of identity politics which may not do justice to her broader political potential. Harris's campaign now revitalizes the Democratic Party with fresh energy and a bold liberal agenda, appealing especially to younger voters and the liberal establishment fearful of Trump's return.

## Key Takeaways:

- 1. **Historical Candidacy:** Kamala Harris emerges as a pioneering figure with the potential to become the first female president with a diverse heritage.
- 2. **Political Shifts:** Rapid political changes have thrust Harris into the spotlight, marking a significant shift from what seemed an uneventful race.
- 3. **Focus on Identity:** The focus on Harris's racial and cultural background by some detractors might overshadow her policy positions and political qualifications.
- 4. Liberal Hopes: Harris represents a renewed liberal hope, countering Trump's conservative influence and possibly steering the nation toward progressive reforms.
- 5. Youth Engagement: Harris's candidacy has re-engaged younger demographics, revitalizing interest and participation in the upcoming election.
- 6. **Challenges Ahead:** Harris faces the challenge of balancing her liberal stance with broader American political sentiments to avoid alienation and intense opposition from conservative sectors.
- 7. **Strategic Positioning:** The effectiveness of Harris's campaign will depend on her ability to navigate the political spectrum and mitigate character attacks from her opposition

## India's illegal coal mining problem-The Hindu Text and Context

#### Governance

#### **Easy Explanation**

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Illegal coal mining in India poses significant challenges and risks, highlighted by recent fatal incidents in Gujarat and Jharkhand where workers died due to unsafe conditions. Governed by the Coal Mines (Nationalisation) Act, 1973, the legal responsibility for addressing illegal mining falls on state governments, categorizing it as a law and order issue. This decentralization results in inconsistent enforcement across different regions. Factors fueling illegal mining include the high demand for coal, economic reliance of local communities on mining, poverty, unemployment, weak enforcement, and alleged political support. Workers in illegal mines face severe risks like exposure to toxic gases, inadequate structural supports, and lack of safety equipment, leading to high fatality rates. The challenges for governance are amplified by the complexity of legal frameworks, bureaucratic inefficiencies, and the socio-economic context that sustains illegal mining operations. Despite efforts to regulate, illegal mining persists, driven by economic incentives and sometimes compounded by political patronage, making it a persistent issue in coal-rich areas of India.

## Key Takeaways:

- 1. **Prevalence of Illegal Mining:** Illegal coal mining is widespread in India, especially in coal-rich regions and abandoned mining sites. The high demand for coal and the economic benefits of mining drive this illegal activity.
- 2. Legal Frameworks: Coal mining in India is regulated under the Coal Mines (Nationalisation) Act, 1973. Despite national regulations, the responsibility to combat illegal mining falls on state governments because it is categorized as a law and order problem.
- 3. **State Responsibility:** States are primarily responsible for addressing illegal mining due to its classification under the state list. This decentralization can lead to inconsistencies in enforcement and regulation.
- 4. **Contributing Factors:** Several factors contribute to the persistence of illegal mining, including high demand for coal, economic dependence of local communities on mining, poverty, unemployment, weak regulatory enforcement, and alleged political patronage.
- 5. **Safety Risks:** Workers in illegal coal mines face severe safety risks, including exposure to toxic gases like carbon monoxide, inadequate structural supports, and lack of proper safety equipment, leading to fatalities and severe health issues.
- 6. **Challenges in Governance:** The complexity of legal frameworks and bureaucratic inefficiencies allow illegal mining activities to thrive. Moreover, the economic and social factors make it challenging for governments to eradicate illegal mining completely.
- 7. Political and Economic Context: Allegations of political support for illegal mining activities complicate efforts to regulate and control these operations. The economic incentives for both miners and local economies contribute to the continuation of illegal practices despite the risks.

## Addressing risk factors could reduce dementia cases by 40%: report-The Hindu science

#### Science

## **Easy Explanation**

India's aging population is set to face a significant public health challenge with the rising incidence of dementia, driven by modifiable risk factors like air pollution, hypertension, and obesity. The demographic shift, exacerbated by a steady decline in the Total Fertility Rate (TFR) from 5.2 in 1971 to 2.0 in 2020, forecasts that by 2050, nearly one-fifth of India's population will be over the age of 60. This demographic transformation is expected to intensify the burden of neurodegenerative disorders across the country.

The Lancet Commission's 2020 report underscores the urgency for policy reforms, emphasizing that up to 40% of dementia cases could be preventable through addressing these modifiable risk factors. Essential strategies proposed include enhancing air quality, promoting healthier lifestyles, and improving healthcare infrastructure. Specialized dementia care facilities, early detection, and timely intervention are pivotal in mitigating the impact of dementia. Furthermore, public health initiatives must focus on educating the population about dementia and encouraging preventive measures to maintain cognitive health in the elderly.

#### Key Takeaways:

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- 1. Aging Population: India's elderly demographic is set to double by 2050, significantly increasing the prevalence of agerelated diseases like dementia.
- 2. **Modifiable Risk Factors:** Addressing key risk factors such as air pollution, hypertension, and obesity could prevent up to 40% of dementia cases.

- 3. **Policy and Infrastructure:** Strengthening healthcare infrastructure and implementing robust policies are crucial for managing the rise in dementia cases.
- 4. **Preventive Health Measures:** Promoting healthier lifestyle choices and early intervention strategies can significantly reduce dementia risk.
- 5. **Public Awareness:** Increasing public understanding of dementia and its risk factors is essential to foster a supportive environment for the aging population.

## Is the Maharashtra Special Public Security Bill draconian?-The Hindu Editorial

Internal security

#### **Easy Explanation**

The Maharashtra Special Public Security Bill, 2024, introduced by the BJP-led government, aims to curb urban Naxalism by allowing the state to declare organizations as unlawful, with related offenses being non-bailable and cognizable. Critics argue that the bill is unnecessary and redundant, given the existing legal framework that includes MCOCA, UAPA, and BNS, which already address the issues targeted by the new bill. Concerns have been raised about the bill's vague definitions of 'unlawful activities,' which could potentially be misused to suppress dissent and civil liberties. The bill's introduction without public consultation and the risk of its misuse against activists, journalists, and political dissenters further accentuate fears of an authoritarian tilt, undermining India's democratic ethos of non-violent protest and free expression. Moreover, historical evidence from other states with similar laws suggests such legislation has not effectively curbed extremism but rather restricted civil freedoms. The need for judicial oversight and more robust public engagement in the legislative process is emphasized to prevent the erosion of foundational democratic principles.

#### Key Takeaways:

- 1. **Redundancy and Overlap:** Critics like Yashovardhan Azad point out that existing laws already cover the issues the new bill aims to address, making it unnecessary and complicating legal processes.
- 2. **Vague Definitions:** The bill's vague definition of 'unlawful activities' raises concerns about its potential misuse against peaceful protests and civil dissent, equating these acts with threats to public order.
- 3. **Potential for Misuse:** There is a significant risk that the bill could be used to target political dissenters, activists, and minority groups, under the guise of maintaining public security.
- 4. Lack of Necessity: The justification for the bill is questioned by the fact that the central government reports a decline in Naxalism, contradicting the state government's claim of a rising threat.
- 5. **Impact on Civil Liberties:** The bill could undermine India's democratic foundation of non-violent protest and free expression by criminalizing dissent.
- 6. **Public and Judicial Oversight:** The lack of public consultation and the need for judicial oversight are highlighted, suggesting that the bill was rushed without adequate consideration of its broader implications.
- 7. **Comparative Effectiveness:** Historical evidence from other states with similar laws shows that such legislation has not necessarily been effective in curbing extremism but has been used to suppress civil freedoms.

#### The 'geo-calculus' of the Moscow visit-The Hindu Editorial

International relations

#### **Easy Explanation**

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Prime Minister Narendra Modi's visit to Moscow, his first bilateral trip in his third term, marks a significant moment in India-Russia relations amid the ongoing Ukraine conflict. This visit, occurring two years after the conflict's onset, suggests a strategic recalibration of India's foreign policy towards Russia, especially given the changing dynamics of global geopolitics. Modi's timing and the continued engagement with Russian President Vladimir Putin highlight India's intent to maintain and perhaps deepen ties with Russia, despite criticism from Western countries and Ukraine. The visit underscores India's strategic autonomy, balancing its relations between major global powers while addressing domestic and regional security concerns.

Economically, the visit focused on strengthening trade ties, particularly in energy, which is crucial for India's energy security. Discussions aimed at boosting bilateral trade, previously valued between \$5 billion and \$10 billion, reflect a mutual interest in expanding economic cooperation. Internationally, the visit has elicited a range of reactions, showcasing the complex interplay between domestic interests and global diplomacy. Modi's visit reaffirms India's commitment to its longstanding relationship with Russia, navigating through the global pressures of alignment and autonomy.

## Key Takeaways:

- 1. **Strategic Timing:** Modi's decision to visit Russia after a hiatus since the Ukraine conflict began illustrates a strategic timing aligned with the changing dynamics of the conflict and its global perception.
- 2. **Geo-political Messaging:** The visit serves as a strong geopolitical message of India's continued partnership with Russia, despite Western pressures and the evolving landscape of international alliances.
- 3. **Implications for India's Foreign Policy:** The visit underscores India's approach to maintaining its strategic autonomy, navigating its relations between major powers like the U.S. and Russia amidst ongoing regional and global tensions.
- 4. **Economic and Trade Considerations:** Modi's visit also focused on deepening economic ties, especially in energy and trade, highlighting the importance of Russia in India's energy security strategy and the potential for expanding bilateral trade.
- 5. **Future of Quad and Indo-Pacific Strategy:** The visit may have implications for India's role and strategic positioning within the Quad and its broader Indo-Pacific strategy, potentially impacting its engagements with other strategic groupings and alliances.
- 6. **Domestic and International Reactions:** The visit has elicited a range of reactions both domestically within India and internationally, reflecting the complex interplay of internal politics, national interests, and global diplomacy.

The visit represents a complex interplay of diplomacy, strategic interests, and international relations, signaling India's intent to navigate its path in the global order while securing its national interests.

## 27th July 2024

## Names of dhaba owners on Kanwar route: issues before SC-Indian Express Explained

## Polity

## Easy Explanation

The Supreme Court of India extended its previous order prohibiting the enforcement of a public notice issued by police in Uttar Pradesh's Muzaffarnagar district. The notice directed hotels, dhabas, and shops along the Kanwar Yatra route to display the names of their owners and employees. This directive, issued on July 17, was challenged by various parties on the grounds that it discriminated against Muslim-owned businesses by compelling them to reveal their religious identity. The Supreme Court observed that the police had no legal basis for issuing such directions and noted that such actions could be taken under the Food Safety and Standards Act, 2006 or the Street Vendors Act, 2014, but only by the competent authority.

## Key Takeaways

- 1. **Supreme Court Extension:** The court extended its order prohibiting the enforcement of the police directive requiring the display of names of owners and employees in Muzaffarnagar district along the Kanwar Yatra route.
- 2. Lack of Government Order: The court found no government order empowering the police to issue such directions. It suggested that these directions could be issued under specific Acts, but only by the competent authority.
- 3. **Discrimination Concerns:** The directive was challenged on the grounds of religious discrimination, as it allegedly targeted Muslim-owned businesses, potentially violating Articles 15(1) and 17 of the Constitution.
- 4. **Legal Basis for Directions:** The police directive did not cite any specific law. However, the state referred to regulations under the Food Safety and Standards Act, 2006, which require food business operators to display registration certificates and photo IDs prominently.
- 5. **Right to Privacy:** The court will consider whether compelling businesses to disclose names violates the right to privacy under Article 21, as recognized in the Justice K S Puttaswamy v. Union of India (2017) case.
- 6. **State's Position:** The state refuted allegations of discrimination, stating that the requirement to display names applies uniformly to all food sellers along the Kanwar Yatra route.

