

01/05/2024

TOPICS COVERED

1. **Microbes, not fossil fuels, produced most new methane: study** (GS Paper III: Environment, S&T)
2. **Shivering produces heat to keep you warm** (GS Paper III: Basic Science)
3. **Make EPI an 'Essential Programme on Immunisation'** (1 May) (GS Paper I: Health Sector)
4. **The need for the use of labour statistics** (GS Paper III: Industry and Labour Relation)
5. **Competition, conflict** (GS Paper II: IR)
6. **Street Vendors Act** (GS Paper III: Employment)
7. **Cost of meals rose by 71% in five years, salaries by just 37%** (GS Paper III: Inflation)
8. **About the redistribution of wealth** (GS Paper III: Inflation)
9. **Core sectors slid 5.2% in March** (GS Paper III: Industry)
10. **SEBI board approves changes to mutual fund regulations** (Regulatory Bodies)

Enforcement Directorate (ED) (GS Paper II: Regulatory Authorities)

- The ED enforces laws designed to protect the integrity of the Indian economy.
- It receives administrative support from the Department of Revenue, while policy matters fall under the Department of Economic Affairs.
- **Formed in 1956** as the 'Enforcement Unit' under the Department of Economic Affairs.

Primary Responsibilities

1. **Prevention of Money Laundering Act, 2002 (PMLA):** The ED's core focus is on investigating and adjudicating money laundering offenses. This involves:
 - Investigating suspicious financial transactions
 - Attaching assets derived from illegal activities
 - Prosecuting offenders
2. **Foreign Exchange Management Act, 1999 (FEMA):** The ED enforces civil provisions of FEMA, aimed at regulating foreign exchange transactions and promoting the orderly development of India's foreign exchange market. Investigations include:
 - Contraventions of foreign exchange rules and regulations
 - Hawala transactions (illegal money transfers)

Headquarters: New Delhi, India

Come clean on timing of Kejriwal arrest: SC to ED (GS Paper III: Internal Security)

Prevention of Money Laundering Act (PMLA) in 2002

- India used FATF recommendations to formulate its own legislation, resulting in the Prevention of Money Laundering Act (PMLA) in 2002.
- The PMLA primarily targeted the laundering of drug money, reflecting the focus of UN resolutions and FATF recommendations.
- The Act contained offenses outlined in the Indian Penal Code (IPC) and the Narcotic Drugs and Psychotropic Substances Act, 1985.
- The PMLA evolved over time through amendments, deviating from its original focus on drug money laundering.
- The Prevention of Money Laundering Act (PMLA) targets the laundering of "crime proceeds," which includes funds derived from criminal activities.
- Individuals involved directly in the crime, as well as those who participate in the laundering process later on, can be held accountable under this law.
- However, the PMLA now includes a wide range of offenses in its schedule that go beyond its original purpose, extending to crimes unrelated to drug money laundering.
- Despite its expanded scope, the fundamental objective of the PMLA remains rooted in addressing the significant threat posed by the laundering of illicit funds from the international drug trade, which has the potential to destabilize the global economy and compromise national sovereignty.

The PMLA's enactment

- The Prevention of Money Laundering Act (PMLA) was enacted by India's Parliament under Article 253, which allows laws to implement international conventions.
- Article 253 restricts such laws to the subject matter of the international decision, as specified in Item 13 of the Union list of the Constitution.
- Originally, the PMLA focused on combating money laundering related to drug trafficking, as per the UN resolution.
- However, amendments to the PMLA expanded its scope, including offenses beyond drug-related crimes, such as those listed in the Indian Penal Code (IPC) or covered by special laws.
- For example, the Prevention of Corruption Act, 1988, aimed at addressing corruption among public servants, was added to the PMLA's schedule in 2009.
- Under the PMLA, accused individuals are presumed guilty until proven innocent, contrary to the fundamental principle of Anglo-Saxon jurisprudence.

- Bail provisions in the PMLA make it difficult for accused individuals to obtain bail, as judges can only grant bail if they are convinced of the accused's innocence, leading to prolonged detention without trial.

The Bail Provision

- The bail provision of the Prevention of Money Laundering Act (PMLA) Act, Section 45, has significant political implications in present-day India.
- It was initially deemed unconstitutional by a two-judge Bench of the Supreme Court in *Nikesh Tarachand Shah vs Union of India (2018)* for violating Article 14 and Article 21.
- However, Parliament swiftly reinstated this provision with amendments, which was later upheld by a three-judge Bench led by Justice A.M. Khanwilkar in *Vijay Madanlal Choudhary vs Union of India (2022)*.
- The Supreme Court ruled that this provision is reasonable and aligns with the objectives of the PMLA Act, which aims to combat money laundering and safeguard the economy from destabilization.
- Despite the Act's original purpose, it includes less serious offenses in its schedule, a decision considered within the legislative policy domain.
- The current judicial approach to bail in PMLA cases is seen as technical, with a departure from the perspective laid out by Justice V.R. Krishna Iyer in 1978.
- Justice Iyer emphasized the importance of personal liberty under Article 21 of the Constitution and urged a cautious and judicial exercise of curial power concerning bail decisions.
- The evolution of the Supreme Court's stance on bail from Justice Iyer to Justice Khanwilkar reflects a significant journey.

Mount Ruang Volcano

- **Location:** Sangihe Islands, North Sulawesi province, Indonesia.





Mount Ruang Volcano

- **Elevation:** 725 meters (2,378 feet)
- **Type:** Stratovolcano (cone-shaped with multiple layers of hardened lava, ash, and rocks)
- **Recent Activity:** Mount Ruang is one of Indonesia's most active volcanoes. It is currently erupting with frequent ash emissions and occasional lava flows.
- **Impact:**
 - Disruptions to air travel due to volcanic ash clouds in the vicinity.
 - Periodic evacuations of nearby island communities when activity intensifies.
 - Formation of a lava dome within the summit crater.
 - Volcanic ash clouds affecting aviation.

History of Eruptions

Mount Ruang has a long history of frequent eruptions. Documented activity dates back to the 1800s, with significant eruptions in recent decades, including:

- **2002:** Major eruption led to evacuations.
- **2023-2024:** Ongoing eruptive period with several significant events causing ashfall and travel disruptions.

