

Today's Prelims Topics

Governor Assent to Bill

Context

The Supreme Court asked what Tamil Nadu Governor R.N. Ravi found so “gross” about the 12 Bills the State government sent him for assent that they were kept pending for over 3 years.

Article 200: Power of Governor Related to Bill

- Grant assent to the Bill.
- Withhold assent from the Bill.
- Reserve the Bill for the President's consideration.
- Return the Bill (unless it is a Money Bill) to the legislature for reconsideration.

- If the bill passed again, the Governor cannot withhold assent.
- **Nabam Rebia & Bamang Felix Case 2016:** The Supreme Court limited the Governor's discretionary power under Article 200 to merely deciding whether a bill should be reserved for the President's consideration, asserting that such actions **are open to judicial review**.

Article 201: Presidential Assent for Reserved Bills

- Grant assent to the Bill.
- Withhold assent from the Bill.
- Return the Bill for reconsideration.
- **Reconsideration of Reserved Bills:**
 - The legislature must reconsider a returned Bill within six months.
 - Once passed again, it is presented to the President.
 - The President is **not obligated to grant assent to a reconsidered Bill**.

Categories of State Bills Reserved for the President

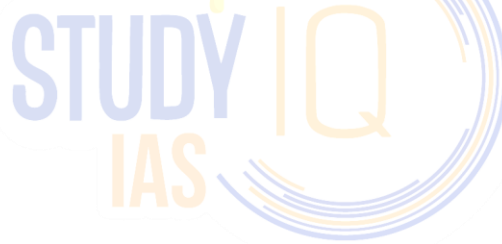
- **Mandatory Reservation:**
 - Bills that diminish the High Court's powers.
 - Bills imposing taxes on water or electricity under certain conditions.
 - Bills related to financial emergency provisions.
- **Discretionary Reservation for Specific Purposes:**
 - To grant immunity from Articles 14 and 19 for:
 - Acquisition of estates.
 - Implementing Directive Principles of State Policy.
 - To resolve conflicts with Union laws in Concurrent List subjects.
 - For trade and commerce restrictions needing Presidential sanction.
- **General Reservation:** Bills that do not fall into specific categories but are still reserved by the Governor under Article 200.

Various Commissions Recommendations

Commission	Recommendations
Sarkaria Commission	Governors should act on ministerial advice under Article 200, barring unconstitutional bills.

	Governors should be impartial, not recently politically active, and not members of the ruling party.
Punchhi Commission	Governors should decide on bills within 6 months.
	Governors can be impeached by the State Legislature.
	A committee including the state's Chief Minister should select Governors.
National Commission to Review the Working of the Constitution (NCRWC)	Governors should decide on bills within 4 months.
	Governors' power to withhold assent should be limited to constitutionally stipulated cases.
2nd Administrative Reforms Commission	The Inter-State Council should formulate guidelines for the exercise of governors' discretionary powers.
Rajamannar Committee on Centre-State Relations	Governors should function as constitutional heads of states, not as agents of the central government.

Source: [The Hindu: What was 'gross' about the 12 Bills kept pending for 3 years: SC to T.N. Governor](#)









Mirage 2000 Aircraft

Context

An Indian Air Force (IAF) aircraft, Mirage 2000, crashed in Shivpuri district of Madhya Pradesh after a system malfunction.

