

1 Environment & Ecology

Countries are increasingly turning food waste, livestock dung and agricultural residues into a clean fuel that can power vehicles and generate income for rural communities.

Which approach is this best an example of?

- A) Carbon Capture and Storage
- B) Circular Bioeconomy
- C) Geoengineering
- D) Blue Economy



2 Polity & Governance

A constitutional court strikes down a law of the state on the ground that it violates the fundamental structure doctrine.

Which feature of the Indian Constitution is being safeguarded here?

- A) Parliamentary Sovereignty
- B) Judicial Supremacy
- C) Constitutional Supremacy
- D) Federal Supremacy



3 Science & Technology

Scientists develop an ultra-sensitive wearable device capable of detecting toxic gases at parts-per-billion levels in industrial environments.

Which scientific principle is most central to the functioning of this technology?

- A) Radioactivity
- B) Nanomaterials
- C) Electromagnetic Induction
- D) Cryogenic Cooling



4 Geography & Climate

A narrow sea passage connects the Persian Gulf with the Gulf of Oman. Global oil prices react immediately to any disruption in this waterway because a large share of the world's crude oil passes through it.

Which waterway is being described?

- A) Bab-el-Mandeb Strait
- B) Strait of Hormuz
- C) Suez Canal
- D) Bosphorus Strait

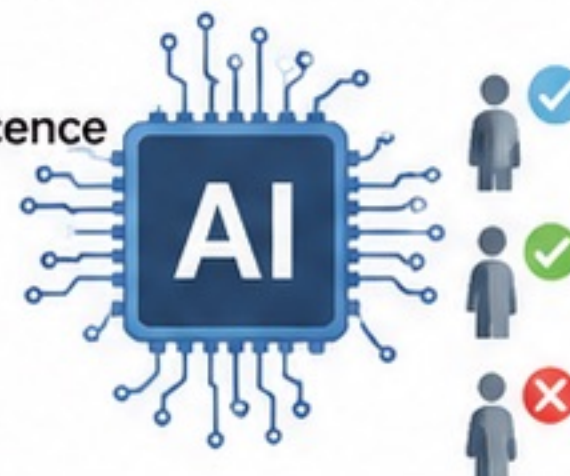


5 Ethics, AI & Governance

An AI system is used in welfare delivery to detect ineligible beneficiaries. Despite high accuracy, some genuine beneficiaries are wrongly excluded without human review.

Which ethical principle is most at risk in this situation?

- A) Transparency
- B) Accountability
- C) Fairness
- D) Non-maleficence



6 Culture & Civilizational Heritage

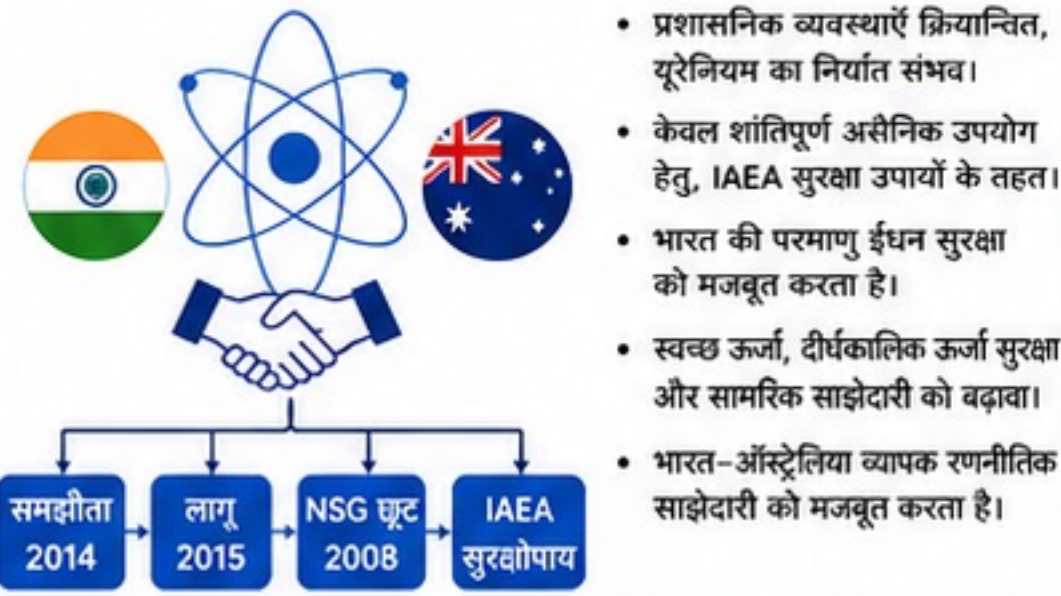
An ancient Indian university known for Buddhist learning, international students and a rich library was destroyed in the 12th century invasions.

Which university is being referred to?

- A) Taxila
- B) Nalanda
- C) Vikramashila
- D) Vallabhi



1 भारत-ऑस्ट्रेलिया असैनिक परमाणु सहयोग (PIB पुष्ठभूमि)



मूल्य संवर्धन: तीन-चरणीय परमाणु कार्यक्रम (PHWR, FBR, थोरियम) NSG छूट (2008), परमाणु समझौता (2015)

मुख्य कीवर्ड: IAEA सुरक्षा उपाय, NSG छूट, आसैनिक परमाणु समझौता, ऊर्जा सुरक्षा

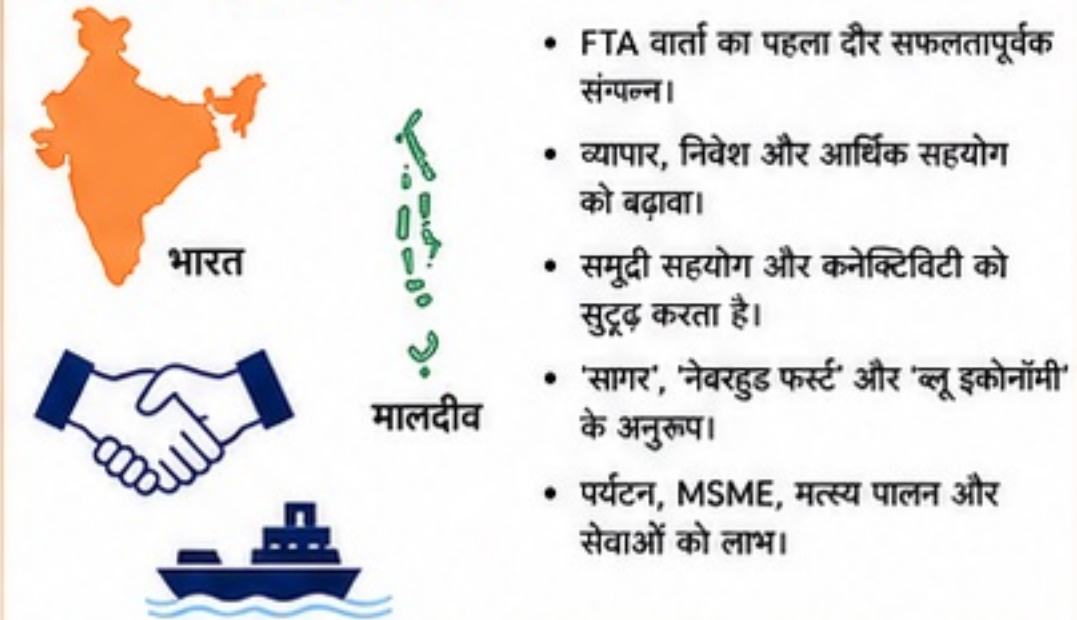
2 आठवाँ चरण: महत्वपूर्ण एवं सामरिक खनिज ब्लॉकों की नीलामी



मूल्य संवर्धन: राष्ट्रीय महत्वपूर्ण खनिज मिशन से जुड़ा हुआ मिनरल सिक्योरिटी पार्टनरशिप का हिस्सा

मुख्य कीवर्ड: महत्वपूर्ण खनिज, EV, ऊर्जा संक्रमण, आत्मनिर्भर भारत, आपूर्ति श्रृंखला सुरक्षा

3 भारत-मालदीव मुक्त व्यापार समझौता (FTA) वार्ता



मूल्य संवर्धन: मालदीव-IOIRA का प्रमुख सदस्य; हिंद महासागर क्षेत्र में सामरिक महत्व