7. **Future Court Considerations:** The court will examine whether the directions violate shopkeepers' rights to privacy and whether they are discriminatory or violate the right to practice any profession under Article 19(1)(g).

## Cheaper cancer drugs-Indian Express Explained

## Science Easy Explanation

The Indian government announced customs duty exemptions on three crucial cancer drugs—trastuzumab deruxtecan, osimertinib, and durvalumab—in the Budget 2024-25. Previously taxed at around 10%, this decision aims to reduce the overall cost of cancer therapies and make these drugs more accessible to patients. Targeted cancer drugs, unlike traditional chemotherapy, specifically attack cancer cells, leading to better outcomes and fewer side effects. Trastuzumab deruxtecan targets HER-2 receptors and is used for metastatic or inoperable cancers; osimertinib targets EGFR in lung cancers, extending patients' lives by 4-5 years; and durvalumab is an immunotherapy drug helping the immune system recognize and attack cancer cells.

The exemptions are expected to alleviate the financial burden on patients, making these expensive treatments more affordable. India is witnessing a rise in cancer cases, with 14.6 lakh new cases detected in 2022. Cancer incidence is higher among women compared to men, with common cancers including lung, mouth, prostate, and breast. The government's decision will significantly benefit patients requiring advanced therapies, particularly for lung and breast cancers, which are prevalent in India.

## Key Takeaways

- 1. **Government Decision:** The Finance Minister announced customs duty exemptions on three cancer drugs: trastuzumab deruxtecan, osimertinib, and durvalumab, previously taxed at around 10%.
- 2. **Targeted Cancer Drugs:** These drugs are designed to specifically target cancer cells, offering better outcomes and fewer side effects compared to traditional chemotherapy.
- 3. Drugs and Their Functions:
  - **Trastuzumab Deruxtecan:** An antibody-drug conjugate targeting HER-2 receptors, used for metastatic or inoperable cancers with HER-2 receptors. Costs around Rs 1.6 lakh per vial.
  - **Osimertinib:** Targets EGFR in lung cancers, extending patients' lives by 4-5 years. Costs around Rs 1.5 lakh per strip of ten pills.
  - **Durvalumab:** An immunotherapy drug that helps the immune system recognize and attack cancer cells. Costs around Rs 1.5 lakh per 10ml vial.
- 4. **Impact of Duty Exemptions:** The exemptions are expected to reduce the financial burden on cancer patients, making treatments more affordable and accessible.
- 5. Cancer Profile in India:

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- $\circ$   $\,$   $\,$  The number of cancer cases is increasing, with 14.6 lakh new cases detected in 2022.
- Cancer incidence is higher among women (103.6 per 100,000) compared to men (94.1 per 100,000).
- Common cancers include lung, mouth, prostate, tongue, and stomach for men, and breast, cervix, ovary, uterus, and lung for women.
- 6. **Importance of the Decision:** The reduced costs will benefit patients needing these advanced therapies, particularly for lung and breast cancers, which are among the most common in India.

## From Greek Revolution to deCoubertin:how modern Olympics were born -Indian Express Explained

## History

## **Easy Explanation**

The modern Olympic Games were inaugurated in Athens, Greece, on April 6, 1896, spearheaded by French baron Pierre de Coubertin. However, the concept dates back to the 1830s in Greece, post its revolution (1821-1829) which sought a national revival. Poet Panagiotis Soutsos and philanthropist Evangelos Zappas were instrumental in advocating for the revival of the ancient Greek Olympics. Zappas funded the first modern iterations of the Games in 1859, 1870, 1875, and 1888, held in Athens' Panathenaic Stadium. Simultaneously, Dr. William Penny Brookes from Wenlock, England, was inspired by these Greek efforts and organized local Olympic games starting in 1859 and proposed international competitions. De Coubertin, inspired by Brookes, proposed and organized the first international Olympic Games, held in Athens in 1896. This event marked the birth of the modern Olympics, attracting athletes from 14 nations and becoming a significant international sports competition.

## Key Takeaways

- 1. **Origin and Revival:** The idea of modern Olympics originated in Greece during the 1830s post-revolution period, aiming for cultural revival.
- 2. Key Figures:
  - Panagiotis Soutsos: Proposed the revival of the ancient Olympics.
  - **Evangelos Zappas:** Funded early modern Olympic games in Athens.
  - **Dr. William Penny Brookes:** Organized local Olympic games in England and proposed international competitions.
  - **Pierre de Coubertin:** Recognized as the father of the modern Olympics, organized the 1896 Games.
- 3. First Modern Olympics: Held in Athens in 1896, organized by de Coubertin, featured athletes from 14 nations.
- 4. Legacy and Impact: The Athens Olympics marked the beginning of international sports competitions on a grand scale, laying the foundation for future Olympic Games.

## A new push in the Bay of Bengal-The Hindu Editorial

## International relations

## Easy Explanation

India hosted the 2nd BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) Foreign Ministers' Retreat in New Delhi, focusing on enhancing cooperation in security, connectivity, trade, and investment within the Bay of Bengal region. This retreat was a precursor to the sixth summit meeting in September, where leaders will sign the BIMSTEC Agreement on Maritime Transport Cooperation. BIMSTEC includes five South Asian and two Southeast Asian countries and aims to strengthen ties and regional stability, especially in light of China's growing influence. The retreat was divided into two parts: assessing current cooperation and discussing each country's expectations for the summit. Key discussions included proposals for centers of excellence, support for health initiatives, and cooperation in various sectors like trade, cybersecurity, and tourism. The retreat also highlighted bilateral merits, with India addressing concerns with Myanmar and Bangladesh. The event marked a decade of India's Act East and Neighbourhood First policies, emphasizing collaborative growth and regional well-being.

## Key Takeaways

- 1. **Event Overview:** The 2nd BIMSTEC Foreign Ministers' Retreat focused on security, connectivity, trade, and investment in the Bay of Bengal region.
- 2. **Upcoming Summit:** The retreat prepared for the sixth summit meeting in September, where the BIMSTEC Agreement on Maritime Transport Cooperation will be signed.
- 3. **BIMSTEC Membership:** Consists of five South Asian and two Southeast Asian countries, crucial for India's regional strategy and countering China's influence.
- 4. Discussion Highlights:

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- Proposals for centers of excellence in agriculture, disaster management, and maritime transport.
- India's support for cancer research and issuance of e-visas for patients.
- Calls for cooperation in the Blue Economy, banning fishing during breeding season, and promoting tourism and cultural exchanges.
- 5. **Bilateral Talks:** India addressed issues with Myanmar (displaced persons, narcotics, and arms) and Bangladesh (supply of essentials and the Teesta project).
- 6. **Policy Milestone:** The retreat marked a decade of India's Act East and Neighbourhood First policies, reinforcing the commitment to regional cooperation and growth.
- 7. **Future Outlook:** The intent of member states to pursue a bold regional vision was evident, with proposals to be discussed at the upcoming summit.

Science and technology

## Easy Explanation

India's expansive school education system, with millions of schools, teachers, and students, utilizes platforms like UDISE+ and APAAR to manage and optimize education delivery. UDISE+ collects real-time data on school infrastructure, teacher and student information, and academic performance, while APAAR assigns unique identifiers to students, consolidating their academic records. However, the integration of these systems and the involvement of third parties like DigiLocker and ed-tech companies raise concerns about data privacy, especially under the new Digital Personal Data Protection (DPDP) Act, 2023. Ensuring compliance with the DPDP Act, particularly regarding parental consent and the specific use of collected data, is essential. The right to privacy, as established by the Supreme Court, necessitates that state actions involving personal data meet legitimate interest, necessity, proportionality, and legal backing. There is a pressing need for clear protocols, standard operating procedures, and a robust grievance redressal mechanism to manage children's personal data securely and lawfully.

## Key Takeaways

- 1. Educational Data Management: UDISE+ and APAAR platforms collect and manage extensive data on schools, teachers, and students to improve educational outcomes and resource allocation.
- 2. **Privacy Concerns:** The integration of UDISE+ and APAAR, involving third parties like DigiLocker and ed-tech companies, raises data privacy issues, especially under the DPDP Act, 2023.
- 3. **Consent and Compliance:** Ensuring verifiable parental consent and compliance with the DPDP Act's requirements for specific and legitimate data use is crucial.
- 4. **Supreme Court's Privacy Test:** Any state action involving personal data must meet the Supreme Court's three-part test of legitimate interest, necessity and proportionality, and legal backing.
- 5. **Need for Protocols:** Clear protocols and standard operating procedures are needed to manage children's data securely and lawfully, including proper grievance redressal mechanisms.
- 6. **Stakeholder Roles:** Identification of data fiduciaries, processors, and principals is necessary for liability fixation and data management.
- 7. **Governance Framework:** An overarching governance framework is essential to ensure data authenticity, legal obligations, and conscientious data handling by all actors involved.

## 28th July 2024

## Kerala breaks free from centralised testing, sequencing

In Kerala, there has been a significant shift in handling virus outbreaks such as Nipah by decentralizing the testing and sequencing processes. Historically, samples were sent to the National Institute of Virology (NIV) in Pune, which could take about 24 hours for results. However, with the recent outbreak on July 20, Kerala utilized the Institute of Advanced Virology (IAV) in Thiruvananthapuram which provided results in just four hours, allowing for quicker public health responses.

The IAV, operational since 2022, is equipped to handle various viruses and has introduced faster diagnostics and real-time response capabilities within the state. This facility has a BSL-3 level biosafety and can perform extensive testing on each sample, leading to rapid identification of pathogens. Moreover, the IAV has begun partial genome sequencing of the Nipah virus, enhancing the understanding of its molecular epidemiology.

## Key Takeaways

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- 1. **Decentralization of Testing**: Kerala has moved to a more localized testing approach which has significantly sped up the response times during virus outbreaks. This approach was crucial during the latest Nipah virus outbreak, enabling immediate action even before confirmation from NIV.
- 2. Advanced Testing Capabilities: The Institute of Advanced Virology in Kerala is a state-of-the-art facility capable of testing and sequencing various viruses, which has positioned it as a critical player in rapid public health responses.

- 3. **Impact of Rapid Testing**: Quick testing capabilities have allowed for faster isolation, contact tracing, and containment measures, which are vital during outbreaks of highly infectious diseases like Nipah.
- 4. **Public Health Significance**: The ability to conduct and analyze genome sequencing locally is instrumental for tracking virus evolution and spreading patterns, which is crucial for effective public health strategies and interventions.
- 5. **Challenges and Comparison**: The article also touches on challenges faced by other states like Gujarat, reflecting on the potential benefits of having similar decentralized capabilities to address virus outbreaks more effectively.

Overall, the shift towards decentralized testing in Kerala represents a significant advancement in managing public health crises, providing a model that could potentially be replicated in other regions for more efficient disease control and prevention.

#### (CREDIT-The Hindu)

Towards quicker testing and genome sequencing With many States reporting outbreaks of emerging pathogens, decentralised testing and genome sequencing have become important In all the four Nipah virus outbreaks in Kerala - 2018, 2019, 2021 and 2023 samples were sent only to NIV Pune for testing In the latest outbreak, samples were sent to NIV Pune and the Institute of Advanced Virology (IAV) in Thiruvananthapuram for testing ne death in the latest Ninah ou On July 20, the Institute of Advanced Virology, which got from the Thiruvananthapuramsequencing of the Nipah virus the sample at 5 am, tested based lab genome and found the virus the sample in four hours. to be similar to previously Result from NIV was received in The Institute of Advanced reported strains from the region the evening Virology is equipped to test 83 viruses, including Data of the partial genome Even before Nipah was Nipah, Zika, Chandrapura virus sequence will be posted in a confirmed by NIV, Kerala swung and influenza public database as soon as the into action to prevent virus annotation is completed spread based on the result AV undertook partial

This infographic focuses on the advancements in viral testing and genome sequencing in Kerala, particularly highlighting the state's response to the Nipah virus outbreaks. Here's a simple explanation:

1. **Historical Context**: In previous Nipah outbreaks in Kerala (2018, 2019, 2021, and 2023), samples were only sent to the National Institute of Virology (NIV) in Pune for testing.