Microbes, not fossil fuels, produced most new methane: study (1 May)

- He uses a supercomputer, approximately the size of an auditorium, to recreate the last 50 years of the Earth's atmosphere.
- Chandra's research team focused on the concentration of methane in the atmosphere from 2019 to 2020.
- They observed that methane concentration increased until the 1990s, stabilized briefly, then began rising again around 2007.
- **Recent estimates suggest that atmospheric methane concentration is three times higher today compared to 300 years ago.**

- The researchers are investigating the source of this increased methane concentration in the atmosphere.

Evolving understanding

- Methane is the second most prevalent human-caused greenhouse gas after carbon dioxide (CO₂), but it has a stronger warming effect on the planet.
- Over a century, methane's global warming potential is 28 times greater than CO₂, and even higher over shorter periods like two decades.
- Until recently, policymakers did not prioritize methane emissions in efforts to address global warming.
- In 2021, member countries launched the 'Global Methane Pledge' at the U.N. climate talks to reduce methane emissions and mitigate global warming.
- Our understanding of methane emissions is still developing.
- Research led by Mr. Chandra's team suggests that microbes, rather than the burning of fossil fuels, are the primary sources of methane in the atmosphere

The sources of methane

- Methane emissions come from various sources, categorized as biogenic and thermogenic.
- Thermogenic methane is released when fossil fuels like natural gas or oil are extracted from deep within the earth's crust.
- Biogenic methane originates from microbial activity, particularly from archaea called methanogens.
- Methanogens thrive in oxygen-depleted environments such as animal digestive tracts, wetlands, rice paddies, landfills, and lake and ocean sediments.
- Methanogens convert organic matter into methane as part of the global carbon cycle, which is essential for natural ecosystems.
- Human activities like agriculture, dairy farming, and fossil fuel production have increased methane emissions beyond natural levels.
- Both biogenic and thermogenic activities produce different isotopes of methane.
- Tracking these isotopes helps identify the sources of methane emissions and their relative contributions to atmospheric methane levels.

Modelling with a supercomputer

- Carbon-13 is a key indicator used to distinguish between methane from biological sources and methane from thermogenic sources.
- Methane from biological sources typically contains fewer carbon-13 atoms compared to methane from thermogenic sources.
- A group of 1,000 methane molecules with fewer carbon-13 atoms indicates a biological source, while more carbon-13 atoms suggest a thermogenic source.

Data mismatch

- The models suggested that methane emissions from fossil fuels declined between 1990 and the 2000s and have remained stable since then.
- Furthermore, the research indicated that microbes were producing more methane than fossil fuels.

Need for local data

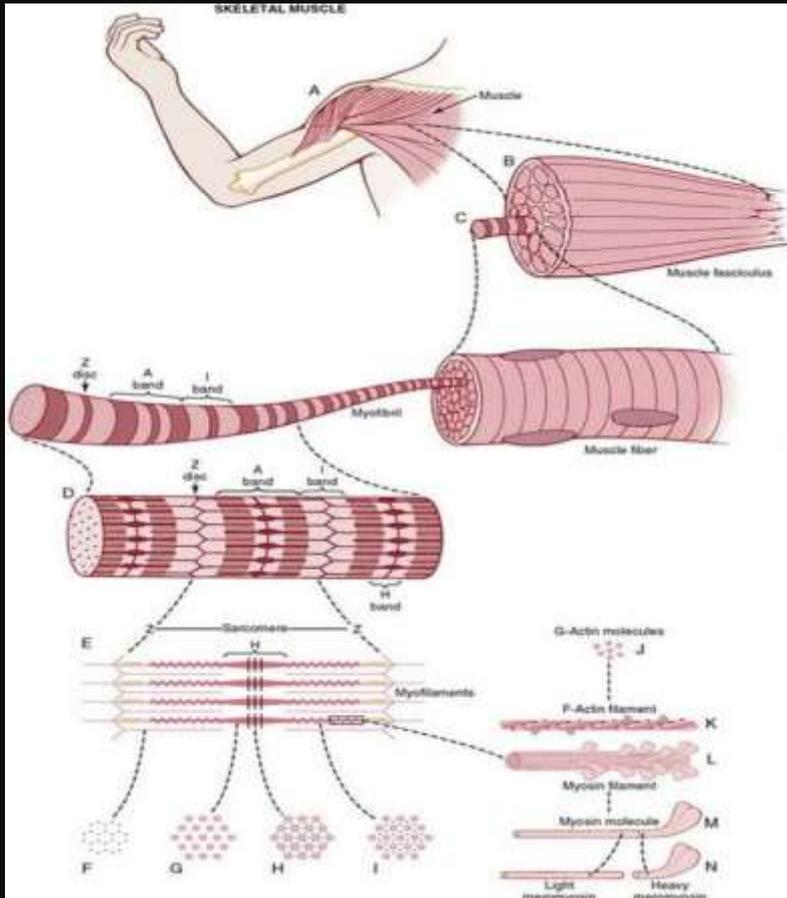
- The study's authors suggest that an increase in cattle-rearing in Latin America and more emissions from waste in South and Southeast Asia, Latin America, and Africa could be possible reasons for the observed methane increase.
- They also note **an increase in the number of wetlands worldwide.**
- **Anaerobic archaea microbes as potential top contributors to atmospheric methane, often using satellite data.**
- Mr. Patra emphasizes the need for measurements in specific locations, such as wetlands and rice fields, to accurately determine methane sources.
- Anthropogenic activities such as **waste and landfills, rice fields, enteric fermentation, oil and gas, and coal are identified as major contributors to methane emissions.**
- To reduce methane emissions, controlling anthropogenic activities should be a priority.

Shivering produces heat to keep you warm (1 May)

Question: Why do we shiver when it is cold?

Answer:

- Shivering is a physiological response that occurs when the **tension of skeletal muscles rises beyond a critical level or when the body temperature falls below 37.1 degrees Celsius.**
- It is an **involuntary contraction of muscles aimed at maintaining body temperature during fever or in cool environments.**
- Shivering involves rapid, oscillating contractions of skeletal muscles occurring at 10-20 times per second.