मुख्य कीवर्ड: FTA, SAGAR, ब्लू इकोनॉमी, इंडो-पैसिफिक, समुद्री सहयोग

4 थोक मूल्य सूचकांक (WPI), आउटपुट एवं ट्रायल इनपुट प्रोड्यूसर प्राइस इंडेक्स

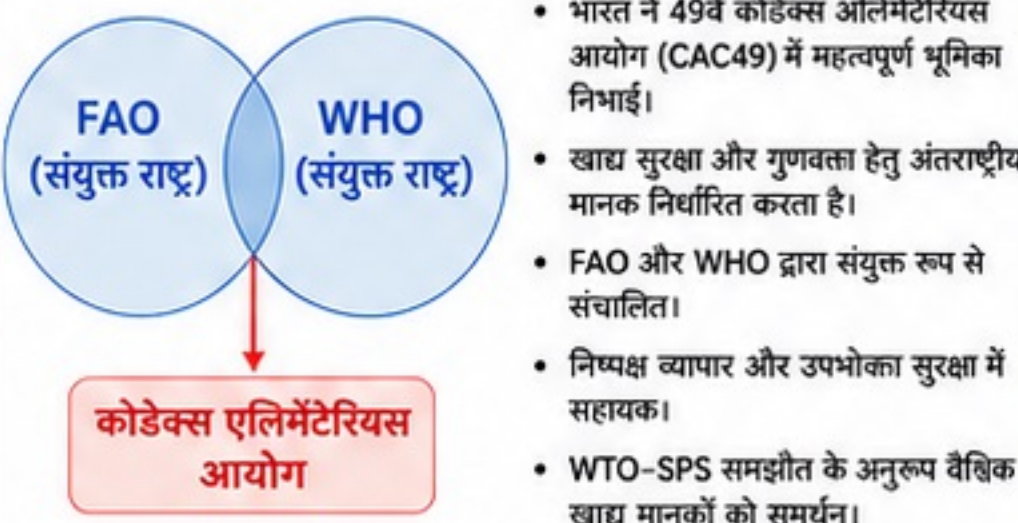


मूल्य संवर्धन: CPI → RBI का लक्ष्य (खुदरा महंगाई)

WPI → आर्थिक सलाहकार कार्यालय; PPI → उत्पादन लागत का बेहतर संकेतक

मुख्य कीवर्ड: CPI, WPI, PPI, महंगाई, आर्थिक संकेतक

5 भारत ने खाद्य मानकों में वैश्विक नेतृत्व को मजबूत किया (कोडेक्स एलिमेंटेरियस)



मूल्य संवर्धन: कोडेक्स मानक FSSAI, खाद्य निर्यात और सार्वजनिक स्वास्थ्य मानकों को प्रभावित करते हैं।

मुख्य कीवर्ड: कोडेक्स एलिमेंटेरियस, FAO, WHO, खाद्य सुरक्षा, WTO-SPS

6 PIB कार्यशाला 'वार्ता' : भारत की रचनात्मक अर्थव्यवस्था हेतु भविष्य तैयार कार्यबल



मूल्य संवर्धन: AVGC-XR इकोसिस्टम (एनीमेशन, VFX, गेमिंग, कॉमिक्स और एक्स्टेंडेड रियलिटी) क्रिएटिव इकोनॉमी की रीढ़

मुख्य कीवर्ड: क्रिएटिव इकोनॉमी, AVGC-XR, डिजिटल स्किल्स, नवाचार, सॉफ्ट पावर

7 उपराष्ट्रपति ने पुस्तक "The Voice of Justice: Justice Gavai Speaks" का विमोचन किया



मूल्य संवर्धन: संवैधानिक नैतिकता, न्यायिक सुधार, न्याय तक पहुँच, विधि का शासन

मुख्य कीवर्ड: संवैधानिक मूल्य, न्यायपालिका, निष्पक्षता, सामाजिक न्याय, शासन

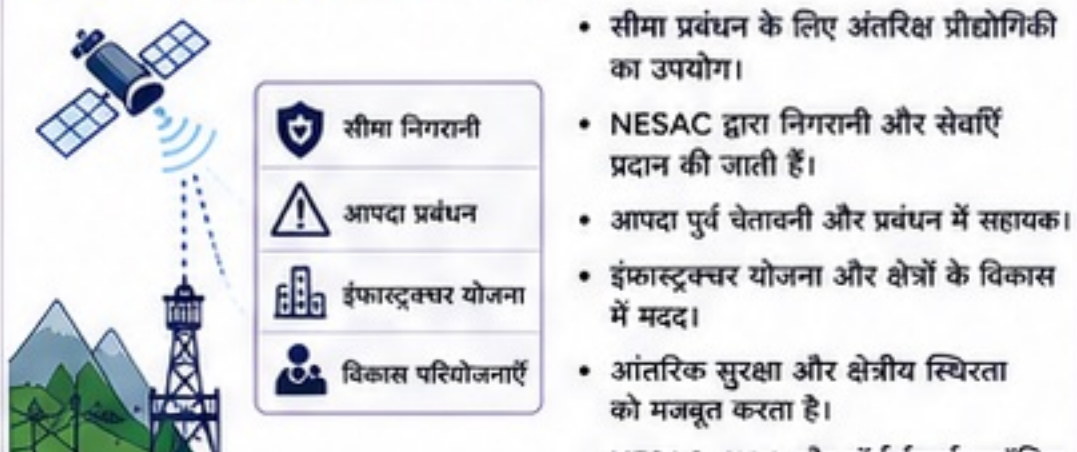
8 अत्यंत संवेदनशील अमोनिया संवेदक



मूल्य संवर्धन: आत्मनिर्भर भारत के उत्तम तकनीक सेंसर विकसित करने की दिशा में महत्वपूर्ण कदम

मुख्य कीवर्ड: अमोनिया, सेंसर, वैयरेबल टेक्नोलॉजी, IoT, पर्यावरण निगरानी, औद्योगिक सुरक्षा

9 सीमा प्रबंधन हेतु अंतरिक्ष-आधारित अनुप्रयोग (NESAC)



मूल्य संवर्धन: रिमोट सेंसिंग, GIS और सैटेलाइट डेटा कठिन भौगोलिक क्षेत्रों में शासन के लिए महत्वपूर्ण

मुख्य कीवर्ड: NESAC, ISRO, सीमा प्रबंधन, रिमोट सेंसिंग, GIS, आपदा प्रबंधन

अन्य महत्वपूर्ण एक-पंक्तियाँ



रांची में 80वीं BOCCS बैठक में कैंटीन सेवाओं विभाग के कामकाज की समीक्षा की गई।



राजस्थान LSA में मोबाइल नेटवर्क गुणवत्ता का मूल्यांकन TRAI ने मनबाओ-टनोट NH-70 पर किया।



MoFPI-NIFTEM, थंजावुर में STSTP (पायलट अस्पतालिक कौशल प्रशिक्षण कार्यक्रम) का शुभारंभ।



नागपुर में UNICEF, PIB और AIIMS द्वारा बाल स्वास्थ्य रिपोर्टिंग पर दो-दिवसीय कार्यशाला।



सेवाओं के उप-क्षेत्रीय ट्रायल सूचकांक (ISP) का प्रथम प्रकाशन: आधार वर्ष 2024-25।

1 India–Australia Civil Nuclear Cooperation (PIB Backgrounder)



- Administrative arrangements operationalised for uranium exports.
- For peaceful civilian use only under IAEA safeguards.
- Strengthens India's nuclear fuel security.
- Supports clean energy transition and energy independence.
- Deepens India–Australia Strategic Partnership.
- Boosts global nuclear trade cooperation.

Value Addition: Supports 3-Stage Nuclear Programme; PHWRs, FBRs & Thorium roadmap.

Keywords: IAEA Safeguards, NSG Waiver, Civil Nuclear Agreement, Energy Security

2 Eighth Tranche of Critical & Strategic Mineral Blocks Auction



- Eighth tranche of auction launched by Ministry of Mines.
- Ensures availability of critical minerals for strategic sectors.
- Important for EVs, batteries, semiconductors, defence & renewables.
- Reduces import dependence and global supply risks.
- Supports Atmanirbhar Bharat and energy transition.
- Strengthens India's position in global mineral value chains.

Value Addition: Linked with National Critical Mineral Mission and Mineral Security Partnerships.