2. **Change in Protocol**: In the latest outbreak, samples were sent not only to NIV but also to the Institute of Advanced Virology (IAV) in Thiruvananthapuram, allowing for faster testing—results were available in just four hours.

3. **Immediate Action**: Even before the NIV confirmed the Nipah virus, Kerala began implementing containment measures based on the quick test results

from IAV.

- 4. **IAV Capabilities**: The IAV has the equipment and expertise to test for multiple viruses, including Nipah, Zika, and Chandrapura virus. It recently started partial genome sequencing of the Nipah virus to better understand the virus's structure.
- 5. Future Plans: The partial genome sequence data of the Nipah virus will be shared publicly once its annotation is complete.

The infographic emphasizes the importance of local and rapid testing facilities in responding swiftly to virus outbreaks, which can significantly affect public health responses.

Are enough formal jobs being created?-The Hindu FAQ

#### Economy

#### **Easy Explanation**

The Union Budget for 2024-25 has placed a strong emphasis on employment, introducing several initiatives aimed at enhancing job creation and addressing the rising unemployment that has become a major concern among voters. Key measures include wage subsidies for hiring new employees, upgrading skills through Industrial Training Institutes, and providing internships to youth with top companies. Despite these efforts, there is skepticism regarding their effectiveness due to the conditions attached and the underlying economic issues such as low demand and insufficient private investment that remain unaddressed. Economists argue that while these schemes may reduce hiring costs, they do not tackle the core problem of stimulating overall economic activity, suggesting that more focus should be on infusing money into micro, small, and medium enterprises (MSMEs) and increasing wages to boost consumption and demand.

I Clear your doubts now.

- 1. **Government's Approach to Employment**: The government has introduced schemes to promote hiring by subsidizing wages and EPFO contributions, aiming to formalize the workforce and increase the number of formal employment opportunities.
- 2. **Economic Context**: Despite an official unemployment rate of 3.2%, there is significant underemployment and informal employment, reflecting a disconnect between official statistics and ground realities. The workforce largely remains informal, with many not having access to basic social security benefits.
- 3. Effectiveness of the Schemes: Critics and economists argue that while the incentives may reduce hiring costs, they don't address the core issue of low demand in the economy. The conditions and bureaucratic hurdles within these schemes may also hinder their effectiveness.
- 4. **Structural Challenges**: The real challenge in job creation is attributed to insufficient demand and lack of private investment. Lower consumption levels and stagnant wages contribute to this scenario, undermining the potential impact of fiscal incentives on employment.
- 5. Focus on MSMEs: Experts suggest that more attention should be given to the micro, small, and medium enterprise (MSME) sector, which is more labor-intensive and could have a significant multiplier effect on the economy. Suggestions include raising wages and infusing capital into MSMEs to stimulate economic activity and demand.
- 6. **Need for a Broader Strategy**: Beyond fiscal incentives for hiring, there is a call for broader measures to increase consumption and demand, such as enhancing wages in existing government schemes like MGNREGA and introducing similar schemes for urban areas to directly stimulate the economy.

The schemes introduced in the budget, while aimed at addressing unemployment, might be insufficient alone without a broader strategy to boost overall economic demand and investment.

What's the Budget push for infrastructure?

The 2024-25 Budget, presented by Finance Minister Nirmala Sitharaman, allocated ₹11 lakh crore for capital expenditure, targeting 3.4% of GDP, with a focus on infrastructure development across various sectors. The government has allocated significant funds to transport, including roads and railways, as well as slight increases in power sector spending. A key component is the ₹1.5 lakh crore in interest-free loans provided to states to encourage infrastructure investment.

## Key Sectors in Focus:

- 1. **Transport**: Major allocations include ₹2.78 lakh crore for roads and ₹2.55 lakh crore for railways, emphasizing improvements and expansions.
- 2. Power and Energy: Marginal increases in allocations, signifying a continued investment in these crucial sectors.
- 3. **Civil Aviation and Shipping**: Funding for these areas has either declined or stagnated, suggesting a need for reassessment or new strategies.

## Challenges and Bottlenecks:

- **Railways**: Issues like skewed freight movement favoring roads, uncertainty in rake supply, and infrastructure delays impact efficiency.
- **Roads**: While the Bharatmala project has expanded highway networks, the focus needs to shift towards maintenance and safety post-construction.
- Shipping and Airports: Under the Sagarmala program, while significant projects are underway, there is a need for more comprehensive development across numerous ports. Privatization efforts are ongoing for airports to enhance efficiency and infrastructure.

## Private Sector Reluctance:

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The private sector has been hesitant to invest in infrastructure due to:

- Market Risks: Delays in project completions impact returns, discouraging investment.
- **Financial Uncertainty**: The profitability and viability of new agreements and projects remain untested, posing significant risks to investors.



## Key Takeaways from the 2024-25 Budget on Infrastructure:

- 1. Significant Budget Allocation: The government has allocated ₹11 lakh crore for capital expenditure, focusing heavily on infrastructure development, which is about 3.4% of GDP.
- 2. **Priority Sectors**: Significant investments are directed towards the transport sector, including roads and railways, with substantial funds also set aside for the power sector.
- 3. State Incentives: States are encouraged to invest in infrastructure through ₹1.5 lakh crore provided as long-term interestfree loans, aiming to spur regional development.
- 4. **Challenges in Implementation**: Issues such as delays in project completion and operational inefficiencies remain significant hurdles, particularly affecting railways and road sectors.
- 5. **Private Sector Hesitancy**: The private sector's reluctance is largely due to financial risks associated with delays and uncertainties in profitability, highlighting a need for better risk management and clearer policies to attract private investments.
- 6. **Future Focus Areas**: Beyond just creating assets, there is a growing need to focus on asset management, maintenance, and safety to ensure sustainable infrastructure development.

India is considering a significant transition towards natural farming, aiming to engage one crore farmers in chemical-free agricultural practices. This initiative is part of the 2024-25 Union Budget, which plans for extensive support through scientific institutions and local governance. Natural farming avoids synthetic chemicals and emphasizes traditional methods to enhance soil fertility and environmental health. However, this approach raises concerns regarding food security due to potentially lower crop yields, especially for staple foods like wheat and rice.

Studies offer mixed results: some regional assessments suggest positive outcomes, while broader research indicates substantial yield reductions compared to conventional farming. The contrasting experiences highlight the need for extensive evaluation and gradual implementation. The cautionary tale of Sri Lanka, which faced severe agricultural setbacks after abruptly transitioning to organic farming, underscores the risks of rapid policy shifts without adequate groundwork. The situation advocates for a balanced and scientifically backed approach to integrating natural farming into India's agricultural framework.

## Key Takeaways:

- 1. Major Policy Initiative: India's move towards natural farming is highlighted in the 2024-25 Union Budget, aiming to onboard one crore farmers into chemical-free practices with the support of ₹4,645.69 crore over six years.
- 2. **Concerns Over Yield**: Transitioning to natural farming for staple crops like wheat and rice could significantly reduce yields, potentially feeding only one-third of the population, thus posing a risk to food security.
- 3. **Mixed Research Outcomes**: Studies yield conflicting results on the viability of natural farming. While some local studies show beneficial outcomes, broader research by national institutions like ICAR indicates a drastic drop in yields.
- 4. **Lessons from Sri Lanka**: Sri Lanka's shift to completely organic farming, which led to a crisis in crop production and national unrest, serves as a cautionary example of the potential risks involved in rapid agricultural policy changes.
- 5. **Recommendation for Cautious Implementation**: Experts suggest a cautious, evidence-based approach to adopting natural farming, recommending extensive scientific validation and pilot projects before a wide-scale implementation to avoid negative impacts on the nation's food supply.

These takeaways underscore the complexity and potential risks of transitioning to natural farming in India, emphasizing the need for careful planning and robust scientific evidence to support policy decisions.

## Should India focus on natural farming? -TH FAQ

-Economy Agri

#### Easy Explanation:

The Union Budget for 2024-25 highlighted a plan to introduce one crore farmers to natural farming within the next two years, supported by certification and branding. Natural farming avoids chemical fertilizers and pesticides, focusing instead on traditional practices like using cow dung and urine, and increasing organic matter in the soil. The government aims to shift farmers from

chemical-based inputs to natural farming, but experts have concerns about its feasibility on a large scale in a populous country like India.

Natural farming can improve soil fertility and reduce greenhouse gas emissions, but its effectiveness on a national scale remains unproven. Studies have shown mixed results: some indicate improved crop yields and farmer incomes, while others report significant yield declines. The lessons from Sri Lanka, where a sudden shift to organic farming led to severe food shortages and economic turmoil, highlight the need for thorough research before implementing such large-scale changes in India.

#### Key Takeaways:

**Government Initiative:** The Union Budget 2024-25 announced plans to introduce one crore farmers to natural farming within two years, supported by scientific institutions and gram panchayats.

**Natural Farming Practices:** Natural farming avoids chemical fertilizers and pesticides, instead using traditional practices like cow dung-urine formulations and organic matter to improve soil fertility and reduce environmental impact.

**Challenges and Concerns:** Experts question the feasibility of a large-scale shift to natural farming in India, citing potential risks to food security due to lower yields. Studies show mixed results, with some reporting improved yields and incomes, while others indicate significant yield declines.

**Lessons from Sri Lanka:** Sri Lanka's rapid shift to organic farming led to severe food shortages and economic turmoil, highlighting the need for careful planning and extensive research before large-scale implementation in India.

**Way Forward:** Noted economist M.S. Sidhu suggests that while natural farming may be beneficial locally, adopting it on a large scale without thorough scientific testing of crop yields could risk national food security.

What's the Budget push for Infrastructure?- TH FAQ

#### -Economy

#### Easy Explanation:

In the Union Budget for 2024-25, Finance Minister Nirmala Sitharaman announced a significant allocation of ₹11 lakh crore for capital expenditure, which is about 3.4% of India's GDP. This funding is aimed at boosting infrastructure development across the country. Additionally, ₹1.5 lakh crore in long-term interest-free loans will be provided to states to encourage their infrastructure spending.

The government has maintained its focus on infrastructure, with 13.9% of the total budget dedicated to this sector. The transport sector, which includes roads, railways, and civil aviation, received a substantial portion of this funding. The Ministry of Roads, Transport and Highways was allocated ₹2.78 lakh crore, and the Railways received a record ₹2.55 lakh crore. However, the allocation for civil aviation saw a decline, with ₹2,357 crore set aside.

The Economic Survey of 2024 highlighted that the length of national highways has grown significantly from 2014 to 2024. The Bharatmala Pariyojana has expanded the national highway network, increasing high-speed corridors and four-lane roads. Despite this progress, experts emphasize the need for better maintenance and safety protocols for these projects.

For the Railways, the increased capital expenditure aims to modernize and expand the network. However, challenges such as improving freight movement efficiency and addressing delays in infrastructure development remain. The shipping sector, under the Sagarmala programme, has completed several projects but needs a more balanced development of ports. In aviation, the government plans to privatize more airports to enhance efficiency.

The private sector's participation in infrastructure projects is crucial. Between FY2019 and 2023, the Centre and State governments contributed significantly to infrastructure investments, but the private sector has been hesitant due to market risks and project delays affecting returns on investment. Improving regulatory frameworks and risk mitigation strategies is essential to encourage private investment.

#### Key Takeaways:

**Budget Allocation:** 

- ₹11 lakh crore for capital expenditure (3.4% of GDP).
- ₹1.5 lakh crore in long-term interest-free loans to states.