- Initially irregular, shivering movements become quick and involuntary, with small groups of muscles contracting asynchronously.
- The primary motor center responsible for shivering is located in the **posterior hypothalamus region of the brain.**
- When the body temperature drops below 37.1 degrees Celsius, cold signals from the skin are sent to the spinal cord, which is picked up by the hypothalamus.
- The hypothalamus responds by increasing skeletal muscle activity to generate heat, acting through descending pathways to control motor neurons.
- Shivering increases muscle tone, producing heat and raising body temperature within seconds.
- Studies show that shivering can produce significant heat, up to 42.5 calories per hour, which is about seven times greater than normal resting metabolism at room temperature.
- In resting individuals, most body heat is generated by ongoing metabolic activities in the thoracic and abdominal organs.
- Shivering is typically observed in birds and mammals as a mechanism to regulate body temperature.

Make EPI an 'Essential Programme on Immunisation' (1 May) (GS Paper I: Health Sector) (GS Paper I: Health Sector)

- The year 2024 marks 50 years since the launch of the **Expanded Programme on Immunization (EPI) by the World Health Organization (WHO) in 1974.**
- **EPI was initiated as the eradication of smallpox virus** was nearing, aiming to utilize existing immunization infrastructure to expand vaccine benefits globally.
- Almost every country in the world initiated its national immunization program following the EPI announcement.
- **India launched its EPI in 1978, later renamed the Universal Immunization Programme (UIP) in 1985.**
- This year also marks two decades since India conducted the last nationwide independent field evaluation of the UIP in collaboration with international experts.
- This milestone presents an opportunity to assess progress and plan for the future of immunization.
- **Globally and in India, significant progress has been made in immunization impact and vaccine availability.**
- **In 1974, there were vaccines for six diseases; now, there are vaccines for 13 universally recommended diseases, with 17 additional vaccines recommended for specific contexts.**
- Ongoing research aims to develop vaccines against nearly 125 pathogens, including diseases prevalent in low- and middle-income countries.

A success story

- Over the years, there has been a significant increase in global immunization coverage, with around **84% of children receiving three doses of DPT (Diphtheria, Pertussis, Tetanus) vaccines by 2022.**
- **Smallpox has been eradicated, polio eliminated from most countries, and many vaccine-preventable diseases have nearly disappeared.**
- **In India, immunization coverage has been steadily increasing, with 76% of children receiving recommended vaccines in 2019-21.**
- Studies have shown that vaccines have saved millions of lives and prevented billions of hospital visits and hospitalizations since the launch of the Expanded Programme on Immunization (EPI).
- **Economically, vaccines are highly cost-effective interventions, with every dollar spent on vaccination programs resulting in a seven to 11-fold return.**
- Immunization programs in low- and middle-income countries, including India, have been successful, often achieving greater coverage than other health programs.
- Despite the success, challenges persist, as evidenced by a decline in childhood immunization coverage globally in 2021.

- In 2022, an estimated 14.3 million children globally did not receive any recommended vaccine, while 6.2 million were only partially immunized.
- While vaccination coverage has improved in India over the years, there are **still inequalities in coverage based on geography, socio-economic status**, and other factors that require urgent interventions.

From childhood focus to life course

- Vaccines have always been available for individuals of all age groups, including adults, since the first vaccine against smallpox in 1798.
- Early vaccines like anti-rabies, cholera, and typhoid were primarily for adults, demonstrating that vaccines were intended for all age groups.
- Children have been prioritized for vaccination due to their vulnerability to vaccine-preventable diseases and limited vaccine supply and resources in the past.
- With increased vaccine coverage for children, vaccine-preventable diseases are becoming more common in the adult population, necessitating a focus on adult and elderly vaccination.
- Government policies should expand immunization coverage to include adults and the elderly, following the example of many countries.
- Policies should provide recommended vaccines for adults and the elderly free of charge at government facilities, as vaccines are highly cost-effective.
- The National Technical Advisory Group on Immunization (NTAGI) should provide recommendations on adult and elderly vaccination to increase coverage.
- **Addressing myths and misconceptions about vaccines is crucial to combat vaccine hesitancy, requiring proactive communication and education efforts by the government and reliable sources.**
- Professional associations of doctors, including community medicine experts, family physicians, and pediatricians, should increase awareness about vaccines among adults and the elderly.
- Physicians treating patients with any disease should take the opportunity to educate them about vaccines.
- Medical colleges and research institutions should conduct studies to understand the burden of diseases in the adult population in India.
- Introduction of new vaccines in national programs has been shown to increase coverage of existing vaccines, suggesting that expanding adult and elderly vaccination may improve coverage with childhood vaccines and reduce vaccine inequities.
- **India's Universal Immunization Programme (UIP)** has made significant progress, warranting another independent national-level review involving key partners and international experts.
- In late 2023, India launched a pilot initiative of adult BCG vaccination as part of efforts to combat tuberculosis (TB).
- The **COVID-19 vaccination of the adult population has raised awareness about the importance and benefits of adult vaccination.**
- This presents an opportune moment to expand the immunization program to focus on zero-dose children, address vaccine coverage inequities, and offer vaccines to adults and the elderly.

- It is time to make the Expanded Programme on Immunization (EPI) an 'Essential Program on Immunization' as it celebrates 50 years of existence.

The need for the use of labour statistics (1May) (GS Paper III: Industry and Labour Relation)

- Labour Institutions and the Industrial Relations system (IRS-LM) are subject to continuous reform due to changing objective variables and subjective orientations of involved agencies.
- Variables impacting IRS-LM include **product market, technology, trade, investment, and labour institutions like trade unions, collective bargaining, and strikes.**
- Reforms encompass both **substantive issues and procedural aspects.**
- Social dialogue, facilitated by institutions like the **Indian Labour Conference (ILC)**, is crucial for consensus-building and informing policy actions.
- However, social dialogue often lacks **evidence-based arguments**, leading to discussions based on **class-based opinions rather than credible data or experience.**
- The ILC is criticized for becoming a "talking shop" without substantial outcomes.
- Labour statistics, unlike economic and industrial data, are not comprehensive. Existing sources like the **Annual Survey of Industries (ASI)** and the **National Sample Survey Office provide limited information on IRS-LM.**
- The **Labour Bureau provides statistics on industrial relations and labour, but mostly administrative data generated for implementing labour laws.**
- Statistics on work stoppages are collected voluntarily, and the scope of data published by the Labour Bureau has remained largely unchanged over the years.