Keywords: Critical Minerals, Energy Transition, EV, Semiconductors, Atmanirbhar Bharat

3 India–Maldives Free Trade Agreement Negotiations

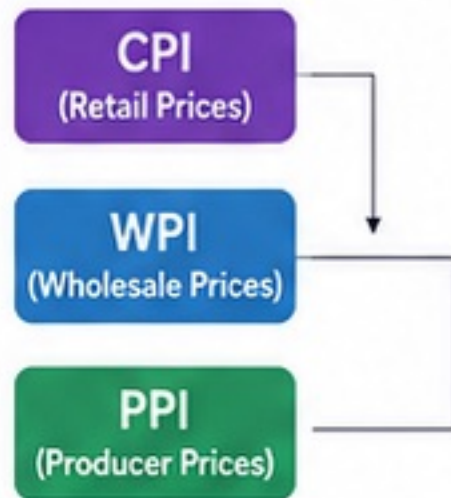


- First round of FTA negotiations concluded successfully.
- Enhances trade, investment and economic cooperation.
- Strengthens maritime cooperation in Indian Ocean.
- Supports SAGAR, Neighbourhood First and Blue Economy.
- Promotes sustainable connectivity in Indo-Pacific.
- Benefits MSMEs, fisheries, tourism and services.

Value Addition: Maldives is a key partner in IORA; strategic location in Indian Ocean Region.

Keywords: FTA, SAGAR, Blue Economy, Indo-Pacific, Maritime Cooperation

4 WPI, Output Producer Price Index & Trial Input Producer Price Index

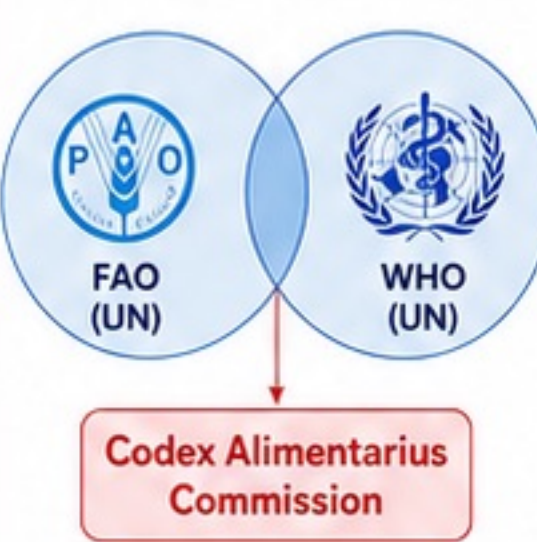


- Provisional Wholesale Price Index (WPI) released.
- Output Producer Price Index released.
- Trial Input Producer Price Index introduced.
- WPI measures inflation at wholesale level.
- PPI captures prices received by producers.
- Important for economic policy and inflation analysis.

Value Addition: CPI → Retail Inflation (RBI target); WPI → Office of Economic Adviser; PPI → Better captures production costs.

Keywords: CPI, WPI, PPI, Inflation, Economic Indicators

5 India Strengthens Global Leadership in Food Standards (Codex Alimentarius)



- India played a key role at the 49th Codex Alimentarius Commission (CAC49).
- Codex sets international food safety and quality standards.
- Joint body of FAO and WHO.
- Supports fair food trade and consumer protection.
- Strengthens India's leadership in global food governance.
- Aligns with WTO-SPS Agreement.

Value Addition: Codex standards influence FSSAI, food exports, and public health norms.

Keywords: Codex Alimentarius, FAO, WHO, Food Safety, WTO-SPS

6 PIB Workshop “Varta” on Creating a Future Ready Workforce for Creative Economy

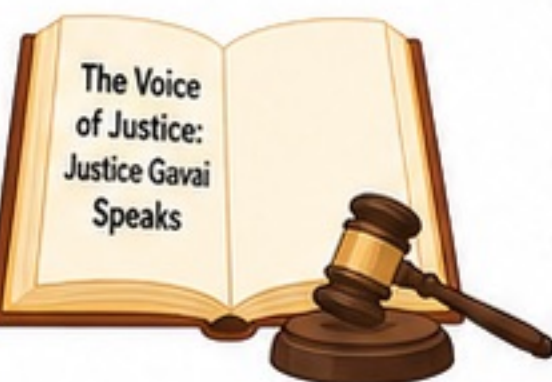


- PIB organised one-day media workshop “Varta”.
- Focus on building future ready workforce for creative economy.
- Covers media, animation, gaming, design, digital content, culture.
- Linked with Skill India, NEP 2020 and Digital India.
- Promotes innovation, employment and soft power.
- Strengthens India's global creative leadership.

Value Addition: AVGC-XR ecosystem key for \$ creative economy; drives job creation & entrepreneurship.

Keywords: Creative Economy, AVGC-XR, Digital Skills, Soft Power, Future of Work

7 Vice-President Releases Book “The Voice of Justice: Justice Gavai Speaks”



- Vice-President released the book authored by Justice B.R. Gavai.
- Reflects on constitutional values, judiciary and justice delivery.
- Emphasises access to justice and social justice.
- Strengthens understanding of judicial philosophy.
- Relevant for governance, ethics and constitutional law.
- Important for aspirants' interview and essay.

Value Addition: Themes include Rule of Law, Constitutional Morality, Judicial Independence and Social Justice.

Keywords: Judiciary, Constitutional Values, Justice Gavai, Rule of Law, Ethics

8 Ultra-sensitive Ammonia Sensor



Wearable • Portable • Self-Powered

- New ultra-sensitive ammonia sensor developed.
- Portable, self-powered and wearable device.
- Detects toxic ammonia in real time.
- Useful in industries, agriculture, health and safety.
- Helps prevent accidents and environmental hazards.
- Example of advanced sensor technology innovation.

Value Addition: Supports Atmanirbhar Bharat in high-tech sensors; applications in IoT and smart monitoring.

Keywords: Ammonia Sensor, Wearable Technology, Environment, Occupational Safety, IoT

9 Space-Based Applications for Border Management (NESAC)



- Space technology used for border management.
- Monitored by NESAC.
- Supports disaster management and early warning.
- Aids infrastructure planning and development.
- Strengthens internal security and regional growth.
- NESAC is a joint initiative of ISRO and North Eastern Council.

Value Addition: Remote sensing, GIS & satellite data critical for governance in difficult terrains.

Keywords: NESAC, ISRO, Border Management, Space Applications, Remote Sensing

Other Important One-Liners



Raksha Rajya Mantri reviews functioning of Canteen Services Department at 80th BOCCS meeting in Ranchi.



TRAI assesses mobile network quality on Munabao–Tanot (NH-70) in Rajasthan LSA.



MoFPI–NIFTEM, Thanjavur launched STSTP at ITC-Trichy.



India strengthens reporting on Childhood NCDs – UNICEF, PIB, Western Zone & AIIMS workshop in Nagpur.



First release of sub-sectoral Trial Index of Services Production (ISP) (Base Year 2024–25).

What is the India-Australia uranium supplies agreement?

What do the administrative arrangements mean for India's nuclear energy sector?

Kallol Bhattacharjee

The story so far:

During Prime Minister Narendra Modi's visit to Australia last week, India and Australia "finalised the administrative arrangements" required to enable export of uranium from Australia to India. These exports will be "exclusively for peaceful purposes and under International Atomic Energy Agency (IAEA) watch" under the Australia-India Nuclear Cooperation Agreement, 2015.

What does the latest development mean?

The finalisation of the "administrative arrangements" means that private Australian mining entities involved in uranium extraction will be able to conclude commercial contracts with Indian private sector companies and joint ventures.

Indian entities in uranium exports from Australia adds a new chapter to India's energy journey, which was recently boosted by the SHANTI Act passed in December 2025, opening the nuclear sector to private players.

The timing of the announcement is significant, as it has come at a time when India's energy sector is under severe stress due to the U.S.-Israel attack on Iran. India is being forced to diversify and explore options to cope with short-term requirements by buying hydrocarbons from Russia, the United States, and Venezuela, while also planning for the future. The arrangements with Australia for uranium export are expected to help India meet its energy requirements in the future.

Why is this significant?

Australia holds more than a quarter of the global uranium reserves and has pursued a strict policy regarding the supply or export of uranium to non-NPT member countries. According to the World Nuclear Association the countries that have received Australia's uranium include the United States, Japan, South Korea, France, Sweden, Belgium, Finland, the United Kingdom, and Germany. India is among the non-signatories, which are countries that chose not to sign the Nuclear Non-Proliferation Treaty.