#### Sector Focus:

- Major funding for transport, including roads and railways.
- Railways received a record allocation of ₹2.55 lakh crore.
- Decline in allocation for civil aviation, with ₹2,357 crore.

#### Progress and Challenges:

- Significant expansion of national highways under the Bharatmala Pariyojana.
- Emphasis on better maintenance and safety for infrastructure projects.
- Increased capital expenditure for Railways to modernize and expand the network.
- Balanced development of ports needed under the Sagarmala programme.
- Plan to privatize more airports for better efficiency.

#### Private Investment:

- Centre and State governments have been major contributors to infrastructure investments.
- Need to encourage private sector participation through improved regulatory frameworks and risk mitigation strategies.

## Butterflies accumulate enough static electricity to attract pollen - TH Science

#### -Environment

## **Easy Explanation:**

A recent study found that butterflies and moths collect static electricity while flying, which helps them attract pollen from flowers across air gaps of several millimeters or centimeters. This increases their efficiency as pollinators. The amount of static electricity varies among different species and is influenced by their ecology, such as their environment and whether they fly during the day or night. This discovery suggests that static electricity accumulation is an adaptive trait that can evolve through natural selection.

Researchers tested 269 butterflies and moths from 11 species across five continents and found that all carried a net electrostatic charge, enabling them to attract pollen without direct contact. This shows that despite their lower wingbeat frequency compared to other insects, butterflies and moths can still accumulate significant electrostatic charge for pollination.

## Key Takeaways:

## Static Electricity in Butterflies and Moths:

- Butterflies and moths collect static electricity while flying, which helps attract pollen across air gaps.
- This ability enhances their effectiveness as pollinators.

## Variations Among Species:

- The amount of static electricity varies among different species, influenced by their environment and habits.
- This trait can be adaptive and subject to natural selection.

## **Testing and Findings:**

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• Researchers studied 269 butterflies and moths from 11 species across five continents.

- All species carried a net electrostatic charge, sufficient for contactless pollination.
- Despite lower wingbeat frequency, they can accumulate significant electrostatic charge.

## Long-term study finds COVID-19 increases diabetes risk- TH Science

Science Tech

## Easy Explanation:

A recent study published in The Lancet Diabetes and Endocrinology has found a link between COVID-19 and an increased risk of developing diabetes. Using data from millions of people in England, researchers observed a four-fold increase in the risk of developing diabetes in the first month after a COVID-19 infection. This risk remained elevated in two-thirds of the individuals even in the second year post-infection.

Initially, doctors worldwide noticed a high occurrence of diabetes in previously healthy individuals after COVID-19, often requiring high doses of insulin. However, it was unclear if this was due to the disease or other factors like steroid use or undiagnosed diabetes that became apparent due to increased medical attention during the pandemic.

The new study also looked at health records before and after the rollout of COVID-19 vaccines, showing that vaccinated individuals, who experienced less severe COVID-19, had a lower risk of developing diabetes. This indicates that the severity of COVID-19 is linked to an increased diabetes risk.

Two main mechanisms are believed to contribute to this increased risk: the virus may damage insulin-producing cells in the pancreas, and the widespread inflammation caused by COVID-19 may lead to insulin resistance.

This study adds to the growing evidence connecting chronic diseases and viral infections, helping us understand how COVID-19 has increased the burden of chronic diseases, including diabetes, among survivors.

## Key Takeaways:

#### COVID-19 and Diabetes Link:

- A study found a four-fold increase in the risk of developing diabetes in the first month after a COVID-19 infection.
- The risk remained elevated in two-thirds of the individuals in the second year post-infection.

#### **Initial Observations:**

• Doctors initially noted high diabetes occurrence in previously healthy individuals after COVID-19, but it was unclear if it was due to the disease or other factors like steroid use or undiagnosed diabetes.

#### **Study Findings:**

- The study also examined health records before and after the vaccine rollout.
- Vaccinated individuals had a lower risk of developing diabetes, indicating a link between COVID-19 severity and diabetes risk.
- Two mechanisms: damage to insulin-producing cells in the pancreas and inflammation leading to insulin resistance.

#### Importance of the Study:

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- The study provides evidence of the increased burden of chronic diseases, including diabetes, among COVID-19 survivors.
- It helps understand the various mechanisms involved in the development of diabetes post-COVID-19.

| Clear your doubts now.

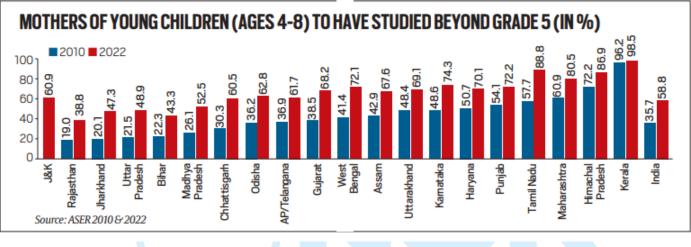
## 29th July 2024

## How educated mothers of young kids can be asset for NIPUN-Indian Express Explained

#### Sociology

#### **Easy Explanation**

The National Education Policy (NEP) 2020 aims to ensure children acquire foundational literacy and numeracy skills by Grade 3. To achieve this, the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat Mission was launched in 2021, focusing on teacher training and developing specialized teaching materials. Alongside these in -school efforts, rising education levels among mothers of young children (ages 4-8) present a unique opportunity. Data shows a significant increase in educated mothers, with many having completed schooling beyond Grade 5 and even Grade 10 in some states. However, female labor force participation remains low, meaning many educated mothers are available to support their children's education. The pandemic has already increased parental involvement in education, and leveraging educated mothers can further strengthen children's learning journeys. Encouraging active participation from mothers, alongside teachers, is essential for the success of the NIPUN Bharat Mission, ensuring that young children develop the necessary literacy and numeracy skills to thrive.



## (Credit-Indian Express)

#### Key Takeaways

NEP 2020 Goal: The policy aims for children to achieve foundational literacy and numeracy skills by Grade 3.

**NIPUN Bharat Mission**: Launched in 2021, focusing on teacher training and specialized teaching materials to support NEP goals. **Increase in Educated Mothers**: A significant rise in the education levels of mothers with children aged 4-8, with many completing schooling beyond Grade 5 and Grade 10 in various states.

Low Female LFPR: Despite higher education levels, female labor force participation remains low, leaving many educated mothers available to support their children's education.

**Opportunity for Leverage**: Educated mothers are uniquely positioned to assist in their children's learning journey, complementing in-school efforts.

**Pandemic Influence**: The pandemic increased parental involvement in education, providing a foundation for continued engagement. **Encouraging Participation**: Active participation from mothers, alongside teachers, is crucial for the success of the NIPUN Bharat Mission, ensuring young children develop essential literacy and numeracy skills.

## GAZA'S TELLUMM AMER NOW A WORLD HERITAGE SITE:WHY THIS MATTERS-Indian Express Explained

#### Art and Culture

#### **Easy Explanation**

The World Heritage Committee (WHC) has designated Tell Umm Amer, also known as the 'Monastery of Saint Hilarion,' as a UNESCO World Heritage Site and added it to the List of World Heritage in Danger during its 46th session in New Delhi. Located in the Gaza Strip, this fourth-century Christian monastery, founded by Hilarion the Great, is a significant historical site featuring ruins of churches, bath complexes, mosaics, and a crypt spanning over four centuries. The monastery, one of the largest in the Middle East, was uncovered by archaeologists in 1999 after being abandoned following a seventh-century earthquake. The ongoing conflict in

Gaza has damaged many cultural and historical sites, including Tell Umm Amer. The inclusion of this site in UNESCO's lists highlights the urgent need for protection and preservation. This designation brings international attention, along with technical and financial assistance, to safeguard and rehabilitate the site. The World Heritage Convention of 1972 mandates member states, including Israel, to protect and preserve such sites, prohibiting actions that could harm them.

## Key Takeaways

- 1. WHC Decision: The World Heritage Committee has included Tell Umm Amer in both the UNESCO World Heritage Site List and the List of World Heritage in Danger, emphasizing its global significance.
- 2. **Historical Significance**: Tell Umm Amer, also known as the 'Monastery of Saint Hilarion,' is a fourth-century Christian monastery founded by Hilarion the Great, who is considered the father of Palestinian monasticism.
- 3. Archaeological Importance: The site contains extensive ruins, including five successive churches, bath complexes, geometric mosaics, and an expansive crypt, making it one of the largest monasteries in the Middle East.
- 4. **Conflict Impact**: The Gaza Strip, where Tell Umm Amer is located, has been heavily affected by ongoing conflicts, leading to significant damage to numerous cultural and historical sites, including this monastery.
- 5. **UNESCO's Role**: The World Heritage Convention of 1972, which Israel is a party to, obligates member states to identify, protect, and preserve World Heritage sites, prohibiting actions that could harm these sites directly or indirectly.
- 6. **Protection and Preservation**: Being listed as a World Heritage site in danger triggers enhanced international technical and financial assistance mechanisms aimed at guaranteeing the protection and, if necessary, the rehabilitation of the property.
- 7. **Global Attention**: The inclusion of Tell Umm Amer in UNESCO's lists brings critical international attention to the need for global efforts to safeguard and preserve cultural heritage sites in conflict zones, ensuring they are protected for future generations.

## Right to be forgotten-Indian Express Explained

## Polity Easy Explanation

India currently lacks a statutory framework for the "right to be forgotten," but the Supreme Court's recent decision to hear a case could define its contours. This right allows individuals to remove their digital footprint from internet searches when it infringes on their privacy. The European Union's Court of Justice recognized this right in 2014 in the "Google Spain case," influencing global discussions on informational self-determination. In India, the right to be forgotten has been mentioned in the 2017 Justice K.S. Puttaswamy v. Union of India judgment, which recognized the right to privacy as a fundamental right. Various high courts in India have given conflicting rulings on this matter. The upcoming Supreme Court hearing, stemming from a Madras High Court case about removing a judgment from a legal portal, will likely address whether the right to be forgotten is fundamental and its relation to other constitutional rights. This decision could lead to clearer guidelines on balancing privacy rights with freedom of expression and public interest.

## Key Takeaways

- 1. **No Statutory Framework**: India does not have a legal statute explicitly outlining the right to be forgotten, unlike the European Union's established right to erasure.
- 2. **Supreme Court Case**: The Supreme Court of India is set to hear a case that could define the right to be forgotten in India, focusing on whether it is a fundamental right and its relationship with other constitutional rights.
- 3. **European Influence**: The right to be forgotten was affirmed by the European Union's Court of Justice in the 2014 "Google Spain case," recognizing individuals' control over their personal data.
- 4. **Justice Puttaswamy Judgment**: The 2017 Supreme Court ruling in Justice K.S. Puttaswamy v. Union of India recognized the right to privacy as fundamental and mentioned the right to be forgotten.
- 5. **Conflicting High Court Rulings**: Indian high courts have issued varied decisions on the right to be forgotten, with some allowing the removal of information and others rejecting such requests.
- 6. **Madras High Court Case**: The specific case before the Supreme Court involves a Madras High Court ruling directing the removal of a 2014 judgment from a legal portal, impacting the petitioner's chances of obtaining Australian citizenship.
- 7. **Potential Impact**: The Supreme Court's decision could provide clearer guidelines on how the right to be forgotten can be balanced with public interest and freedom of expression, potentially leading to new legal standards in India.

#### **Easy Explanation**

The monsoon season, which spans from June to September, has shown significant variability in rainfall distribution across India. While the overall rainfall has been satisfactory, certain regions have experienced deficits. Central and peninsular regions have received normal to excess rainfall, largely due to the monsoon trough's southward position, resulting in heavy rainfall in these areas. Conversely, northwest, extreme north, east, and northeast India have faced rainfall deficits. The first half of the monsoon season saw an 11% below-normal rainfall in June, but July witnessed a significant recovery, with a 41% surplus rainfall from July 19-25. The Indian Meteorological Department (IMD) data indicates a mix of rainfall performance across different states. The uneven distribution poses challenges, particularly for Kharif crops, as excessive rainfall in some areas has forced farmers to resow their crops.