Reform arguments

- **Employers criticize labour inspection system as "Inspector-Raj" and call for reform.**
- They complain about **State governments' reluctance to approve retrenchment or establishment closure.**
- **Employers seek limitations on right to strike and prefer non-union workplaces.**
- Some academics and global agencies support these reform opinions.
- Studies like Besley and Burgess (B&B) in 2004 are cited despite methodological weaknesses.
- Government responds by seeking to introduce labour law reforms.
- Trade unions urged to collect relevant data on labour inspections.
- Discrepancy exists between number of inspectors and inspection coverage.

Closure reform

- **Trade unions lack data on retrenchment/closure applications and permissions granted/refused.**
- Information on these applications is not typically published, except in Maharashtra.
- Denial of permissions may have been prevalent in the command economy era, but is it still common in the post-reform period?

- A study on retrenchments/closures in Maharashtra from 2001-2005 showed the state was more liberal in granting permissions.
- Lack of comprehensive data on retrenchments/closures hinders informed discussion and policy decisions.

On strikes

- The **Industrial Relations Code, 2020** has made legal strikes difficult and carries heavy penalties for illegal strikes.
- Data from the Labour Bureau shows that **lockouts are more common and result in more workdays lost than strikes in the post-reform period.**
- Trade unions should utilize data on strikes and lockouts to challenge harsh clauses on strikes in the Industrial Relations Code.
- Trade unions have the capacity to produce statistics on various aspects of industrial relations at the establishment level.
- Employers' organizations like NASSCOM provide statistics on industries like IT, which are often used without scrutiny.
- **India has ratified conventions on labor statistics and inspection, highlighting the need for reliable data on industrial relations.**
- **Trade unions should engage in research on industrial relations, collaborate with academics, and use empirical studies to advocate for reforms.**
- By producing labor statistics and conducting research, trade unions can present evidence-based arguments in forums like the Indian Labor Conference.
- A concerted effort by trade unions to demand better labor statistics could lead to reforms in statistical agencies like the Labour Bureau.
- This May Day, trade unions should commit to these actions to advocate for better labor statistics and reforms in industrial relations.

Poll time, prison time (1 May)

Kejriwal's continuing imprisonment casts a shadow on election campaign

- The continued imprisonment of Delhi Chief Minister Arvind Kejriwal during a general election highlights political realities regarding prosecution of leaders.
- It's observed that charges are pursued against political rivals by unfriendly regimes, while allies often see their offenses forgotten.
- The relationship between the ruling party and those facing charges influences the actions of supposedly independent agencies.
- In Kejriwal's case, he's accused of taking kickbacks for a liquor policy, which he denies. His party, the Aam Aadmi Party, claims his arrest is politically motivated.
- Despite no law sparing politicians from criminal liability during elections, Kejriwal has been denied participation in the campaign.
- The case against Kejriwal was filed in August 2022, but investigations by the CBI and ED are ongoing.

- Witnesses have given multiple statements, complicating the investigation process.
- **The power to arrest suspects is meant to prevent them from fleeing justice, tampering with evidence, or repeating crimes.**
- However, there's often a gap between having the power to arrest and the necessity of making an arrest.
- Political leaders in this case have been arrested based on statements from approvers, not independent witnesses.
- The timing of the arrest raises concerns, particularly because Mr. Kejriwal didn't respond to multiple ED summonses.
- Expecting accused individuals to "cooperate" with investigation agencies before arrests seems peculiar.
- Agencies should be able to prosecute without solely relying on statements from the accused.
- **Section 50 of the Prevention of Money Laundering Act has been used to record admissible statements and then make arrests.**
- Questions arise about whether non-appearance in response to a summons justifies arrest and denial of bail.
- **Arresting and imprisoning serving Chief Ministers during an election raises concerns about federalism and democracy.**

Competition, conflict (1 May) (GS Paper II: IR)

U.S. and China must manage their differences responsibly

- U.S. Secretary of State Antony Blinken held extensive talks with Chinese officials, including President Xi Jinping.
- Both countries aim to stabilize their relationship despite facing challenges.
- Blinken emphasized preventing their competition from escalating into conflict.
- Xi urged seeking common ground rather than engaging in fierce competition.
- However, Blinken raised concerns about China's support for Russia's defense industry.
- China criticized the U.S.'s recent military aid to Ukraine and labeled accusations against its trade with Russia as groundless.
- Both nations harbor deep mutual misgivings.
- **The U.S. views China as a revisionist power and a significant technological and military challenger.**
- **It has imposed export controls and tariffs on Chinese goods, supported Taiwan, and strengthened defense cooperation with the Philippines.**
- China blames the U.S. for South China Sea tensions and views its support for Taiwan as interference.
- Despite structural challenges, there are **areas of cooperation, including military communication, AI risk management, fentanyl control, climate change, and global food security.**
- **Lessons from the Cold War emphasize the need to avoid turning competition into proxy conflicts, economic wars, and diplomatic crises.**

- Both countries should focus on cooperation, build guardrails to prevent escalation, and address global challenges together.

Street Vendors Act (1 May) (GS Paper III: Employment)

- The **Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act** came into effect on May 1, 2014, after decades of legal development and advocacy by street vendor movements in India.
- Considered a progressive law, it aimed to protect the rights and livelihoods of street vendors.
- Despite its enactment, the Act now faces significant challenges in its implementation.
- Merely passing the law did not guarantee the security and protection of street vendors in Indian cities.
- There have been shortcomings in executing the provisions of the Act effectively.