Australia has been exporting uranium to countries with which it has "bilateral safeguards agreements", as it maintains that support for nuclear non-proliferation is among its "paramount" considerations. The "administrative arrangements" can be interpreted as further firming up of "bilateral safeguards" that were part of the Australia-India Nuclear Cooperation Agreement 2015.

India has an unblemished nuclear supply chain record and an ambitious policy that is not a signatory to the NPT; it signed a safeguards agreement with the IAEA in 2008 after India and the U.S. signed the nuclear deal, which was presided over by Prime Minister Manmohan Singh and President George W. Bush. Subsequently, the 48-member Nuclear Suppliers Group made a major move by exempting India from the list of countries with which they are prohibited from engaging in nuclear-energy-related business, thereby opening the gates for nuclear-energy-related supplies to India. This exemption has been the basis of several civil nuclear agreements that India has signed with partner countries.

What negotiations made this arrangement possible in 2026?

While Canberra and New Delhi have finalised the "administrative arrangements" now, negotiations between the two sides have been ongoing for nearly two decades. On November 12, 2009, during Prime Minister Kevin Rudd's visit to India, the two issues were addressed.

A joint statement issued during this visit said, "Mr. Rudd noted India's plans to meet its future energy requirements by exploring and developing all sources of energy, including nuclear, renewable and non-conventional resources. Both sides

agreed that energy security concerns are best met by reconciling the long-term interests of both energy-producing and energy-consuming countries through a truly open and competitive energy market. Both sides also expressed their willingness to join efforts which promote a cooperative response to any global energy crisis." The same joint statement also mentioned mutual commitment to oppose nuclear weapons. These negotiations led to the Australia-India Nuclear Cooperation Agreement, which was signed in 2014 and came into force in 2015.

According to World Nuclear Association, the "administrative arrangement" between India and Australia was 'finalised and became operational' after the signing of the Australia-India Nuclear Cooperation Agreement of 2015 and at least 300 tonnes of uranium were exported to India since 2018.

But it is understood, that uranium export was part of a 'test drive' as there were lingering concerns about Indian entities receiving Australian uranium. The latest announcement on the "administrative arrangements" and the emphasis on "exclusively peaceful purposes and under International Atomic Energy Agency (IAEA) safeguards" indicates that the 'test run' has paved the way.

- **Agreement:** Administrative arrangements under Australia-India Nuclear Cooperation Agreement, 2015.
- **Purpose:** Export of uranium from Australia to India exclusively for peaceful purposes under IAEA safeguards.
- **Status:** Finalised in July 2026.

- **Meaning:** Enables Australian mining entities to sign commercial contracts with Indian companies.
- **Boosted by:** SHANTI Act, 2025 – opens nuclear sector to private players in India.
- **Importance:** Strengthens India's energy security and supply diversification.

- **Why Australia?** Holds > 25% of global uranium reserves.
- **Australia's Policy:** Exports only to countries with bilateral safeguards agreements.
- **India's Status:** Not a signatory to NPT; has IAEA safeguards agreement since 2008.

- **NSG Exemption:** In 2008, India exempted by 48-member NSG from nuclear trade restrictions.
- **Base for Civil Nuclear Agreements:** Led to multiple nuclear cooperation deals.
- **Negotiations:** Ongoing for nearly 20 years; issues addressed in 2009 visit of PM Kevin Rudd.

- **Mutual Commitment:** To oppose nuclear weapons.
- **Agreement Signed:** 2014
- **Agreement in Force:** 2015

- **Uranium Exports to India:** At least 300 tonnes since 2018.
- **Test Drive:** Initial exports faced concerns; latest arrangement reaffirms safeguards and peaceful use.

Holding the Court accountable amid democratic strain

In late June this year, 23 Opposition parties wrote to the Chief Justice of India (CJI) Surya Kant raising concerns about the state of the electoral process in India's democracy. The letter reiterated the broad concern that the Special Intensive Revision (SIR) of electoral rolls is exclusionary, and that the framework is burdensome for ordinary citizens. The Opposition's letter is also a gesture of desperation and disappointment over the Supreme Court of India's refusal to interfere with the massive and continuous disenfranchisement.

The erosion of the right to vote

In *Why India Votes?* (2014), Mukulika Banerjee narrates various encounters with poor ordinary voters. Ms. Banerjee, in the book, referring to Mekhala Krishnamurthy's study, cites an incident: A woman named Rukmini Bai was unable to vote in the elections for lack of proper identification documents. When Rukmini was asked why it was important for her to vote, she said, "My work is to sweep up all the grain that falls from the sacks and the weighing scales on the floor. At the end of the day, I sell what I have collected and I am allowed to keep half the money. That is my income. So you see, I understand the value of each grain of wheat. On the floor they look insignificant, just one isolated grain of wheat, but each grain that is added to the heap determines what I earn. My vote is like those grains of wheat."

For any citizen of a democracy, exercising the right to adult franchise is vital. But for those who have been marginalised from mainstream society, voting becomes a powerful political act. It reaffirms the recognition that they and their votes matter, and that they count as much as those of the privileged. This is why the long queues at polling booths, without class, caste, or income disparities, turns out to be a beautiful image of a functioning democracy.

What the SIR exercise initiated by the Election Commission of India (ECI) has done is to poke at the heart of this electoral enfranchisement. The modalities in which the ECI has invoked this process are also significant. The ECI has been successful in creating an atmosphere of anxiety for citizens, in a matter closely tied to their political identity. The right to vote is a significant facet of political expression envisaged by the Constitution.



Kaleeswaram Raj

Lawyer at the Supreme Court of India



Thulasi K. Raj

Lawyer at the Supreme Court of India

The higher judiciary's handling of the Special Intensive Revision (SIR) of electoral rolls raises questions about judicial scrutiny and India's democratic health.

submerged in an entire overarching framework consisting of documentation, inquiry into lineage, appeals and as scholar Rudraksh Lakra calls it – 'digital structural authoritarianism'.

Role of the Court

When the basic structure of a democracy is directly attacked by the executive, the kind of response by the Court – a counter-majoritarian institution – deserves serious study. When a politically aggressive state battles the powerless individual with the entire state machinery at its disposal, one looks at the Court, equipped with the constitutional tools to limit state power.

The Bihar SIR case was adjudicated by the Bench led by the CJI on May 27, 2026. However, this decision came long after the election was over. The Court also has a disappointing history of postponing the final decision in cases after the state action in question has been already operated or implemented.

Therefore, as in the cases challenging demonetisation (2016) and the abrogation of the special status of Jammu and Kashmir, by the time the legality of the SIR was decided, it had become a *fait accompli*. This is the primary failure of the Court – not determining the dispute when time is of the essence.

Second, the way in which the Court oversaw the process was problematic. Unlike the cases where executive action is under judicial scrutiny, in the Bihar SIR, the Court actively involved itself and facilitated the so-called revision that led to deletion of several lakhs of voters. By virtue of several interim orders and a multitude of directions, the Court effectively administered the process. One finds a clear judicial abetment to the electoral process making it a collaborative exercise – quite unprecedented in the country's history. The Court's nature shifted from a forum of judicial review to an administrative body.

Third, the ex-post facto endorsement. In the Bihar SIR case, it was nevertheless crucial how the Court would substantively conceptualise the dispute. This was also determinative for other State elections, particularly in Assam and West Bengal. One could frame the narrative in either of two ways: first, as a technical question concerning the competence and powers of the ECI; and second, as a question of deprivation of rights.

In formulating the questions themselves, the

Court leaned towards the former rather than the latter. Barring a singular question on proportionality and legitimacy, all other issues were misidentified. This is why there is no effective deliberation on the legality of the process, particularly with regard to its vagueness and lack of reasoning. The disproportionate administrative demand for (often impossible) paperwork, rigid time limits, and the discriminatory impact on minorities, women, and the migrant population were overlooked. In the adjudicatory exercise, there was no appreciation of the social realities of illiteracy, poverty and lack of institutional access for a substantial number of voters. Ultimately, the Court decided in favour of the ECI on all the issues.

Judicial accountability

Long ago, the liberal thinker Murray Rothbard, relying on the scholar Charles Black, noted that: "the state has largely transformed judicial review itself from a limiting device to yet another instrument for furnishing ideological legitimacy to the government's actions." In his classic work, *The Politics of the Judiciary* (1977), J.A.G. Griffith also exposes the judiciary's natural inclination towards the political branches of the state.