#### Key Takeaways

- 1. **Overall Rainfall**: Despite a good overall monsoon, there have been significant regional disparities in rainfall distribution.
- 2. **Regional Variations**: Central and peninsular regions have seen normal to excess rainfall, while northwest, extreme north, east, and northeast India face deficits.
- 3. **Monsoon Trough**: The position of the monsoon trough has contributed to the surplus rainfall in central and peninsular regions but left northern areas dry.
- 4. **Temporal Changes**: June ended with 11% below-normal rainfall, but July saw a substantial recovery with a 41% surplus between July 19-25.
- 5. **Impact on Agriculture**: Skewed rainfall distribution has affected Kharif crops, with excessive rainfall in some regions leading to the resowing of crops.
- 6. Future Forecast: IMD forecasts indicate limited rainfall for northwest and north India in early August.
- 7. **Rain-bearing Systems**: Fewer rain-bearing weather systems have formed, and those that did often did not reach the northern regions, exacerbating the dry conditions there.

## On reservations and the OBC creamy layer-The Hindu Text and Context

#### Polity

## Easy Explanation

The implementation of the Other Backward Class (OBC) reservation and the criteria for excluding the 'creamy layer' have been subjects of debate and controversy. The Mandal Commission recommended 27% reservation for OBCs in central government employment, which was implemented in 1990. The Supreme Court upheld this in the Indra Sawhney case (1992) but introduced the concept of the 'creamy layer' to exclude economically advanced OBCs from reservation benefits. Despite this, issues such as fraudulent acquisition of non-creamy layer (NCL) certificates and the concentration of reservation benefits among a small segment of OBCs persist. There is also a significant underrepresentation in SC and ST reservations. Ensuring equitable distribution of reservation benefits and plugging loopholes in the certification processes are necessary for achieving social justice.

#### Key Takeaways

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- 1. Mandal Commission Recommendations: The Commission recommended 27% reservation for OBCs in central government jobs, implemented in 1990.
- 2. Creamy Layer Exclusion: The Supreme Court's Indra Sawhney judgment upheld OBC reservations but excluded the 'creamy layer'. Criteria for exclusion include parental income above ₹8 lakh per annum, high-ranking government service, and managerial positions in PSUs.
- 3. **Reservation History**: Articles 15 and 16 of the Constitution allow special provisions for socially and educationally backward classes, SCs, and STs. Current reservations are 15% for SCs, 7.5% for STs, and 27% for OBCs. A 10% reservation for EWS was added in 2019.
- 4. **Issues with Certification**: There are allegations of fraudulent acquisition of NCL and EWS certificates and misuse of disability certificates to gain reservation benefits.

- 5. **Concentration of Benefits**: The Rohini Commission found that 97% of reserved jobs and seats are taken by 25% of OBC castes, while many communities have zero representation. Similar issues exist within SC and ST reservations.
- 6. **Unfilled Reserved Seats**: Government data indicates 40-50% of seats reserved for OBC, SC, and ST in central government remain unfilled.
- 7. **Need for Sub-categorisation**: To address underrepresentation, sub-categorisation within reservations is essential. Discussion on creamy layer exclusion for SC and ST children of high-ranking officials is also suggested.
- 8. **Way Forward**: Strengthening the scrutiny process for NCL, EWS, and disability certificates, ensuring no backlog in filling reserved vacancies, and initiating discussions on sensitive issues are crucial steps towards equitable distribution of reservation benefits.

## What is South Africa's new law on climate change?-The Hindu Text and Context

## International relations

## **Easy Explanation**

South Africa's President, Cyril Ramaphosa, has signed a Climate Change Bill into law, which mandates emission reductions from large fossil-fuel-heavy industries and requires climate-adaptation plans from local areas. This law aims to help South Africa meet its commitments under the Paris Agreement. South Africa, heavily reliant on coal and a significant greenhouse gas emitter, has made strides in reducing its emissions and has set ambitious targets for future reductions. The country aims for a "just transition" to a sustainable economy. In contrast, India does not have a comprehensive climate change law but incorporates climate-related provisions in various environmental acts. The Supreme Court of India has highlighted the need for a dedicated climate change legislation to ensure citizens' rights against the adverse effects of climate change.

## Key Takeaways

- 1. South Africa's Climate Change Bill: Signed into law by President Cyril Ramaphosa, the bill mandates curbs on emissions from major industries and requires local climate-adaptation plans.
- 2. Significance of the Law: South Africa, one of the top 15 greenhouse gas emitters globally and heavily dependent on coal for electricity, aims to meet its Paris Agreement commitments. The law represents a crucial step in reducing emissions and transitioning to sustainable practices.
- 3. Emission Reduction Targets: South Africa's updated Nationally Determined Contributions (NDC) aim for a 31% reduction in greenhouse gas emissions by 2025, with further targets set for 2030 and net zero emissions by 2050.
- 4. **Just Transition Framework**: The Presidential Climate Commission's Just Transition Framework seeks to guide policy-making for a sustainable shift away from fossil fuels, focusing on key sectors like agriculture, forestry, energy, and waste.
- 5. Comparison with India: India lacks a comprehensive climate change law but integrates climate-related provisions in various acts, such as the Environmental Protection Act and Energy Conservation Act. Despite progress, including a significant reduction in energy emission intensity, the Supreme Court has called for a dedicated climate change law to protect citizens' rights.
- 6. **Need for Comprehensive Legislation in India**: India's Supreme Court emphasized the necessity for an omnibus climate change law to link climate impact with citizens' constitutional rights to life, liberty, and equality. This would enhance the country's ability to address climate change systematically.
- 7. India's Climate Commitments: India has committed to reducing emission intensity by 45% by 2030 and sourcing 50% of its electricity from non-fossil fuel resources by the same year.

## What are the various efforts being taken to mitigate caller ID spoofing?-The Hindu Text and Context

# Science and technology Easy Explanation

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Caller ID spoofing, a technique used to falsify the phone number appearing on a call recipient's display, is a tool used by enthusiasts, telemarketers, and fraudsters. Despite being legal in many jurisdictions, it poses significant challenges, including financial losses and difficulties in crime investigation. Efforts to mitigate caller ID spoofing include international and national initiatives, such as Public Key Infrastructure (PKI)-based authentication proposed by the International Telecommunications Union (ITU) and India's Telecom Regulatory Authority's (TRAI) recommendation for a Calling Name Presentation (CNAP) system. However, the effectiveness and implementation of these measures remain uncertain, and more comprehensive action is required to address the issue.



## 1. Definition and Use of Caller ID Spoofing:

- Caller ID spoofing falsifies the originating number displayed on a recipient's phone.
- Used by fraudsters for scams and social engineering attacks.
- Legal in many places, with several companies offering spoofing services.

#### 2. Impact of Caller ID Spoofing:

- $\circ$  ~ Financial losses for telecommunications providers and defrauded users.
- Challenges for law enforcement in investigating spoofed calls.

#### 3. International Efforts:

- o ITU's 2021 technical report proposes using PKI-based authentication to counter spoofing.
- India could implement these recommendations for effective mitigation.

#### 4. National Efforts in India:

- TRAI's CNAP system aims to show caller names based on KYC documents, similar to TrueCaller.
- Department of Telecommunications (DoT) plans to pilot the CNAP project.
- The DoT has developed a system to identify and block international calls with manipulated caller IDs.

#### 5. Challenges and Government Action:

- Despite measures, caller ID spoofing remains unresolved.
- Telecommunications Act, 2023 empowers the government to control telecom networks during emergencies, yet action on spoofing is lacking.
- Fixing spoofing would enhance public safety, reduce fraud, and save revenue for telecommunications providers.

#### 6. Benefits of Addressing Caller ID Spoofing:

- Reduced spam and fraud calls for consumers.
- Increased revenue for telecommunications providers.
- Positive economic impact through better telecom network integrity and reduced fraudulent activities.

## Surprising 'dark oxygen' discovery could ensnarl deep-sea mining-The Hindu Science

#### Science

#### **Easy Explanation**

Scientists have discovered a process producing oxygen in the deep ocean regions, termed 'dark oxygen,' where sunlight doesn't reach, thus precluding photosynthesis. This discovery, detailed in a study conducted in the Clarion-Clipperton Zone off Mexico's coast, suggests the existence of unknown ecosystems relying on this oxygen, generated potentially by polymetallic nodules on the ocean floor. These nodules, rich in metals like manganese and iron, might create electric charges that split water molecules to release oxygen. This finding has significant implications for deep-sea mining, an industry poised for expansion, with countries like India securing contracts to mine these nodules. However, this form of mining could threaten these delicate marine ecosystems that depend on dark oxygen. Past studies, such as the Disturbance and Recolonisation Experiment, demonstrate that deep-sea mining can have long-lasting detrimental impacts on the ocean floor's biodiversity and ecological functions. With increasing recognition of these risks, some major European insurance companies have begun to exclude deep-sea mining from their underwriting portfolios, calling for more sustainable mining practices to avoid irreversible environmental damage.

#### Key Takeaways

#### 1. Discovery of 'Dark Oxygen':

- Scientists found an unknown process producing oxygen in deep ocean regions where photosynthesis is impossible.
- The discovery implies the existence of previously unknown ecosystems.

#### 2. Source of 'Dark Oxygen':

- Polymetallic nodules may be transporting electric charges that split water molecules, releasing oxygen.
- Nodules' surfaces can have a voltage of up to 0.95 V; clustered nodules might generate enough voltage to split water molecules.

#### 3. Implications for Deep-Sea Mining:

- Many countries, including India, have contracts to explore and mine polymetallic nodules in the deep seabed.
- Deep-sea mining could potentially harm ecosystems that rely on 'dark oxygen' for survival.
- 4. Previous Studies and Concerns:

- The Disturbance and Recolonisation (DISCOL) Experiment in the Peru Basin showed long-lasting environmental impacts from simulated mining.
- $\circ~$  A 2019 study found significant ecological changes even 26 years after the experiment.
- $\circ$  ~ Deep-sea mining may cause irreversible loss of some ecosystem functions.

## 5. Government and Scientific Response:

- India is building a submersible vehicle for deep-sea resource exploration as part of its 'Deep Ocean Mission'.
- Scientists urge caution in mining activities due to incomplete understanding of deep-sea ecosystems and their roles in global climate processes.

## 6. Industry Reaction:

- In light of environmental concerns, three major European insurance companies decided to exclude deep-sea mining from their underwriting portfolios.
- Sustainable solutions for deep-sea mining are needed to prevent potential environmental damage.

## Planning better-The Hindu Editorial

## Polity Easy Explanation

The NITI Aayog, India's policy think tank, faces criticism for its limited role as merely an advisory body without powers of resource distribution, contrasting with the earlier Planning Commission which engaged in direct consultations with states for allocations. Recent events, including the boycott of its ninth Governing Council meeting by representatives from several states and a walkout by West Bengal's Chief Minister, highlight the discontent among states, especially those governed by opposition parties. This discontent stems from a perceived bias in allocation of projects and grants, which are seen to favor BJP-ruled states under the "double engine" government strategy. Additionally, the Finance Ministry's specific focus on states like Bihar and Andhra Pradesh due to political alliances has also raised concerns about equitable treatment across all states. This situation suggests a need for NITI Aayog to be re-envisioned to include some resource allocation powers to foster true cooperative federalism and address infrastructure and capital investment needs more effectively across states.