Provisions of the law

- Street vendors make up about 2.5% of any city's population and play diverse roles in urban life.
- They provide essential daily services like selling vegetables and food, offering a consistent income source for migrants and the urban poor.
- Street vendors contribute to making city life affordable by supplying vital goods and food items at reasonable prices.
- They are integral to Indian culture, with iconic street foods like vada pav in Mumbai and dosa in Chennai.
- The Street Vendors Act of 2014 aimed to acknowledge the importance of street vending in cities.
- The law seeks to protect and regulate street vending, with state-level rules and execution by Urban Local Bodies (ULBs).
- It defines the roles and responsibilities of vendors and different levels of government clearly.
- The Act commits to accommodating all existing vendors in designated vending zones and issuing vending certificates.
- It establishes participatory governance through Town Vending Committees (TVCs), where street vendor representatives make up 40% of members.
- There is a provision for 33% representation of women street vendors in TVCs.
- TVCs ensure the inclusion of all existing vendors in vending zones and address grievances through mechanisms like Grievance Redressal Committees chaired by judicial officials.
- The Act sets a precedent for inclusive and participatory approaches to address street vending needs in cities, theoretically.

Three broad challenges

- **Administrative Challenges:**

- Increase in harassment and evictions despite protection emphasis.
 - Outdated bureaucratic mindset.
 - Lack of awareness among authorities and vendors.
 - Limited influence of vendor representatives.
- **Governance Challenges:**
 - Weak urban governance mechanisms.
 - Lack of integration with urban governance framework.
 - ULBs lacking powers and capacities.
 - Focus on infrastructure over vendor inclusion.
 - **Societal Challenges:**
 - Exclusionary 'world class city' image.
 - Marginalization and stigmatization of vendors.
 - Failure to recognize vendors as economic contributors.
 - Reflective in city designs and policies.

The way forward

- **Implementation Support:**
 - Initially requires top-down direction.
 - Ministry of Housing and Urban Affairs can provide management.
 - Decentralization over time for effectiveness.
 - PM SVANidhi serves as a positive example.
- **Decentralization Need:**
 - ULBs need capacity enhancement for effective planning.
 - Move from department-led actions to TVC-level deliberations.
 - Amend urban schemes, planning guidelines, and policies to include street vending.
- **New Challenges:**
 - Impact of climate change on vendors.
 - Surge in the number of vendors.
 - Competition from e-commerce.
 - Reduced incomes.
- **Creative Use of Provisions:**
 - Utilize Act's welfare provisions creatively.
 - Adapt to meet emerging needs of street vendors.
- **National Urban Livelihood Mission:**
 - Sub-component for street vendors needs to adapt to changing realities.
 - Facilitate innovative measures to address needs.

- **Lessons Learned:**

- Complex interplay of space, urban workers, and governance.
- Offers valuable lessons for future lawmaking and implementation.

Cost of meals rose by 71% in five years, salaries by just 37% (1 May)



- Homecooked vegetarian thali cost in Maharashtra increased by 71% in five years.
- Average monthly salary increase was only 37%.
- Wages of casual laborers increased by 67%, but they already spent a high portion of their wages on food.
- Assumed an average Indian family consumes two thalis per day for dietary needs.
- Excluded non-vegetarian meals due to data limitations.
- Chose Maharashtra for analysis due to data consistency.
- Compared costs with average wages and salaries of Maharashtra workers.
- Methodology involved identifying ingredients, measuring grams, and collating average retail costs.
- Example: Cost of 125g of toor dal for two thalis increased from ₹9.3 to ₹20.1 in five years.
- Cost of 300g of potato increased from ₹6.8 to ₹8.6.

- Cost of ingredients for two thalis increased over the years: ₹79.2 this year, ₹64.2 last year, and ₹46.2 in 2019.
- Total monthly cost for making two thalis rose from ₹1,386 in 2019 to ₹2,377 in 2024.
- Average daily wage in Maharashtra increased from ₹218 in 2019 to ₹365 in 2024.
- Average monthly salary in Maharashtra increased from ₹17,189 to ₹23,549 in the same period.
- Percentage of thali cost relative to earnings: increased marginally for casual labourers (21.1% to 21.7%) and notably for regular salaried workers (8.1% to 10.1%) from 2019 to 2024.
- Disparity between salary and expenditure: Cost of making a thali increased by 71% in the past five years, while monthly salary increased by only 37%. Casual labourers were already spending over 20% of earnings on food.

About the redistribution of wealth (1 May)

- Heated exchanges between ruling government and Opposition during ongoing election campaign.
- Focus on redistribution of wealth.
- Supreme Court formed nine-judge Bench.
- Aim: Interpret Directive Principles of State Policy (DPSP).
- Specifically regarding ownership and control of material resources.

What does the Constitution provide?

- The Constitution's Preamble seeks social and economic justice, liberty, and equality for all citizens.
- Part III of the Constitution outlines fundamental rights, ensuring liberty and equality.
- Part IV contains the Directive Principles of State Policy (DPSP), guiding both central and State governments.
- DPSP focuses on achieving social and economic justice.
- Unlike fundamental rights, DPSP is not enforceable in court but is crucial for governance.
- Article 39(b) and (c) of DPSP aim at economic justice by distributing material resources for common good and preventing wealth concentration.

What is the historical context?

- Initially, the Constitution guaranteed the right to property as a fundamental right under Article 19(1)(f) and required the state to provide compensation for property acquisition under Article 31.
- Land reforms and public asset construction led to amendments curbing property rights due to limited government resources.
- Amendments like Articles 31A, 31B, and 31C restricted the right to property for public welfare purposes.
- Supreme Court cases, including Golak Nath (1967), Kesavananda Bharati (1973), and Minerva Mills (1980), interpreted the balance between fundamental rights and DPSP.

- The Kesavananda Bharati case upheld Article 31C but subjected it to judicial review, emphasizing a harmonious balance between fundamental rights and DPSP.
- In 1978, the 44th Amendment Act removed the right to property as a fundamental right, making it a constitutional right under Article 300A to reduce litigation.
- Private property rights remain important, and state acquisition should be for public purposes with adequate compensation.

What is the current debate?