The Indian Supreme Court is one of the most powerful institutions in the world. Many decisions of the Court seemingly involving legal questions are essentially political questions. Therefore, it is necessary for the political Opposition to evaluate and criticise the fundamental aberrations in the judicial realm. This is part and parcel of the function of the Opposition, in today's critical times.

Manufacturing endorsements to support continuing executive excesses is symptomatic of any authoritarian regime. It is important to recognise that India is evolving into a system in which institutions have lost neutrality, as acknowledged by the Leader of the Opposition in the Lok Sabha, Rahul Gandhi, in his speech at the recent INDIA bloc convention.

It is also becoming clearer that any radical change in the polity through the judicial process is unlikely. There is a recent global trend of expanding oppositional politics beyond conventional methods to people's movements. India's democracy must embrace such political imagination.

- SIR of electoral rolls is exclusionary and burdensome for ordinary citizens.
- ECI's process creates anxiety and disenfranchisement.

- Voting is a powerful act for marginalised citizens.
- Denial of vote = denial of dignity and political identity.

- Court failed to act as a real check on executive overreach.
- Discriminatory impact on minorities, women & migrants ignored.

- Court delayed decision till after elections.
- Actively involved in the process; became an administrative body.

- Ex-post facto approval legitimised the flawed process.
- Issues framed as technical instead of rights-based.

- Lack of deliberation on legality, vagueness, lack of reasoning.
- Disproportionate demands and rigid timelines overlooked.

- SC is a powerful institution; many "legal" decisions are political in nature.
- Judicial accountability is essential in a democracy.

- Endorsement of executive excesses = sign of authoritarian drift.
- Institutions losing neutrality.

- Radical change unlikely through judiciary alone.
- Democracy needs people's movements and political imagination.



FROM THE ARCHIVES

Know your English

S. Upendran

What is the meaning and origin of the expression “at the drop of a hat”? (D. Gundu Rao, Bangalore)

When you say that you are willing to do something at the drop of a hat, it means that given the opportunity, you are willing to do it immediately. It is not necessary for anyone to urge you to do it. The task is something that you want to do and you needn't be told twice to do it. Here are a few examples.

Kamath was willing to help me with my homework at the drop of a hat.

I would go to Arunachal Pradesh at the drop of a hat.

According to some scholars, this idiom originated in the U.S. During the days of the wild west, boxing contests were very popular – I guess this explains why Las Vegas hosts many of the bouts even today. During the early days however, bells were not used to inform the fighters when to begin their bout. Instead a hat or a cap was used. The referee, or the man who was getting the show on the road, raised his hat high and then he dropped it. The dropping of the hat signalled to the boxers that they could get on with the fight. And the boxers went about their business immediately; they didn't wait for a second invitation. The same signalling system was used in horse racing as well. As soon as the man at the starting gate lowered his hat or dropped it, the jockeys immediately spurred their horses on.

Is it OK to say “Have you married your daughter?” (K. R. Manohara, Chitradurga)

Grammatically there is nothing wrong with the sentence; but no one actually goes about marrying his own daughter. If the meaning that you wish to convey is “Have you got your daughter married?” then the question you should ask is “Have you married off your daughter?” The expression you are looking for is “married off”. When you marry off your son or daughter, you find a suitable partner for him/her. Here are a few examples.

Radha's parents married her off to a rich old man.

The greedy parents wanted to marry him off to a princess.

What is the difference between “egotist” and “egoist”? (K. Narayan, Madurai)

The words “egotist” and “egoist” are often used interchangeably, but there is a subtle difference in meaning between the two.

An “egotist” is an “I” specialist; he keeps talking about himself all the time. He

makes sure that the conversation revolves around him. We have another name for such a person; we usually call him a “bore”. An “egoist” is interested in promoting his cause as well, but unlike the “egotist”, he may not talk about himself all the time. He is much more cunning; he may get what he wants through devious means. He is not a boaster like the “egotist”; in fact, he may deliberately avoid boasting if he thinks that it will jeopardise his advancement.

An egoist is very selfish; he treats self-interest as the foundation of morality.

An egotist, though boastful, need not be selfish. Here are a few examples.

The egotist decided to become a politician.

There was a heated argument when Sandeep accused his wife of being an egoist.

Published in The Hindu on April 3, 2001

- “At the drop of a hat” = immediately; willingly; without being asked twice.
- **Origin:** U.S. Wild West boxing & horse racing.
- **Signal to start:** Referee/Starter drops hat → action begins instantly.
- **Key idea:** Readiness + Immediate response.

- **Correct Expression:** “Have you married off your daughter?”
- “Married off” = arrange a suitable partner for son/daughter.
- Word ‘off’ implies transfer of responsibility.
- **Grammar** may be correct, but usage should be appropriate.

- “Egotist” = talks about self; “I” specialist; boastful; conversation revolves around him.
- “Egoist” = self-centred; promotes own cause; may be cunning; not necessarily boastful.
- Egotist ≠ always selfish; Egoist = always selfish.
- Both derive from ‘ego’ but differ in behaviour.

Idiom Use Examples

- ✓ I will finish this project at the drop of a hat.
- ✓ He agreed to help at the drop of a hat.
- ✓ She married off her daughter last year.
- ✓ The parents married their son off to a doctor.
- ✓ The egotist kept praising himself.
- ✓ The politician is an egoist; he thinks only of power.

- **Useful for:** Essay (Society), Ethics (Selfishness, Morality), Language Paper, Interview
- **Themes:** Responsiveness, Social Norms, Language Precision, Human Behaviour
- **Related Concepts:** Idioms & Phrases, Semantics, Usage, Cultural Context

Quick Revision

- At the drop of a hat → Immediate willingness
- Origin linked to hat-dropping signal (boxing/racing)
- Married off → Appropriate & correct usage
- Egotist → Talks about self
- Egoist → Self-interested; may be cunning

14 July 2026

Can biogas aid India's energy security?

India, which imports nearly 85% of its crude oil needs, remains vulnerable to global energy shocks. Over the years, it has pushed several initiatives to promote compressed biogas. Despite these efforts, progress has been limited; government support and incentives could provide a boost to the sector

EXPLAINER

V. Nivedita

Tensions in West Asia continue to keep global energy markets on edge. India imports nearly 85% of its crude oil needs, much of it from West Asia, and supplies faced disruptions due to the Israel-U.S.-Iran war. While the government has diversified its crude oil suppliers, around 90% of India's LPG imports still transit through the Strait of Hormuz, making any instability in the region a potential risk to India's energy security.

Over the years, India has pushed several initiatives to promote alternate fuels like compressed biogas to reduce dependence on imported fuel, tackle agricultural waste and support rural incomes. But despite ambitious targets and policy support, progress has remained limited.

The search for an alternative fuel

Biogas is a mixture of methane, CO₂ and small quantities of other gases produced by anaerobic digestion of organic matter. It can be processed and compressed to get Compressed Biogas (CBG). It is chemically identical to CNG; renewable, carbon-neutral and can be produced from waste. It can be used directly to produce electricity, heating or as an energy source for cooking.

India has also been trying to blend biogas into its gas supply for at least a decade. The push gathered pace in 2018, when the Sustainable Alternative Towards Affordable Transportation (SATAT) initiative was launched with a target of establishing 5,000 plants by 2023. Only 132 are completed as of June 3, 2026.

The Centre launched the GOBARdhan (Galvanising Organic Bio-Agro Resources Dhan) scheme to increase CBG production. Under this 'waste to wealth' programme, the government offered grants of up to ₹1.5 crore per project for



A biogas plant at the Waste-to-Energy unit in Koramangala in Bengaluru. J. ALLEN EGENUSE

community biogas plants. ₹564 crore was earmarked for the purchase of biomass collection machinery, while ₹394 crore was allocated to build pipelines connecting biogas plants directly to the gas grid.

However, progress on the ground has remained limited. The lack of infrastructure, poor private investment, difficulties in accessing formal credit and high upfront cost of technologies have stalled progress. Financial support from the government can make biogas projects economically viable. Other incentives, like accelerated depreciation and tax holidays, would also help attract private players.

Impact on cultivation patterns

The development of biogas has been uneven across the world, with Europe, China and the United States accounting for 90% of global production.

Germany is one of the largest producers in Europe, along with France, Denmark and the U.K. The fillip for the sector came in 2000, when Germany introduced the Renewable Energy Sources Act to promote biogas production.