## Key Takeaways

- 1. **Structural Limitations**: NITI Aayog functions as an advisory body without the power to allocate resources directly to states, limiting its effectiveness compared to the former Planning Commission.
- 2. **Political Controversies**: The perceived preferential treatment in resource allocation towards BJP-ruled states has caused dissatisfaction among opposition-led states, exacerbating political tensions.
- 3. **Boycotts and Protests**: The boycott of the NITI Aayog meeting by several state leaders underscores the growing rift between the central government and some states over issues of federal cooperation and resource distribution.
- 4. **Role of Finance Ministry**: Unlike the NITI Aayog, the Finance Ministry retains significant control over financial grants to states, affecting how resources are distributed nationally and influencing state development.
- 5. **Need for Institutional Reform**: There is a pressing need to restructure the NITI Aayog to equip it with more substantive powers for direct consultations and resource allocations to ensure equitable treatment of all states.
- 6. Vision for Cooperative Federalism: Reinvisioning the NITI Aayog could help restore the balance of cooperative federalism, ensuring all states have a fair say in their development agendas and resource allocations.

## 30th July 2024

## Why a Mumbai trial court releasing an accused in a PMLA case is significant-Indian Express Explained

## Polity

## **Easy Explanation**

A Mumbai Special Court recently released businessman Purushottam Mandhana, arrested in a money laundering case, drawing from the Supreme Court's order granting bail to Delhi Chief Minister Arvind Kejriwal. The court found that the Enforcement Directorate (ED) did not provide Mandhana with the required "reasons to believe" for his arrest, a procedural safeguard under the Prevention of Money Laundering Act (PMLA). Section 19 of the PMLA mandates that ED officers record and communicate these reasons based on



material evidence, ensuring arrests are not arbitrary. The Supreme Court's ruling emphasized judicial scrutiny over ED's reasons for arrest and mandated sharing them with the accused. This ruling extends similar procedural safeguards to other stringent laws, such as the Unlawful Activities Prevention Act (UAPA). The trial court's decision underscores the importance of due process and marks a significant shift from the 2022 Supreme Court ruling in Vijay Madanlal Chaudhary vs Union of India, which upheld the PMLA's broad powers. This shift aims to prevent arbitrary state actions and ensure fundamental rights are protected.

## Key Takeaways

- 1. **Supreme Court's Influence**: The release of Mandhana was influenced by the Supreme Court's order in Kejriwal's case, which emphasized the need for ED to provide valid "reasons to believe" for arrests.
- 2. **Procedural Safeguards**: Section 19 of the PMLA requires ED officers to record and communicate the "reasons to believe" for an arrest, ensuring that arrests are not arbitrary.
- 3. **High Bar for Bail**: Under Section 45 of the PMLA, obtaining bail is difficult, requiring the court to be satisfied that the accused is "not guilty" before the trial begins.
- 4. **Judicial Review**: The Supreme Court ruled that there can be a judicial review of the ED's reasons for arrest, making it mandatory to share these reasons with the accused.
- 5. **Extended Procedural Safeguards**: The requirement to disclose grounds of arrest within 24 hours extends to other stringent laws like the Unlawful Activities Prevention Act (UAPA).
- 6. **Significance of Trial Court Ruling**: The ruling marks a shift towards reinforcing procedural safeguards and due process, ensuring that the state's power to arrest is not exercised arbitrarily. It indicates a move away from the 2022 Supreme Court ruling in Vijay Madanlal Chaudhary vs Union of India, which upheld broad powers under the PMLA.

## Why Israel-Hezbollah conflict is heating up-Indian Express Explained

## International relations Easy Explanation

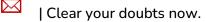
The Israel-Hezbollah conflict has intensified following a deadly rocket strike in the Israeli-occupied Golan Heights, allegedly by Hezbollah, which denied responsibility. This escalation began on October 8, when Hezbollah started trading fire with Israel after Hamas attacked southern Israel, triggering the ongoing Gaza conflict. Hezbollah, an ally of Hamas, aims to support Palestinians under Israeli bombardment in Gaza and insists it will not stop its attacks unless a Gaza ceasefire is reached. Both Israel and Hezbollah have a history of conflicts, with the last major war in 2006. Despite the recent hostilities being relatively contained, there is significant concern about further escalation.

## Key Takeaways

- 1. **Recent Escalation**: A rocket strike in the Israeli-occupied Golan Heights has heightened tensions between Israel and Hezbollah, raising fears of a full-scale war.
- 2. **Origins of Conflict**: The conflict reignited on October 8, following Hamas's attack on southern Israel, with Hezbollah joining to support Palestinians in Gaza.
- 3. **Historical Context**: Israel and Hezbollah have fought several wars, the last major one in 2006, causing extensive damage and displacement in both regions.
- 4. **Current Stance**: Hezbollah asserts it will continue attacks until a Gaza ceasefire is achieved, while Israel has threatened severe retaliation.
- 5. **Potential for Escalation**: The conflict could worsen significantly, with both sides preparing for possible all-out war, although current hostilities remain relatively contained.
- 6. **Diplomatic Efforts**: The U.S. is involved in diplomatic efforts to de-escalate the conflict, with both Israel and Hezbollah showing conditional openness to a diplomatic resolution, dependent on developments in Gaza.

## Clear goals, hazy roadmaps-Indian Express Editorial

Economy Easy Explanation



The recent Budget emphasizes fiscal consolidation and critical growth areas, but its success hinges on effective project implementation. The final Budget has only marginal differences from the Interim Budget, with increased revenue due to higher RBI dividends and increased tax devolution to states. The Budget projects a gross tax revenue of Rs 38.4 lakh crore and plans total expenditures of Rs 48.20 lakh crore. Fiscal deficit targets have been reduced, continuing the path of fiscal consolidation. Key revenue-side measures include a review of the Income Tax Act and rationalization of capital gains tax. On the expenditure side, the Budget maintains capital expenditures but emphasizes future spending. The effectiveness of new employment initiatives remains uncertain, emphasizing the need for performance budgeting to ensure actual expenditures match plans.

## Key Takeaways

- 1. **Fiscal Consolidation**: The Budget focuses on reducing the fiscal deficit, targeting 4.9% of GDP, with a long-term goal of reaching 3%.
- 2. **Revenue and Expenditures**: Increased RBI dividends and higher tax devolution to states boost revenues; total expenditure is set at Rs 48.20 lakh crore with a 77:23 ratio between revenue and capital expenditures.
- 3. **Tax Measures**: A comprehensive review of the Income Tax Act is planned, along with rationalization of capital gains tax and elimination of angel tax to boost venture capital.
- 4. **Capital Expenditure**: Maintained at Rs 11.11 lakh crore, but non-defence capital outlay is reduced, with provisions for interest-free loans to states.
- 5. **Employment Initiatives**: New "Employment Linked Incentives" aim to boost formal, stable employment, though effectiveness is uncertain.
- 6. **Future Spending**: Many expenditure schemes are projected for future years, emphasizing the need for performance budgeting to track success.
- 7. **Private Investment**: Reducing government reliance on financial savings is crucial to boost private investment, given historically low household financial savings.
- 8. Implementation Focus: Success depends on effective project implementation and aligning actual expenditures with planned ones.

AT A STANDSTILL-Indian Express Editorial

## Sociology Easy Explanation

For over 15 years, Indian cities have struggled with excessive monsoon rainfall, resulting in significant flooding. This year, heavy rains have severely impacted cities like Delhi, Guwahati, Pune, and Mumbai. Common issues contributing to these floods include outdated drainage systems, poor urban planning, and limited civic agency responses. Climate change has exacerbated these problems, increasing the intensity of extreme weather events. While cities like Mumbai and Pune have Climate Action Plans, there is a lack of effective implementation and institutional mechanisms to enhance climate resilience. Successful flood mitigation requires early alert systems, improved stormwater drainage, and a combination of natural and technological solutions.

## Key Takeaways

- 1. **Common Flood Issues**: Outdated drainage systems, poor planning, and inadequate civic response are common problems across Indian cities.
- 2. Impact of Climate Change: Increased rainfall intensity due to climate change is worsening the flooding situation.
- 3. Current Efforts: Cities like Mumbai and Pune have Climate Action Plans, but implementation is lacking.
- 4. **Casualties**: Floods have caused deaths due to overflowing drains, building collapses, and electrocution incidents.
- 5. Global Examples: Cities like Buenos Aires use advanced flood warning systems, which Indian cities can learn from.
- 6. **Necessary Actions**: Indian cities need to invest in stormwater drainage improvements and adopt both natural and technological solutions to mitigate flood damage.
- 7. **Urgency**: The recurring monsoon problems highlight the urgent need for comprehensive and proactive flood management strategies.

## NEEDED: GUARDRAILS-Indian Express Editorial

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| Clear your doubts now.

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#### **Easy Explanation**

A recent ruling by a nine-judge Constitution Bench of the Supreme Court has affirmed that states in India have the authority to tax mining activities, overturning a 1989 judgment that defined royalties as a tax and limited state powers solely to collecting these royalties. This decision, stemming from the case Mineral Area Development Authority v M/s Steel Authority of India, acknowledges the separate nature of royalties from taxes, enabling state governments to generate additional revenue from both mining activities and the land used for these activities. The ruling is significant as it impacts the legislative powers between the central government and state governments regarding mineral rights and development, as outlined in the Seventh Schedule of the Constitution.

#### Key Takeaways

- 1. Enhanced State Powers: States now have the explicit power to impose taxes on mining activities in addition to collecting royalties, potentially increasing their revenue sources.
- 2. Legal Background: The ruling revises the interpretation of royalties and taxes related to mining, contrasting with the previous stance from the 1989 India Cement Ltd v State of Tamil Nadu decision.
- 3. **Federal Concerns**: The decision has implications for the balance of power within India's federal structure, specifically in terms of legislative authority over mineral development.
- 4. **Economic Impact**: There are concerns that this new taxing power could lead to unhealthy competition among states, potentially raising the cost of minerals and impacting the national economy.
- 5. **Policy Implications**: The verdict calls for the implementation of policy guardrails to manage the potential negative outcomes, ensuring a coordinated approach among states and between the central and state governments.
- 6. Judicial Split: The decision was not unanimous, with an 8-1 split, indicating differing judicial opinions on the matter's impact on the federal system and economic stability.

#### Indian scientists build breakthrough gene-editor, are aiming for patent-The Hindu Science

#### Science

#### **Easy Explanation**

Indian scientists from CSIR-IGIB and L.V. Prasad Eye Institute have developed an enhanced CRISPR-Cas9 system using the FnCas9 enzyme from Francisella novicida bacteria. This new system edits genomes more efficiently and with fewer off-target effects compared to the traditional SpCas9 from Streptococcus pyogenes. The breakthrough involves modifications to FnCas9 that improve its binding affinity and flexibility, allowing for more effective gene editing across difficult genomic regions. The team has successfully applied this system to treat inherited blindness in laboratory settings by correcting mutations in specific genes. They are now seeking to patent this innovation and work on adapting it to various delivery methods for broader therapeutic applications.

#### **Key Takeaways**

- 1. Enhanced CRISPR System: The new system uses an engineered version of the FnCas9 enzyme, which provides higher efficiency and specificity in gene editing than existing CRISPR systems.
- 2. **Application in Medical Therapeutics**: The enhanced FnCas9 was used to correct a genetic mutation causing Leber congenital amaurosis type 2 (LCA2), demonstrating its potential in therapeutic settings.
- 3. **Reduction in Off-Target Effects**: The modified FnCas9 shows significantly fewer off-target interactions, crucial for safe and effective clinical applications.
- 4. **Future Development**: The research team is focusing on improving the delivery mechanisms and reducing the size of the FnCas9 system to enhance its usability in medical treatments.
- 5. **Patenting and Commercialization**: The team is in talks with Indian companies to patent the technology, aiming to develop affordable therapeutics for low- and middle-income countries.
- 6. **Global Impact**: This development could position India as a leader in CRISPR technology, potentially reducing reliance on expensive licenses from foreign entities.