- Post-independence, India followed a socialist economic model with laws for land acquisition and nationalization of key sectors like banking and insurance.
- High taxes, such as up to 97% direct taxes, estate duty, and wealth tax, aimed to reduce inequality but stifled growth and led to tax evasion.
- The 1990s saw a shift towards liberalization, globalization, and privatization to empower market forces and improve efficiency.
- Reforms included repealing the MRTP Act, reducing income tax rates, and abolishing estate duty in 1985 and wealth tax in 2016.
- Market-driven economy led to economic growth and poverty reduction but also increased inequality, with the top 10% owning 65% of wealth and 57% of income.
- Congress manifesto promises measures for the poor, including financial aid and wealth distribution surveys, while the ruling party criticizes them for potentially reintroducing inheritance taxes.
- Supreme Court examines whether private resources fall under Article 39(b) regarding material resources.

What can be the way forward?

- Inequality is a global issue in liberalized open-market economies, not just in India.
- Government has a duty to protect the interests of poorer classes who rely on state support.
- Past policies like high tax rates, estate duty, and wealth tax didn't achieve desired goals but led to income and wealth concealment.
- Innovation and growth should not be hindered, but benefits must reach all sections, especially the marginalized.
- Policies should be debated and framed according to current economic models.
- The overarching goal remains economic justice for all, as outlined in the Constitution.

Question: What was held in the Coelho case? In this context, can you say that judicial review is of key importance amongst the basic features of the Constitution? (200 Words) (UPSC 2016)

ANSWER APPROACH:

- Introduce the answer with historical and contextual background of the case.
- Then bring the key holdings of the **Coelho case**.
- **Then further discuss the Importance of Judicial Review in Light of Coelho.**
- Conclude with a positive note.

ANSWER

The Ninth Schedule of the Constitution was introduced through the First Amendment Act, 1951. It was designed to shield certain laws from judicial scrutiny on the grounds that they violated Fundamental Rights. Over time, the Ninth Schedule was used to place an increasing number of laws beyond judicial review, leading to concerns about potential legislative overreach. The Coelho case, formally known as I.R. Coelho (dead) vs. State of Tamil Nadu (2007), is a landmark judgment by the Supreme Court of India that significantly reinforced the doctrine of the Basic Structure and the power of judicial review.

Key Holdings of the Coelho case:

- **Basic Structure Doctrine:** The Court reiterated that the Basic Structure of the Constitution, which includes fundamental principles such as democracy, secularism, federalism, and separation of powers, cannot be altered even by a constitutional amendment.
- **Ninth Schedule Laws subject to Basic Structure:** The Court held that any law placed under the Ninth Schedule is still open to judicial review on the grounds of violating the Basic Structure of the Constitution.
- **Role of Judicial Review:** The Court emphasized that judicial review is an essential pillar of the Basic Structure. The power to scrutinize legislation and uphold the supremacy of the Constitution lies with the judiciary.

Importance of Judicial Review in Light of Coelho:

The Coelho case serves as a powerful reaffirmation of judicial review as one of the key basic features of the Indian Constitution. Its significance lies in the following aspects:

- **Safeguarding Fundamental Rights:** Judicial review ensures that laws enacted by Parliament do not infringe upon the fundamental rights guaranteed to citizens. It provides a mechanism to redress potential abuses of legislative power.
- **Upholding Constitutional Supremacy:** The doctrine of judicial review enables courts to declare any law or amendment as unconstitutional if it violates the Basic Structure. This prevents unchecked power of any organ of the government and maintains the delicate balance of power.
- **Preserving Rule of Law:** Judicial review ensures the supremacy of the Constitution as the fundamental law of the land. It acts as a check against arbitrary and potentially unjust legislation.
- **Protection of Minorities:** Judicial review helps protect the rights of minority groups and marginalized sections by ensuring that laws enacted by the majority cannot be used to suppress their interests.

Counter-Arguments and Limitations:

- **Judicial Activism:** Critics argue that judicial review can lead to judicial overreach and unelected judges encroaching upon the domain of elected legislatures.
- **Potential for Stalemates:** The power to declare laws unconstitutional can sometimes lead to conflicts between the judiciary and the legislature, hindering policy initiatives.

Despite these limitations, judicial review as affirmed in the Coelho case remains an indispensable bulwark against unconstitutional actions by the state. It is instrumental in securing the core values enshrined within the Constitution of India. By upholding the Basic Structure and safeguarding individual liberties, judicial review serves as a vital guardian of India's constitutional democracy.

Core sectors (1 May)

Core Sectors

- The core sectors are the backbone of the Indian economy. They comprise the eight critical industries that serve as the foundation for most major economic activities.
- These sectors have a significant impact on industrial growth, infrastructure development, and overall economic performance.

The Eight Core Sectors:

- 1. Coal:**
 - Key fuel for power generation and industrial energy needs.
 - India is a major coal producer and consumer.
- 2. Crude Oil:**
 - The primary source of petrol, diesel, and other petroleum products.
 - India imports a considerable amount of its crude oil requirements.
- 3. Natural Gas:**
 - Used for power generation, fertilizer production, and as a cleaner fuel source.
 - India's domestic production is increasing, with a push for expanded utilization.
- 4. Refinery Products:**
 - Include petrol, diesel, kerosene, LPG, and other essential fuels derived from crude oil.
 - The output of refineries directly impacts fuel prices and industrial costs.
- 5. Fertilizers:**
 - Critical for agriculture, ensuring food security and boosting crop yields.
 - India has both domestic production and imports in this sector.
- 6. Steel:**
 - Vital for construction, infrastructure, manufacturing, and heavy industries.
 - India is one of the world's largest steel producers.
- 7. Cement:**
 - Fundamental for building construction, infrastructure projects, and housing.
 - India is the second-largest cement producer globally.
- 8. Electricity:**
 - Powers all sectors of the economy, from industries to households.
 - India's electricity generation mix is diversifying, with a growing focus on renewables.

Significance:

- **Index of Industrial Production (IIP):** Core sectors have a substantial weightage (about 40%) in the IIP, an indicator of industrial output.
- **Economic Growth:** Growth and performance of the core sectors heavily influence the overall GDP growth rate.
- **Infrastructure:** They underpin infrastructure development crucial for the country's progress.

Data and Monitoring:

- **Ministry of Statistics and Programme Implementation (MoSPI):** Releases monthly data on the production of the core sectors.
- **Office of Economic Adviser, Department for Promotion of Industry and Internal Trade:** Compiles the Index of Eight Core Industries.