Over the years, it introduced schemes to guarantee income to producers, gave bonuses to help operators increase their income and encouraged small-scale biogas plants. However, the country's push for biogas triggered a "corn mania", with maize cultivation rising sharply because it was highly profitable for farmers. Maize slowly started to replace other food crops. Over a decade later, the government was forced to step in and control this by introducing a cap on the use of maize in biogas plants.

This danger hits close to home. The Economic Survey 2026 noted that maize cultivation in India has increased sharply, potentially affecting crop diversity and food security. It noted that while the national maize yield increased from approximately 2.56 tonnes per hectare in FY16 to roughly 3.78 tonnes per hectare by FY25, the yields for soybeans, sunflower, rapeseed, peanuts and millets, among other crops, have either stagnated or declined.

While this trend could be attributed to technological advancements, ethanol pricing can be an important factor.

per-litre ethanol prices based on the feedstock used. The price for maize-based ethanol is higher, while the price for rice-based ethanol is lower. The price for molasses-based ethanol is fixed between the two. Between FY22 and FY25, the administered price of maize-based ethanol grew at a compound annual growth rate (CAGR) of 11.7%, making maize more lucrative for farmers.

While maize's area under cultivation and production jumped between FY22 and FY25, pulses output declined, while oilseeds and other cereals registered only modest growth.

India imports large quantities of pulses and edible oils to meet demand. Yet, instead of focusing on increasing production, the government's policy might inadvertently disincentivise farmers from cultivating them. Over time, this could increase India's dependence on imports and expose domestic food prices to greater volatility during supply shocks.

Denmark, which is targeting to use only biomethane in its gas system by 2030, offers a solution. The government discouraged the use of crops as feedstock, and the primary source is livestock manure and agricultural waste.

Government's action plan

In 2023, the National Biofuels Coordination Committee approved a mandatory blending obligation. Gas distributors have been mandated to blend CBG into their supply from FY26. It would start at 1% and rise to 5% by FY29. In her Budget speech in February 2024, Finance Minister Nirmala Sitharaman said the phased blending of CBG in CNG for transport and Piped Natural Gas for domestic purposes "will be mandated."

To meet these targets, the government is ramping up the establishment of plants.

The question is whether the government can replicate India's ethanol blending programme with CBG. In 2014, just 1.5% of petrol was blended with ethanol. By December 2025, it had hit 20%, five years ahead of the original 2030

- India imports ~85% crude oil
- 90% LPG imports via Strait of Hormuz
- Instability = risk to energy security

- Biogas = methane + CO₂
- Produced by anaerobic digestion
- Upgraded & compressed = CBG
- Like CNG; renewable, carbon-neutral
- Used for electricity, cooking, heating, transport

- SATAT: Target 5,000 plants by 2023, only 132 completed till 3 June 2026
- GOBARdhan scheme: Grants up to ₹1.5 crore per project
- ₹564 cr for machinery; ₹394 cr for pipeline to gas grid

- Key Challenges: Lack of infrastructure, high cost, poor private investment, credit access, tech barriers
- Incentives needed: Financial support, tax holidays, accelerated depreciation

- Global production: Europe, China, USA = 90%
- Germany boosted biogas with income guarantee, bonuses, small-scale plants
- "Corn mania" led to maize over-cultivation → capped

- Risks in India: Maize rise → affects crop diversity & food security
- Pulses output declined; oilseeds & cereals low growth
- Higher imports → price volatility

- Policy: CBG blending mandate 1% (FY26) → 5% (FY29)
- FM: "Phased blending of CBG in CNG & PNG will be mandated"
- Govt ramping up plant establishment

- Learn from Denmark: Uses livestock manure & agri waste
- Focus on waste-based feedstock, not food crops
- Diversify feedstock for sustainable growth

1 ईरान के लिए होर्मुज जलडमरूमध्य: निवारण और प्रभुत्व की कुंजी



- अमेरिका-ईरान समझौता कमजोर; सुराभिन पर विवाद।
- प्रतिदिन ~20 मिलियन बैरल तेल का परिवहन (2025)।
- 112 अरब घन मी. LNG तथा ~30% उर्वरक व्यापार पास होता है।
- ईरान इसे रणनीतिक निवारण और दबाव के साधन के रूप में देखता है।
- अमेरिका ओमान तट के वैकल्पिक मार्ग को बढ़ावा दे रहा है।
- वैश्विक ऊर्जा सुरक्षा और कीमतों के स्थिरता के लिए महत्वपूर्ण।

होर्मुज जलडमरूमध्य • ऊर्जा सुरक्षा • व्यापार
GS II (IR) • GS III (ऊर्जा) • समुद्री सुरक्षा

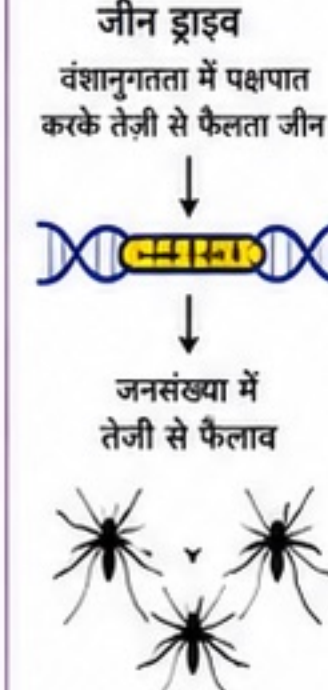
2 लाल सागर: पश्चिम एशिया और आफ्रीका के सींग के बीच कड़ी



- भूमध्य सागर को बाब-अल-मंदेब के माध्यम से हिंद महासागर से जोड़ता है।
- स्वेज़ नहर के कारण यूरोप-एशिया व्यापार के लिए महत्वपूर्ण मार्ग।
- तेल, LNG और कंटेनर शिपिंग के लिए अत्यंत रणनीतिक।
- तटीय देश: मिस्र, सूडान, एरिट्रिया, जिबूती, सऊदी अरब, यमन।
- अस्थिरता, समुद्री सुरक्षा, यूरोपीय शक्तियों की प्रतिस्पर्धा बढ़ी।
- भारत के व्यापार, ऊर्जा आयात और SAGAR दृष्टि के लिए महत्वपूर्ण।

लाल सागर • बाब-अल-मंदेब • स्वेज़ नहर
GS I (भूगोल) • GS II (IR) • GS III (सुरक्षा)

3 जीन ड्राइव: उपचार और अव्यवस्था के बीच प्रतिस्पर्धा



- जीन ड्राइव वंशानुगतता में पक्षपात करके तेज़ी से फैलता जीन
- CRISPR-Cas9 तकनीक जीन में सटीक परिवर्तन संभव बनाती है।
- जीन ड्राइव विरासत में पक्षपात कर जीन को तेज़ी से फैलाता है।
- मच्छर-जनित रोगों के निवृत्तन की बड़ी संभावना।
- पारिस्थितिक तंत्र में व्यवधान का जोखिम।
- प्रभाव अपरिवर्तनीय और व्यापक हो सकता है।
- सख्त जैव सुरक्षा, विनियमन और सामुदायिक सहमति आवश्यक।

जीन ड्राइव • CRISPR • जैव सुरक्षा • जैव-नैतिकता
GS III (S&T) • जैव प्रौद्योगिकी

4 लोकतांत्रिक तनाव के बीच न्यायालय को जवाबदेह बनाना



- न्यायिक स्वतंत्रता और जवाबदेही एक-दूसरे की पूरक।
- वैधता का स्रोत: तर्कसंगत निर्णय, पारदर्शिता और संवैधानिक नैतिकता।
- सूचित आलोचना स्वीकार्य, पर संस्थागत स्वतंत्रता पर आघात नहीं।
- लंबित मामलों, नियुक्तियों में देरी और सार्वजनिक अविश्वास चुनौतियाँ।
- पारदर्शी नियुक्तियों, समयबद्ध निपटान, सुलभ न्याय को बढ़ाना जरूरी।
- संस्थाओं के बीच संविधानिक मर्यादा लोकतंत्र की मजबूती का आधार।

अनुच्छेद 32, 141, 142 • मूल संरचना सिद्धांत
GS II (राजव्यवस्था) • GS IV (नैतिकता) • न्यायपालिका