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## Sociology Easy Explanation

The Indian government's decision not to extend the June 30, 2024 deadline for freezing administrative boundaries has raised expectations for the commencement of the Census operations in October 2024. However, the reduced budget allocation in 2024-25 suggests further delays, which is concerning given that the last Census was conducted in 2011. This delay impacts the implementation of policies, including the Women's Reservation Act, which requires updated demographic data to reserve 33% of seats in Parliament and assemblies for women. The urgency to conduct the next Census is underscored by the need for updated population data to facilitate access to various government schemes and services, as well as to prepare for constitutional mandates like constituency delimitation post-2026.

## Key Takeaways

- 1. **Urgency of Conducting the Census**: The delay in conducting the Census, initially scheduled for 2021, jeopardizes the effectiveness of welfare schemes and legislative reforms such as the Women's Reservation Act.
- 2. **Budgetary Concerns**: The significant reduction in budget allocation for the Census from ₹3,768 crore in 2021-22 to ₹1,309.46 crore in 2024-25 hints at possible further delays, risking the timely collection of crucial demographic data.
- 3. **Preparatory Work Underway**: Despite uncertainties about the Census schedule, preparatory work like updating maps, lists, and digital data collection methods are ongoing, with some readiness already achieved by Census directorates in various states, including Tamil Nadu.
- 4. **Constitutional and Legislative Implications**: The Constitution (Eighty-fourth Amendment) Act of 2001 defers delimitation of constituencies based on Census data until after 2026, making the next Census critical for electoral boundary setting.
- 5. **Controversies and Clarifications**: The inclusion of new questions in the National Population Register (NPR), seen as a precursor to the National Register of Citizens (NRC), has been controversial. The government has clarified that NPR data will not be used for NRC, but decisions on contentious issues like caste information collection remain pending.
- 6. **Impact on Policy Implementation**: The absence of updated Census data hampers the equitable distribution of resources and implementation of policies tailored to the current demographic realities of India.

## Human failure-The Hindu Editorial

## Governance Easy Explanation

The recent tragedy at an IAS coaching center in New Delhi, where three aspirants died due to basement flooding, highlights a critical issue in urban planning and safety regulation. The basement, typically not permitted for habitation but often used for such purposes in mixed-use buildings, became a death trap due to inadequate flood resilience measures. This incident reflects broader systemic failures, including inadequate enforcement of building codes, the challenge of maintaining safety in rapidly urbanizing spaces, and the lax oversight by authorities which sometimes leads to circumvention of regulations due to bureaucratic hurdles and corruption. The flooding was exacerbated by poor civic infrastructure, such as a burst stormwater drain. This disaster underscores the urgent need for cities to enforce building codes strictly, ensure buildings are flood-resilient, and improve urban infrastructure to handle extreme weather events.

## Key Takeaways

- 1. Urban Planning and Safety: The tragedy was a result of poor urban planning and the failure to adhere to safety regulations concerning basement usage.
- 2. Enforcement of Building Codes: There is a critical need for strict enforcement of building bylaws that restrict the use of basements for habitation, especially in coaching centers and similar establishments.
- 3. **Infrastructure Failures**: The incident was compounded by inadequate civic infrastructure, including the failure of stormwater drains which are not equipped to handle heavy rainfall, leading to flooding.
- 4. **Regulatory Oversight**: The coaching center's compliance with safety regulations and the renewal of permits is under scrutiny, highlighting the often lax oversight by authorities.

- 5. **Corruption and Compliance**: The reluctance to notify authorities about changes in building use often stems from the desire to avoid bureaucratic hurdles and corrupt practices.
- 6. **Flood Resilience**: The need for buildings to incorporate flood-resilient designs, such as waterproof barriers and non-return valves in plumbing, is emphasized to prevent future disasters.
- 7. **Policy Implications**: The event calls for a reevaluation of policies regarding building usage and safety standards, particularly in urban areas prone to flooding.

## The problem with India's blocking of the Chinese-The Hindu Editorial

#### International relations

## **Easy Explanation**

The current predicament of blocking visas for Chinese technicians in India exemplifies a significant policy challenge, reflecting broader issues in the country's approach to skill development and foreign expertise. India's industries, ranging from solar manufacturing to textiles, are experiencing operational difficulties due to a lack of skilled personnel needed to run advanced machinery, much of which is imported from China. Despite the acknowledged skill gap between Chinese and Indian workers, visa restrictions have been imposed citing national security concerns, leading to a stark reduction in the number of visas issued to Chinese nationals—from 200,000 in 2019 to just a few thousand recently.

This situation not only hampers the productivity of Indian businesses but also highlights severe shortcomings in India's educational system, which fails to equip its workforce with the necessary skills for modern industries—a contrast to China's more effective educational strategies. The irony of India's self-reliance rhetoric, which clashes with its dependency on foreign expertise for economic growth, underscores the need for substantial educational reforms and a more pragmatic approach to international collaboration. Without addressing these foundational issues, India risks missing crucial economic opportunities and failing to provide dignified jobs for its expanding workforce.

## Key Takeaways

- 1. **Visa Restrictions**: Despite the demand from various industrial sectors, the Indian government has been slow in issuing visas to Chinese technicians due to security concerns, drastically reducing the number from 200,000 in 2019 to just a few thousand recently.
- 2. **Skill Gap**: Indian industry faces a significant skill gap that Chinese technicians can fill. This gap is not just in high-tech areas but also in more traditional manufacturing roles, where efficiency and productivity are essential.
- 3. **Economic Impact**: The visa restrictions and resulting skill shortages are causing economic disruptions, with machinery lying idle and export orders unfulfilled, impacting sectors like solar manufacturing and electronics.
- 4. **Educational Shortcomings**: The core of the problem lies in India's educational system, which has not successfully equipped the majority of its population with the skills necessary for modern industry, unlike China's more successful educational initiatives.
- 5. **Policy Irony**: There is an ironic disconnect between India's self-reliance rhetoric and the reality of its dependence on foreign expertise for economic growth.
- 6. **Long-term Consequences**: Without a significant overhaul of its educational system and a more open approach to foreign expertise, India risks missing out on key economic opportunities and failing to provide dignified jobs for its growing workforce.
- 7. **Global Economic Position**: The narrative that India could become a global economic superpower is critically examined against its educational and industrial challenges, suggesting that without substantial reforms, such aspirations may be unrealistic.

## 31st July 2024

## Behind Leh Flight cancellations: High Temperatures, low air density-Indian Express Explained

Environment Easy Explanation

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In Leh, Ladakh, unusually high daytime temperatures of up to 33.5°C have caused significant disruptions in air travel, with numerous flight cancellations reported. These high temperatures negatively affect aircraft by reducing the density of the air, which is critical for generating the lift needed for takeoff. As a result, aircraft require longer runways and more power to achieve necessary lift. This issue is further compounded in high-altitude airports like Leh, where the air is naturally thinner. Additionally, the reduced air density impacts the engines' ability to produce sufficient thrust, further complicating both takeoffs and landings. Global warming contributes to these extreme temperature conditions, suggesting that such disruptions may become more common, prompting the need for changes in flight scheduling, airport infrastructure, and aircraft design to mitigate the impact of rising temperatures on aviation.

## Key Takeaways:

## 1. Aircraft Lift and High Temperatures:

Aircraft require a difference in air pressure above and below the wings to create lift. High temperatures cause air to expand and become less dense, reducing the number of air molecules available to generate this lift. For every 3°C increase in temperature, aircraft lift decreases by approximately 1%.

## 2. Engine Performance:

• The performance of aircraft engines also declines in thinner, warmer air due to fewer oxygen molecules available for combustion. This reduction in air density decreases the engine's thrust, which is essential for both takeoff and in-flight maneuvering.

## 3. Increased Runway Length Requirements:

 Higher temperatures mean airplanes need longer runways to achieve the necessary speed for takeoff. For example, a temperature increase from 20°C to 40°C could extend required runway length from 6,500 feet to 8,200 feet.

## 4. Impact on Landings:

• Thinner air affects the effectiveness of reverse thrust used during landing, making it harder to slow down the aircraft.

## 5. Challenges at High-Altitude Airports:

 Airports at higher altitudes like Leh face additional challenges because the air is already thinner, and their runways are typically shorter.

## 6. Global Warming's Role:

• The increasing frequency of such temperature extremes is linked to global warming. Studies have shown that rising temperatures have begun to disrupt air travel by reducing maximum takeoff weights and increasing required runway lengths.

## 7. Future Projections:

 Continued global warming is expected to worsen these conditions, demanding longer takeoff distances and more robust infrastructure adaptations such as scheduling flights during cooler times of the day, extending runways, or reducing takeoff weights.

## 8. Long-term Solutions:

• The long-term solution to mitigate these disruptions includes significant reductions in fossil fuel usage to curb the effects of global warming.

## No buyers for JK's lithium-Indian Express Explained

Economics Easy Explanation



The Ministry of Mines in India canceled the auction for a lithium block in Reasi, Jammu and Kashmir, for a second time due to low investor interest. This block, initially announced as one of the largest lithium deposits globally with an inferred 5.9 million tonnes, faced skepticism due to the complexities involved in extracting and processing lithium from its hard rock pegmatite form. Further complications arose from inadequate mineral reporting standards that failed to assure potential investors of the economic viability of the project. These issues highlight significant challenges in attracting investment for large-scale mining operations in new areas, emphasizing the need for more detailed exploration and internationally compliant reporting standards to better assess and communicate the economic potential of mining projects.



Locals holding lithium ore in Jammu and Kashmir's Reasi district. The lithium reserve in Reasi was discovered in February 2023. PTI

## (Credit-Indian Express)

Key Takeaways:

1. Repeated Auction Failures:

 $\circ$  The auctions were scrapped twice due to a lack of sufficient bidders, despite relaxing entry criteria for the second auction.

2. **Challenges in Extraction and Processing:** • The technical difficulties in processing lithium from hard rock and the initial insufficient data in tender documents have deterred investors.

3. Investor Concerns Over Reporting Standards:

 Current resource classification rules in India, based on the UNFC, are considered inadequate by investors for assessing the economic viability of mining projects. There's a push to adopt the CRIRSCO standards, which are internationally recognized and provide detailed economic viability insights.

## 4. Potential Government Intervention:

• The government might consider further exploration of the Reasi block or reserve the area for mining operations by a government-owned company if private investment continues to be lackluster.

#### 5. Broader Implications for Lithium Exploration in India:

• While the auction for a lithium block in Chhattisgarh was successful, exploration efforts in other regions like Manipur and Ladakh have faced challenges, including local resistance and discouraging results, respectively.

## Why Maduro's re-election has triggered protests in Venezuela, criticism abroad-Indian Express Explained

#### International relations

#### **Easy Explanation**

In Venezuela, violent protests erupted after Nicolas Maduro's re-election as president, with the National Electoral Council declaring him the winner with 51% of the vote amid allegations of electoral fraud. The opposition, led by María Corina Machado, has contested the credibility of the election results, citing the absence of individual polling data and inconsistencies with independent and exit polls where opposition candidate Edmundo González Urrutia was favored. Maduro's administration has been characterized by a centralization of power and economic control, intensifying national crises including hyperinflation and essential goods shortages, which worsened following a drop in oil prices and international sanctions. The global response to the election has been mixed; the U.S., EU, and several Latin American countries have questioned the legitimacy of the results, while Russia, China, and some of Maduro's regional allies have recognized his victory. The election's aftermath has highlighted deep divisions both within

Venezuela and in international relations, reflecting ongoing concerns about the transparency and integrity of Venezuela's electoral process.

## Key Takeaways

## 1. Election Controversy:

• Nicolas Maduro was declared re-elected amidst allegations of electoral fraud and lack of transparency in vote counting, leading to widespread protests within Venezuela.

## 2. Centralized Power and Economic Challenges:

• Maduro's administration is marked by a high degree of control over major industries and the military, contributing to economic crises exacerbated by falling oil prices and U.S. sanctions.