- India's core infrastructure sectors experienced a growth slowdown, with output rising by 5.2% in March compared to 7.1% in February.

- The growth was driven by high production in cement and electricity, but it was offset by contractions in fertilizers and refinery products.
- For the full fiscal year 2023-24, the core sectors saw a growth rate of 7.5%, marking a three-year low compared to 7.8% in the previous fiscal year.
- However, this was the first time in at least 12 years that all eight sectors recorded annual growth, led by double-digit increases in steel and coal production, along with a marginal rise in crude oil output after 11 years of decline.
- The Index of Core Industries (ICI), representing over 40% of the Index of Industrial Production (IIP), reached its highest level in at least seven and a half years, registering a reading of 173.3 in March, a 9.9% increase over February.
- While all sectors showed increased production compared to February, only six sectors recorded year-on-year growth.
- Fertilizers contracted by 1.3% compared to last March, marking the third consecutive month of output decline, while refinery products shrank by 0.3%.
- Steel output grew by 5.5%, the slowest since July 2022, while natural gas and crude oil production rose by 6.3% and 2%, respectively.
- Cement production and electricity generation reached a five-month high growth rate of 10.6% and 8%, respectively.
- Coal output increased by 8.7%, but it marked the slowest growth rate since last June. However, compared to February, coal production levels were 20.7% higher.
- Economists anticipate a cooling off in overall industrial output growth, following the 5.7% increase recorded in February. The Index of Industrial Production (IIP) for March is scheduled for release on May 10.
- Aditi Nayar, chief economist at rating agency ICRA, predicts that IIP growth in March 2024 will moderate to a range of 3.5-5%, as the leap year effect diminishes.
- In the fiscal year 2023-24, steel output saw the highest growth rate at 12.3%, followed by coal with an 11.7% increase and cement production with a 9.1% rise. Electricity generation recorded a 7% increase, marking the slowest growth in three years, while natural gas output grew by 6.1%.
- Fertilizers and refinery products also experienced growth, with increases of 3.7% and 3.4%, respectively.

SEBI board approves changes to mutual fund regulations (1 May)

SEBI

- **Full Form** Securities and Exchange Board of India
- A statutory regulatory body established by an Act of Parliament, the SEBI Act of 1992.
- **Headquarters:** Mumbai, Maharashtra, India
- **Regional Offices:** Delhi, Kolkata, Chennai, Ahmedabad.

Purpose and Mandate:

SEBI serves three key purposes in the Indian financial markets:

1. **Investor Protection:** Safeguarding the interests of investors who participate in securities markets by ensuring fair practices and transparency.

2. **Market Development:** Promoting the development of securities markets, adopting new technologies, and fostering innovation to enhance efficiency.
3. **Regulation:** Regulating the operations of stock exchanges, mutual funds, brokers, merchant bankers, portfolio managers, foreign portfolio investors, and other market participants.

Key Functions

- **Regulation:** Framing rules and guidelines for various market entities.
- **Supervision:** Monitoring stock exchanges, brokers, and other market intermediaries, ensuring compliance with SEBI regulations.
- **Investigation:** Conducting inquiries and taking enforcement actions against violations of securities laws.

Governance Structure

SEBI is governed by a Board of Members appointed by the Central Government of India. The Board currently consists of:

- Chairperson
- Two members from the Ministry of Finance
- One member from the Reserve Bank of India
- Five other members appointed by the Central Government

- The Securities and Exchange Board of India (SEBI) is enforcing new rules for Asset Management Companies (AMCs).
- These rules require AMCs to establish an institutional mechanism aimed at preventing potential market abuse, specifically front-running.
- Recent instances of front-running observed by SEBI prompted the decision.
- The SEBI Board approved amendments to the SEBI (Mutual Funds) Regulations, 1996.
- The goal is to enhance the existing regulatory framework by mandating AMCs to implement a structured institutional mechanism.
- This mechanism aims to identify and deter potential market abuse, including front-running and fraudulent transactions in securities.

'Enhanced surveillance

- SEBI requires the institutional mechanism to include:
 - Enhanced surveillance systems.
 - Internal control procedures.
 - Escalation processes.
- The aim is to identify, monitor, and address specific types of misconduct, such as front-running, insider trading, and misuse of sensitive information.
- Front-running involves trading in a financial asset by a broker who has inside knowledge of a future transaction that will significantly affect its price.
- SEBI also aims to enhance responsibility and accountability of AMCs for implementing this mechanism.
- Transparency is to be fostered by mandating AMCs to have a whistleblower mechanism in place.

PRELIMS PRACTICE QUESTIONS:

<p>Question 1: Which of the following industries is NOT part of India's eight core sectors?</p> <p>(A) Petroleum refinery products (B) Automobiles (C) Steel (D) Cement</p>	<p>Answer: (B) Automobiles Explanation: While the automobile industry is vital to the Indian economy, it's not classified as one of the eight core sectors. The core sectors represent the infrastructure backbone upon which various other industries rely.</p>
<p>Question 2: What is the purpose of computing the Index of Eight Core Industries (IICI)?</p> <p>(A) To measure the performance of public sector undertakings (B) To track inflation in the industrial sector (C) To assess the overall health of major industrial sectors (D) To determine eligibility for foreign direct investment (FDI)</p>	<p>Answer: (C) To assess the overall health of major industrial sectors Explanation: The IICI is a key indicator of industrial activity in India. It monitors the production levels of the eight core sectors, providing insights into the overall economic performance and industrial growth potential.</p>
<p>Question 3: Consider the following statements about the weightage of core sector industries in the IICI:</p> <p>1. Coal has the highest weightage. 2. Electricity has the lowest weightage.</p> <p>Which of the above statements is/are correct?</p> <p>(A) 1 only (B) 2 only (C) Both 1 and 2 (D) Neither 1 nor 2</p>	<p>Answer: (D) Neither 1 nor 2 Explanation: Neither statement is entirely correct. Here's a general idea of the relative weightage in the IICI: Crude oil and refinery products often have significant weightage. Electricity, steel, and cement usually hold moderate weightage. Fertilizers and natural gas typically have lower weightage. Note: The precise weightage can be adjusted periodically</p>
<p>Question 4: Which of the following ministries is responsible for the calculation and release of the Index of Eight Core Industries?</p> <p>(A) Ministry of Finance (B) Ministry of Commerce and Industry</p>	<p>Answer: (B) Ministry of Commerce and Industry Explanation: The Office of the Economic Adviser (OEA), within the Department for Promotion of Industry and Internal Trade (DPIIT) of the Ministry of Commerce and</p>