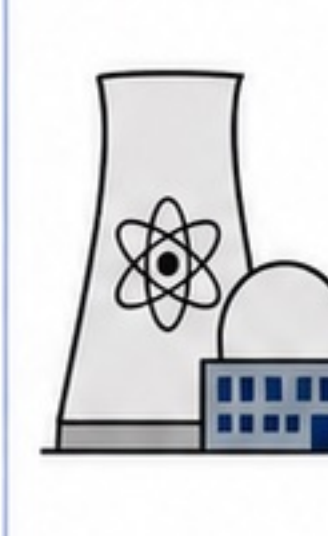
5 असुरक्षित प्रथाएँ (संपादकीया)



- वियतनाम में स्पीडबोट दुर्घटना में कई भारतीय पर्यटकों की मृत्यु।
- अचानक वजन का झुकाव और खराब मौसम से नाव पलटी।
- लाइफ जैकेट न पहनना और सुरक्षा नियमों की अनदेखी।
- नाव संचालन और आपात प्रतिक्रियाओं में कमियाँ।
- सुरक्षा प्रोटोकॉल, SOP और नियमित निरीक्षण जरूरी।
- पर्यटन के साथ सुरक्षा मानकों की समानांतर मजबूती अनिवार्य।

सुरक्षा प्रोटोकॉल • SOP • आपदा तैयारी • जन सुरक्षा
GS II (शासन) • GS III (आपदा प्रबंधन)

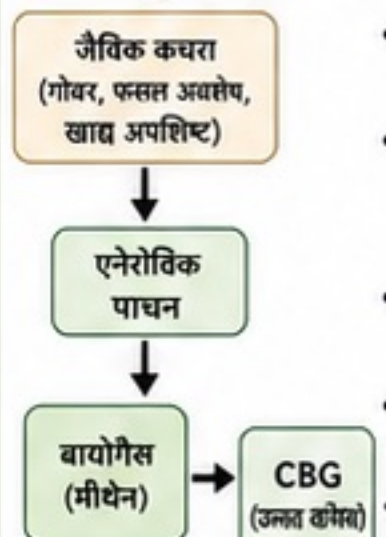
6 भारत की नाभिकीय ऊर्जा विकास के लिए सही मार्ग



- नाभिकीय ऊर्जा विश्वसनीय बेसलोड, कम कार्बन उत्सर्जन वाला स्रोत।
- SMR और उन्नत रिएक्टर भविष्य का समाधान हैं।
- भारत की तीन-चरणीय नाभिकीय कार्यक्रम की प्रगति।
- चुनौतियाँ: उच्च लागत, अपशिष्ट प्रबंधन, सुरक्षा, सार्वजनिक धारणा।
- मजबूत नियामक ढांचा, स्वदेशी तकनीक और कौशल विकास जरूरी।
- ऊर्जा सुरक्षा और नेट-जीरो लक्ष्य के लिए नाभिकीय ऊर्जा महत्वपूर्ण।

PHWR • SMR • थोरियम • बेसलोड पावर
GS III (ऊर्जा) • अवसंरचना • पर्यावरण

7 क्या बायोगैस भारत की ऊर्जा सुरक्षा में मदद कर सकती है?



- पशु अपशिष्ट, फसल अवशेष और नगर अपशिष्ट से बायोगैस बनती है।
- उन्नत कर CBG बनाया जाता है, LPG/CNG/औद्योगिक ईंधन के रूप में उपयोगी।
- SATAT, GOBARdhan और राष्ट्रीय बायोएनर्जी कार्यक्रम महत्वपूर्ण।
- मीथेन उत्सर्जन में कमी और पराली जलाने की रोकथाम में मदद।
- किसानों की आय, ग्रामीण रोजगार और अपशिष्ट प्रबंधन में लाभ।
- चुनौतियाँ: फ्रीडस्टॉक, वित्तीय व्यवहार्यता, अवसंरचना, बाज़ार का विकास।

SATAT • GOBARdhan • CBG • जैव ऊर्जा
GS III (ऊर्जा) • पर्यावरण • ग्रामीण अर्थव्यवस्था

8 भारत-ऑस्ट्रेलिया यूरेनियम आपूर्ति समझौता क्या है?



- ऑस्ट्रेलिया से यूरेनियम निर्यात के लिए प्रशासनिक व्यवस्थाएँ तय।
- केवल शांतिपूर्ण उपयोग के लिए और IAEA सुरक्षा उपायों के तहत।
- भारत के नाभिकीय ऊर्जा विस्तार को समर्थन।
- भारत की ईंधन सुरक्षा और आयात स्रोतों का विविधीकरण।
- भारत-ऑस्ट्रेलिया व्यापक रणनीतिक साझेदारी को मजबूती।
- नागरिक नाभिकीय सहयोग ढांचे का सतत विकास।

यूरेनियम • IAEA • NSG छूट (2008)
GS II (IR) • GS III (ऊर्जा) • परमाणु सहयोग

9 आनुवंशिक इतिहास बताता है कि कुछ भाषाएँ इतनी अनूठी क्यों हैं



- अध्ययन में मानव आनुवंशिकी और भाषाई विविधता के संबंध का विश्लेषण।
- प्रवास पैटर्न जीन और भाषाओं दोनों में परिलक्षित होते हैं।
- भौगोलिक अलगाव और सामाजिक संघर्ष भाषा विविधता को प्रभावित करते हैं।
- जीन भाषा को निर्धारित नहीं करते; संस्कृति और इतिहास प्रमुख कारक।
- लुप्तप्राय भाषाओं के संरक्षण के लिए महत्वपूर्ण संकेतक।
- मानव विकास, प्रवास और सांस्कृतिक विविधता की समझ बढ़ती है।

भाषाई विविधता • मानव प्रवास • संस्कृति
GS I (समाज) • GS III (मानवशास्त्र)

QUICK NEWS

- नागरिकता से जुड़े निर्णय निष्पक्ष और कानूनसम्मत हों: सुप्रीम कोर्ट
- खुदरा मुद्रास्फीति RBI लक्ष्य से ऊपर 4.4% पर पहुँची
- सुप्रीम कोर्ट ने मदास हार्ड कोर्ट के गौ-हत्या प्रतिबंध आदेश पर रोक लगाई
- दक्षिणी पश्चिमी घाट में हाथियों की आवाजाही पर वर्षा का बड़ा प्रभाव
- लद्दाख के सभी जिलों में स्वायच पहाड़ी परिषदें बनेंगी
- भारत और जापान ने रक्षा सहयोग की समीक्षा की; 2+2 संवाद की तैयारी
- नाभिकीय अपशिष्ट जल को फ़िल्टर करने का कुशल तरीका खोजा गया
- OpenAI ने भारत में ChatGPT के लिए 'वर्क एजेंट' लॉन्च किया
- रूस जुलाई मध्य तक सीरिया में लॉजिस्टिक्स हब शुरू करना चाहता है

PRELIM FACTS

- होर्मुज जलडमरूमध्य फारस की खाड़ी को ओमान की खाड़ी से जोड़ता है।
- बाब-अल-मंदेब लाल सागर को अदन की खाड़ी से जोड़ता है।
- स्वेज़ नहर भूमध्य सागर को लाल सागर से जोड़ती है।
- बायोगैस में मुख्यतः मीथेन (CH₄) और कार्बन डाइऑक्साइड होते हैं।
- CBG को उन्नत कर ईंधन के रूप में उपयोग किया जाता है।
- CRISPR-Cas9 जीन संपादन की अत्याधुनिक तकनीक है।
- ऑस्ट्रेलिया के पास विश्व के सबसे बड़े ज्ञात यूरेनियम भंडार हैं।
- भारत को NSG छूट वर्ष 2008 में नागरिक नाभिकीय व्यापार हेतु मिली।
- IAEA का कार्य शांतिपूर्ण उद्देश्यों के लिए नाभिकीय सामग्री की सुरक्षा सुनिश्चित करना है।

VOCABULARY

- निवारण — प्रतिद्वंद्वी को संभावित आक्रमण से रोकने की क्षमता या रणनीति।
- चोकपॉइंट — संकीर्ण समुद्री/भौगोलिक मार्ग जिसका व्यापार के लिए अत्यधिक महत्व हो।
- जैव सुरक्षा — जैविक जोखिमों और उनके प्रसार से संरक्षण के उपाय।
- पारदर्शिता — सूचना और निर्णय प्रक्रिया की खुली और स्पष्ट उपलब्धता।
- सततता — वर्तमान आवश्यकताओं को पूरा करते हुए भविष्य की आवश्यकताओं को सुरक्षित रखना।

1. STRAIT OF HORMUZ: KEY TO DETERRENCE & DOMINANCE



- Dispute over safe passage clause in U.S.–Iran MoU.
- ~20 million barrels oil/day transit through Hormuz.
- ~112 bcm LNG and ~30% of fertiliser trade also pass.
- Iran sees control as strategic deterrent & leverage.
- U.S. seeks alternate routes along Oman's coast.
- Crucial for global energy security & price stability.