## 3. International Reactions:

• The U.S. and several Latin American countries have expressed doubts about the election's legitimacy, while Russia, China, and some of Maduro's regional allies have supported the result.

## 4. Humanitarian and Economic Crisis:

- Venezuela continues to struggle with hyperinflation, shortages of essential goods, and a significant exodus of its population due to the ongoing economic and political turmoil.
- 5. Future Prospects:
  - The international community, including the EU and UK, is calling for increased transparency and fairness in Venezuela's electoral process, indicating ongoing global concern over the state of democracy in the country.

## WHY SEINE'S WATER QUALITY POSES A CHALLENGE FOR THE OLYMPICS-Indian Express Explained

## International relations Easy Explanation

The men's triathlon swimming event at the Paris Olympics was postponed due to concerns about the Seine River's water quality, which has been problematic since swimming was banned there in 1923. Paris' aged combined sewer system, which merges rainwater with wastewater, often overflows during heavy rain, leading to untreated sewage being discharged directly into the Seine. This contributes to high levels of E. coli bacteria, exceeding safe competition limits set by European Union and World Triathlon Federation standards. Despite a 1.4 billion euro effort to improve conditions, including constructing a massive underground rainwater storage and upgrading water treatment facilities, recent heavy rains have still resulted in pollution levels that could endanger athletes' health.

## Key Takeaways

- 1. **Historical Pollution Issues**: The Seine has been heavily polluted for nearly a century, exacerbated by an outdated sewage system that fails during heavy rainfall.
- 2. Health Risks from E. coli: Elevated levels of E. coli from fecal contamination in the Seine pose serious health risks, including gastrointestinal and urinary tract infections.
- 3. **Massive Investment in Infrastructure**: Paris has invested significantly in infrastructure to combat this issue, central to its bid for hosting the Olympics, highlighting the city's commitment to environmental improvement.
- 4. **Current Challenges**: Despite these efforts, recent weather conditions have overwhelmed the system, leading to spikes in pollution that threaten the feasibility of water-based Olympic events.
- 5. **Contingency Plans**: Alternative venues, such as the Vaires-sur-Marne Nautical Stadium, are prepared, and additional reserve days are scheduled to accommodate potential changes due to ongoing water quality issues.

## The not young-Indian Express Editorial

## Sociology Easy Explanation

As India transitions into an aging society, there is growing concern about the gaps in social security for the elderly, highlighted by issues in accessing pensions, health services, and social care. Despite a demographic shift that will see the elderly population rise from 8.6% in 2011 to an estimated 20.8% by 2050, older individuals' needs remain less prioritized compared to the younger



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population. Challenges include an outdated infrastructure like the combined sewage systems that fail during heavy rainfall, leading to direct discharge of untreated sewage into water bodies like the Seine. Additionally, fluctuations in rain patterns contribute to unpredictable E. coli levels in the river, further complicating the maintenance of safe water conditions. The postponement of the Olympic triathlon swimming event is a consequence of these environmental and infrastructural inadequacies, reflecting broader issues of urban planning and environmental management in the face of climate variability.

## Key Takeaways

- 1. **Rapid Aging Phenomenon**: India is experiencing a rapid increase in its elderly population, a trend more accelerated than that seen in the West, which took place over a century.
- 2. **Inadequate Social Security**: The lack of universal public pension schemes, health insurance, and social care provisioning for all elders, particularly those above the poverty line, poses significant challenges.
- 3. **Health Vulnerabilities**: Older adults in India often suffer from multiple morbidities such as diabetes and hypertension, necessitating comprehensive healthcare and support systems.
- 4. **Economic and Social Inequalities**: There are stark inequalities in the availability and accessibility of financial and healthcare resources for the elderly, influenced by geographical location, class, caste, and gender.
- 5. **Policy Gaps**: Unlike some East Asian countries that have integrated health and social care systems, India lacks a cohesive policy framework to address the needs of its aging population effectively.
- 6. **Need for Comprehensive Policies**: There is a pressing need for policies that bridge the gap between the supply of and demand for elder care, taking into account the complex interplay of financial, health, and social care needs.

The growing number of elderly individuals in India calls for an urgent reevaluation of existing policies and the implementation of robust systems to ensure their well-being as the country continues to age.

## Not somebody else's war-Indian Express Editorial

## International relations Easy Explanation

Prime Minister Narendra Modi's recent visit to Moscow and his upcoming trip to Kyiv signify a potential shift in India's approach to European security, emphasizing the importance of re-engaging with the region amidst the ongoing Ukraine conflict. The war in Ukraine has thrust European geopolitics back onto India's strategic agenda, highlighting the need for India to play a more active role in fostering peace and stability. Despite historical disengagement from European geopolitics post-Cold War, the current conflict and its implications for global security and the Indian economy necessitate a renewed focus. Engaging in peace diplomacy in Ukraine offers India an opportunity to enhance its strategic presence in Europe, balancing its relationships with both Russia and Western partners.

## Key Takeaways

- 1. **Strategic Re-engagement**: The Ukraine war underscores the need for India to re-engage with European security matters, marking a shift from its historical disengagement post-Cold War.
- 2. **Peace Diplomacy**: Prime Minister Modi's visits to Moscow and Kyiv reflect India's intention to play a constructive role in peace efforts, even if its impact might be limited.
- 3. **Economic and Security Implications**: The conflict in Ukraine has significant implications for India's economy and security, making it crucial for India to contribute to peace processes.
- 4. **Balancing Relations**: India's involvement in Ukraine peace efforts aims to balance its longstanding relationship with Russia and its growing ties with Western countries.
- 5. **Historical Context**: The historical context of India's involvement in European conflicts during the colonial era and the subsequent strategic disengagement post-Cold War highlights the importance of renewed engagement in contemporary geopolitics.
- 6. Long-term Interest: Supporting peace in Ukraine aligns with India's long-term interests in limiting the conflict between Russia and Western partners, preventing further geopolitical instability that could benefit China.

By intensifying its peace diplomacy efforts, India seeks to reaffirm its strategic relevance in European geopolitics and contribute to global stability amidst the ongoing Ukraine conflict.



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## The different armed groups of Myanmar-The Hindu Text and Context

#### International relations

#### **Easy Explanation**

The political landscape in Myanmar has been dramatically transformed following the military coup in 2021, which ousted Aung San Suu Kyi and prompted widespread violent resistance. This resistance has led to the military losing control over significant parts of the country. Ethnic Armed Organizations (EAOs) such as the Brotherhood Alliance and the Kachin Independence Army have capitalized on this, capturing strategic areas and military posts. The situation underscores the inadequacy of Myanmar's 2008 Constitution in addressing the nation's deep-rooted ethnic divisions and governance issues. EAOs have avoided declaring independence, potentially aiming for a federal democratic structure that includes maximum autonomy for provinces. Amidst this, China has played a dual role, supporting both the Myanmar military and various EAOs to protect its investments and maintain strategic interests. The ongoing conflict suggests the need for a new constitutional framework that embraces federalism and democracy. India, with its experience in federalism and conflict resolution, could offer valuable insights and support in facilitating a dialogue towards sustainable peace in Myanmar.

#### Key Takeaways

- 1. **EAOs' Territorial Gains**: The EAOs, particularly the Brotherhood Alliance, have made substantial territorial advances, capturing strategic locations and weakening military control, especially in regions like Shan State and the Rakhine province.
- 2. **Fractured Sovereignty**: Myanmar is described as a country with "fragmented sovereignty" due to the multiple armed groups asserting control over different regions, leading to a complex and unstable political environment.
- 3. **China's Influence**: China plays a dual role by supporting both the Myanmar military and various EAOs, aiming to maintain its strategic interests and economic investments in the region, despite the ongoing conflict.
- 4. **Need for a New Constitutional Framework**: The current political and military stalemate indicates the necessity for a new constitutional framework that upholds the principles of federalism and democracy to achieve sustainable peace.
- 5. India's Potential Role: India could contribute positively by sharing its experiences in federalism and conflict resolution, similar to its efforts in establishing peace accords within its own territories.

The situation in Myanmar represents a critical juncture where international support and a redefined constitutional framework could pave the way for reconciliation and peace, moving away from the cycle of confrontation and ceasefires that currently defines the nation's political crisis.

#### India's open ecosystems facing an unusual threat: encroaching trees-The Hindu Science

#### Environment

#### **Easy Explanation**

The phenomenon of woody encroachment in open ecosystems such as savannahs and grasslands presents a significant environmental challenge. Although generally perceived as beneficial, increasing tree cover in these ecosystems disrupts their ecological balance, threatening the survival of native species, particularly grassland birds. This encroachment is largely driven by human activities that alter natural disturbance regimes essential for maintaining the unique biodiversity of these habitats. Key factors contributing to this issue include fire suppression, intensive agriculture, large-scale development projects, and changes in land use that favor tree growth over grasslands. The situation is exacerbated by global changes such as increased atmospheric CO2, which promotes the growth of woody plants over grasses. The impact is global, with significant declines in grassland bird populations observed in regions like the African Savannah and changes in grass species and faunal associations noted across various continents.

#### Key Takeaways

1. **Global Impact on Biodiversity**: Woody encroachment significantly reduces biodiversity in grasslands, with a notable decline in grassland bird populations due to loss of habitat and altered soil conditions.

- 2. **Human-Driven Factors**: The encroachment is primarily a result of human activities that change the natural disturbance regimes necessary for the health of open ecosystems. These include fire suppression, fragmentation, and inappropriate land management practices.
- 3. **Exacerbated by Climate Change**: Increased levels of atmospheric CO2 favor the growth of woody plants, further tipping the balance away from native grasses, which are crucial for the biodiversity of these ecosystems.
- 4. **Ecological and Conservation Challenges**: The encroachment presents complex ecological challenges, requiring targeted conservation efforts to prevent the homogenization of diverse ecosystems into mono-dominant landscapes.
- 5. **Need for Informed Policy and Action**: Effective management and conservation of open ecosystems necessitate policies that recognize the value of these habitats and are informed by scientific research to counteract the adverse effects of woody encroachment.

The issue of woody encroachment calls for a reevaluation of conservation priorities and strategies to maintain the ecological integrity of open ecosystems, crucial for sustaining global biodiversity.

## A licence raj for digital content creators-The Hindu Editorial

## Science and technology Easy Explanation

The Union government in India is proposing the Broadcasting Services (Regulation) Bill, 2024, as a mechanism to control digital content creation, particularly on platforms like YouTube and Instagram. This legislation comes in response to the perceived influence of digital media on voter preferences, which is seen as a threat to the ruling party's control. The Bill aims to classify individual commentators as "Digital News Broadcasters" and content creators as "OTT Broadcasters," requiring them to register and comply with new regulatory frameworks. This move is viewed as an attempt to impose a digital license raj, centralizing command over digital narratives and potentially stifling democratic expression and individual freedoms on the internet.

## Key Takeaways

- 1. **Impact on Digital Freedom**: The Bill threatens to restrict freedom of expression on digital platforms by imposing stringent controls over content creators, including those who do not traditionally fall under news broadcasting.
- 2. Expansion of Government Control: It proposes expanded powers for the Ministry of Information and Broadcasting (MIB), allowing it to enforce registration, compliance, and censorship across digital platforms.
- 3. **Potential for Arbitrary Enforcement**: Vague provisions within the Bill could lead to arbitrary enforcement, further endangering the transparency and fairness of digital content regulation.
- 4. **Resistance from Stakeholders**: There is significant apprehension among digital content creators and other stakeholders regarding the implications of the Bill, highlighting concerns over increased censorship and reduced creative freedom.
- 5. **Legal and Public Backlash**: The proposed regulations have already faced criticism and legal challenges, indicating a contentious path forward for the Bill's implementation.

The Broadcasting Services (Regulation) Bill, 2024, represents a critical juncture for digital expression in India, with significant implications for the democratic landscape and the governance of digital spaces.