<p>(C) Ministry of Labour and Employment (D) NITI Aayog</p>	<p>Industry, compiles and releases the IICI on a monthly basis.</p>
<p>Question 5: The Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act was enacted in which year? (A) 2004 (B) 2010 (C) 2014 (D) 2018</p>	<p>Answer: (C) 2014 Explanation: The Street Vendors Act was a landmark piece of legislation enacted in 2014 to recognize and safeguard the rights of street vendors in India.</p>
<p>Question 6: Which of the following is a key objective of the Street Vendors Act? (A) Prohibit street vending in urban areas (B) Provide social security benefits to street vendors (C) Grant street vendors permanent ownership of their vending space (D) Promote organized retail over street vending</p>	<p>Answer: (B) Provide social security benefits to street vendors Explanation: The Street Vendors Act aims to provide a framework for regulating street vending while ensuring social security and livelihood protection for vendors.</p>
<p>Question 7: Consider the following statements about the Street Vendors Act: 1. It mandates the creation of Town Vending Committees (TVCs) in each local authority. 2. Street vendors registered under the Act are eligible for bank loans and other financial benefits. Which of the above statements is/are correct? (A) 1 only (B) 2 only (C) Both 1 and 2 (D) Neither 1 nor 2</p>	<p>Answer: (C) Both 1 and 2 Explanation: Statement 1 is correct. TVCs are responsible for planning and implementing various aspects of street vending regulation under the Act. Statement 2 is correct. The Act aims to facilitate access to financial services for registered street vendors.</p>
<p>Question 8: Under the Street Vendors Act, who has a</p>	<p>Answer: (D) 1, 2, and 3 Explanation: TVCs are designed to have a diverse representation,</p>

<p>representation on Town Vending Committees (TVCs)?</p> <ol style="list-style-type: none"> 1. Local government officials 2. Representatives of street vendors 3. Police representatives <p>(A) 1 and 2 only (B) 2 and 3 only (C) 1 and 3 only (D) 1, 2, and 3</p>	<p>including local authorities, street vendor associations, police, and other stakeholders, to ensure balanced decision-making on matters related to street vending.</p>
<p>Question 9: Shivering is an involuntary bodily response primarily aimed at:</p> <p>(A) Increasing blood flow to extremities (B) Generating heat to maintain core temperature (C) Signaling distress to others (D) Conserving body heat</p>	<p>Answer: (B) Generating heat to maintain core temperature Explanation: Shivering is a natural thermoregulatory mechanism. When the body's core temperature drops, rapid muscle contractions in the form of shivering help produce heat to prevent hypothermia.</p>
<p>Question 10: Which part of the brain controls the shivering response to cold temperatures?</p> <p>(A) Cerebellum (B) Medulla Oblongata (C) Hypothalamus (D) Frontal Lobe</p>	<p>Answer: (C) Hypothalamus Explanation: The hypothalamus is the body's thermostat. It receives signals from temperature sensors in the skin and initiates responses like shivering to maintain a stable internal temperature.</p>
<p>Question 11: Consider the following statements:</p> <ol style="list-style-type: none"> 1. Shivering can occur even if the ambient temperature is not very low. 2. Shivering is a symptom of certain medical conditions. <p>Which of the above statements is/are correct?</p> <p>(A) 1 only (B) 2 only (C) Both 1 and 2 (D) Neither 1 nor 2</p>	<p>Answer: (C) Both 1 and 2 Explanation: Statement 1 is correct. Shivering can be triggered by a sudden drop in body temperature, even if the external temperature isn't freezing. Fever can also cause chills and shivering. Statement 2 is correct. Shivering can be a symptom of illnesses like infections, thyroid problems, and neurological disorders.</p>
<p>Question 12: Which of the following is the most significant source of anthropogenic methane emissions?</p>	<p>Answer: (C) Agriculture and Livestock Explanation: While all options contribute to methane release,</p>

<p>(A) Coal Mining (B) Wetland Decomposition (C) Agriculture and Livestock (D) Deforestation</p>	<p>agriculture (particularly rice cultivation) and livestock emissions (from digestion and manure) are the largest human-caused sources of methane.</p>
<p>Question 13: Consider the following statements about methane: 1. Methane is a more potent greenhouse gas than carbon dioxide. 2. Methane persists in the atmosphere for a much shorter duration than carbon dioxide. Which of the above statements is/are correct? (A) 1 only (B) 2 only (C) Both 1 and 2 (D) Neither 1 nor 2</p>	<p>Answer: (C) Both 1 and 2 Explanation: Statement 1 is correct. Methane has a much higher global warming potential than carbon dioxide, especially over shorter time scales. Statement 2 is correct. Despite its strong warming impact, methane breaks down in the atmosphere relatively quickly compared to carbon dioxide's long-term persistence.</p>
<p>Question 14: Methane hydrates, found in deep ocean sediments, pose a future climate risk because: (A) They contain a large reservoir of methane that could be released with warming temperatures. (B) They increase ocean acidity, harming marine ecosystems. (C) They reduce the ocean's ability to absorb carbon dioxide. (D) They block sunlight from reaching the ocean depths</p>	<p>Answer: (A) They contain a large reservoir of methane that could be released with warming temperatures. Explanation: Methane hydrates are essentially ice-like structures trapping methane. As global temperatures rise, these hydrates risk destabilizing and releasing stored methane, further exacerbating warming.</p>
<p>Question 15: Which of the following natural phenomena is a significant source of methane emissions? (A) Volcanic eruptions (B) Decay of organic matter in wetlands (C) Photosynthesis by trees (D) Sandstorms</p>	<p>Answer: (B) Decay of organic matter in wetlands Explanation: Wetlands are a major natural source of methane. Anaerobic decomposition of organic matter in waterlogged soils releases methane into the atmosphere.</p>