Checkpoint • Energy Security • Trade
GS II (IR) • GS III (Energy) • Maritime Security

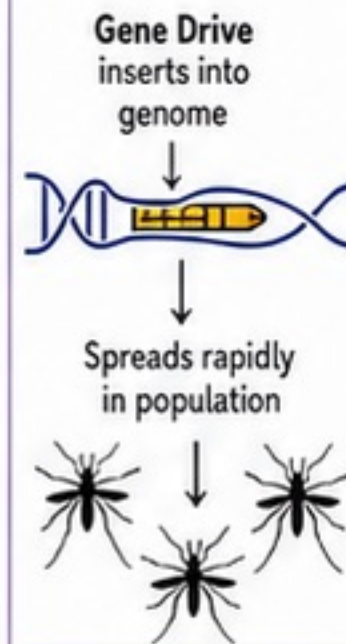
2. RED SEA: HINGE BETWEEN WEST ASIA & HORN OF AFRICA



- Connects Mediterranean to Indian Ocean via Suez Canal & Bab-el-Mandeb.
- Vital route for oil, LNG & global container trade.
- Coastal states: Egypt, Sudan, Eritrea, Djibouti, Saudi Arabia, Yemen.
- Attracts global naval presence & strategic competition.
- Instability in West Asia impacts Horn of Africa.
- Key for India's trade & maritime security.

Suez Canal • Bab-el-Mandeb • Maritime Trade
GS I (Geo) • GS II (IR) • GS III (Security)

3. GENE DRIVES: CONTEST BETWEEN CURE & CHAOS



- Gene drives bias inheritance & spread a gene rapidly.
- Built using CRISPR-Cas9 technology.
- Potential for controlling mosquito-borne diseases.
- Risks: ecological disruption, resistance, irreversible spread.
- Need robust biosafety, regulation & community consent.
- WHO & global bodies advocate phased testing.

Gene Drive • CRISPR • Biosafety
GS III (S&T) • Bioethics • Biotechnology

4. HOLDING THE COURT ACCOUNTABLE AMID DEMOCRATIC STRAIN



- Judicial independence and accountability are complementary.
- Courts derive legitimacy from reasoned judgments, transparency & morality.
- Public criticism valid but should respect autonomy.
- Delays, appointments & scrutiny challenge credibility.
- Strengthen ethics, technology use & timely disposal.
- Healthy democracy needs strong yet accountable courts.

Art 32 • 141 • 142 • Basic Structure
GS II (Polity) • GS IV (Ethics) • Judiciary

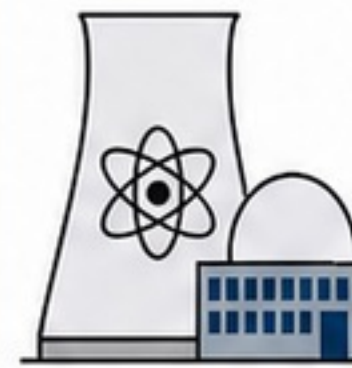
5. UNSAFE PRACTICES (EDITORIAL)



- Vietnam speedboat tragedy killed many Indian tourists.
- Weight shift & rough weather caused capsizing.
- Life jackets not worn; safety norms ignored.
- Need strict compliance with boating regulations.
- Mandatory life jackets, seating discipline & safety briefings.
- Tourism growth must match safety standards.

Safety Protocols • SOPs • Disaster Preparedness
GS II (Gov) • GS III (DM) • Public Safety

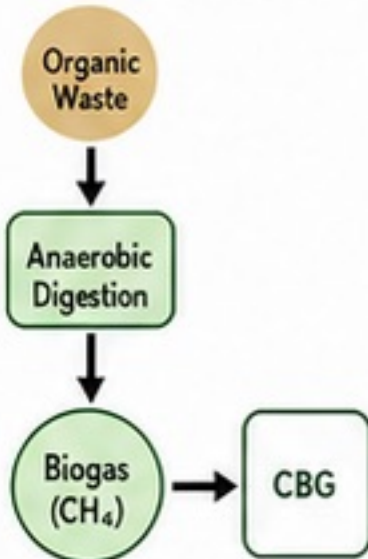
6. RIGHT PATH FOR INDIA'S NUCLEAR POWER DEVELOPMENT



- Nuclear offers reliable baseload, low-carbon power.
- India's 3-stage programme & PHWR strength.
- Focus on indigenous tech, SMRs & advanced reactors.
- Challenges: high cost, waste management, safety.
- Strengthen regulation, skilling & public trust.
- Key for energy security & net-zero transition.

PHWR • SMR • Thorium • Baseload Power
GS III (Energy) • Environment • Infrastructure

7. CAN BIOGAS AID INDIA'S ENERGY SECURITY?



- Biogas from dung, crop residue, food & MSW.
- Upgraded to CBG for CNG, LPG & industrial use.
- Cuts fuel imports and reduces methane emissions.
- SATAT, GOBARdhan & National Bioenergy Programme.
- Challenges: feedstock, viability & infra.
- Promote decentralized plants & farmer participation.

SATAT • GOBARdhan • CBG • Circular Economy
GS III (Energy) • Environment • Rural Economy

8. INDIA-AUSTRALIA URANIUM SUPPLIES AGREEMENT



- Administrative arrangements finalised for uranium export.
- For peaceful uses under IAEA safeguards.
- Supports India's nuclear energy expansion.
- Diversifies uranium sources & enhances fuel security.
- Strengthens India-Australia strategic partnership.
- Civil nuclear cooperation framework continues.

Uranium • IAEA • NSG Waiver 2008
GS II (IR) • GS III (Energy) • Nuclear Cooperation

9. GENETIC HISTORY REVEALS WHY SOME LANGUAGES UNIQUE



- Study links human genetic history with language diversity.
- Migration patterns reflect in both genes & languages.
- Geography, isolation & social interaction shape languages.
- Correlation exists but not always together.
- Emphasises culture, not genetic determinism.
- Important for preserving linguistic diversity.

Linguistic Diversity • Migration • Culture
GS I (Society) • GS III (Anthropology)

QUICK NEWS

- Citizenship rulings must be 'fair, lawful': SC**
Tribunals must follow due process; Art 14 & 21 apply.
- Retail inflation climbs past RBI target to 4.4%**
Driven by food, fuel prices & uneven monsoon.
- SC stays Madras HC order banning cow slaughter**
Slaughter must follow law & designated facilities.
- Rainfall impacts elephant movement in Western Ghats**
Affects migration routes; important for corridors.
- All Ladakh districts to get autonomous hill councils**
Strengthens local self-governance.
- India, Japan review defence ties; prep for 2+2 dialogue**
Focus on Indo-Pacific cooperation.
- Study finds efficient way to filter nuclear wastewater**
New MOF method improves tritium separation.
- OpenAI launches work agent in ChatGPT in India**
AI productivity tools for enterprises.
- Russia eyes mid-July start for Syria logistics hub**
Strategic engagement in West Asia continues.

PRELIM FACTS

- Strait of Hormuz links Persian Gulf with Gulf of Oman.
- Bab-el-Mandeb connects Red Sea with Gulf of Aden.
- Suez Canal links Mediterranean Sea with Red Sea.
- Biogas mainly contains Methane (CH₄) and CO₂.
- CBG is upgraded biogas used as transport & industrial fuel.
- CRISPR-Cas9 is a genome-editing technology.
- Australia has the world's largest known uranium reserves.
- India received NSG waiver in 2008 for civil nuclear trade.
- IAEA safeguards ensure peaceful use of nuclear materials.

VOCABULARY

- Deterrence** — Preventing hostile actions by credible capability
- Checkpoint** — Strategic narrow passage vital for trade/security
- Biosafety** — Protection from biological risks or harm
- Accountability** — Answerability for decisions and actions
- Resilience** — Capacity to recover quickly from adversity