About Mirage 2000 Aircraft

JET FIGHTER GENERATIONS	
 <p>1st Gen jet fighters (1940s-1950s) used turbojets for propulsion instead of earlier piston-driven aircraft (Messerschmitt-Me262, Mystere-IV, MiG-15 etc)</p>	<p>5th Gen fighters are multi-role or swing-role but also incorporate advanced stealth technology, composite materials, supercruise (achieve supersonic cruise speeds without use of afterburners), thrust-vectoring & multi-sensor integrated avionics</p>  <p>Only fully-operational 5th-gen fighter at present is the American F/A-22 'Raptor', developed for \$28 billion, with each fighter costing \$350-400 million extra. Two FGFA in pipeline are American F-35 'Lightning-II' Joint Strike Fighter & Russian Sukhoi T-50 or PAK-FA</p>
 <p>2nd Gen fighters (1950s-1960s) integrated new technologies, swept or delta wings & guided missiles for BVR (beyond visual range) combat (MiG-21, Sukhoi-7, F-104 Starfighter etc)</p>	
 <p>3rd Gen fighters (1960s-1970s) inducted improved radars, missiles & avionics (Mirage-III, MiG-25, F-4 Phantom-II etc)</p>	
 <p>4th Gen fighters (1970s-1990s) incorporated fly-by-wire controls & multi-role capabilities (Mirage-2000, MiG-29, Sukhoi-27, Tornado, F-16 Fighting Falcon etc)</p>	
 <p>4.5 Gen fighters (1990s-onwards) use more advanced avionics & electronics, with some stealth. (Sukhoi-30MKI, Gripen, Eurofighter Typhoon, F-16F Desert Falcon, F/A-18 Super Hornet etc)</p>	

- It is a **French multirole, single-engine 4th-generation** fighter jet.
- **Available:** As a **single-seater or two-seater** multirole fighter.
- **Capability:** Air-to-Air Missiles and Surface-to-Air Missiles.
- **Significance:** It played a significant role in **Operation Safed Sagar** during **1999 Kargil War**.

Source: [The Hindu: IAF's Mirage 2000 crashes near Gwalior after system malfunction; pilots safe](#)

Faceless Scheme of Assessment

Context

The CBI has registered a case against nine individuals for allegedly attempting to undermine the Income Tax Department's "Faceless Assessment Scheme."

About the Scheme

- The **Faceless Assessment Scheme** was introduced by the **Income Tax Department in 2019** as part of the "**Transparent Taxation – Honouring the Honest**" initiative.
- **Aim:** To **eliminate face-to-face interactions** between taxpayers and tax officials, reducing corruption, ensuring objectivity, and improving efficiency in the tax assessment process.
- **Legal Framework:** It is backed by **Section 144B** of the Income Tax Act, which mandates the following:
 - No physical meetings between tax officers and taxpayers.
 - All notices and responses are to be **exchanged electronically**.
 - Randomized allocation of cases to ensure neutrality.

How the Faceless Assessment Works

The scheme operates through a **fully digital and centralized** system, involving multiple specialized units:

- **National e-Assessment Centre (NeAC):** Acts as the **central body** for issuing notices and coordinating assessment-related communication.
 - Allocates cases randomly to **Regional e-Assessment Centres (ReACs)**.
- **Regional e-Assessment Centres (ReACs):** Located in different parts of the country to handle assessment cases assigned by NeAC.
 - Includes **Assessment Units (AUs), Verification Units (VUs), Review Units (RUs), and Technical Units (TUs)**.
- **Digital Process Flow:**
 - **Automated Case Selection:** Cases are selected through AI-driven risk analysis.
 - **Electronic Notices:** All notices are sent digitally via the Income Tax portal.
 - **Submission by Taxpayer:** Taxpayers submit responses and documents online.
 - **Assessment by Teams:** Multiple teams independently review cases for fairness and accuracy.
 - **Final Order Issued:** The final assessment order is sent electronically without any human interaction.

Source: [The Hindu: CBI books nine persons for 'sabotaging' I-T Dept. scheme](#)

Dibru Saikhowa National Park

Context

Oil India Limited (OIL) has urged the Environment Ministry to approve an R&D (research and development) study in Assam's Dibru Saikhowa National Park for which the extraction proposal was rejected.

About Dibru Saikhowa National Park



- **Situated in:** Dibrugarh and Tinsukia districts of Assam, India.
- **Declared:** National park in 1999 and as a Biosphere Reserve in 1997.
- **Geography:** Bounded by the Brahmaputra and Lohit Rivers in the north and the Dibru River in the south.
- **Flora & Fauna:** Originally established to protect the rare white-winged wood duck, the park now shelters diverse species such as Bengal tigers, Indian leopards, and feral horses (descendants of horses abandoned during World War II).
 - It's an Important Bird Area with over 300 bird species recorded.

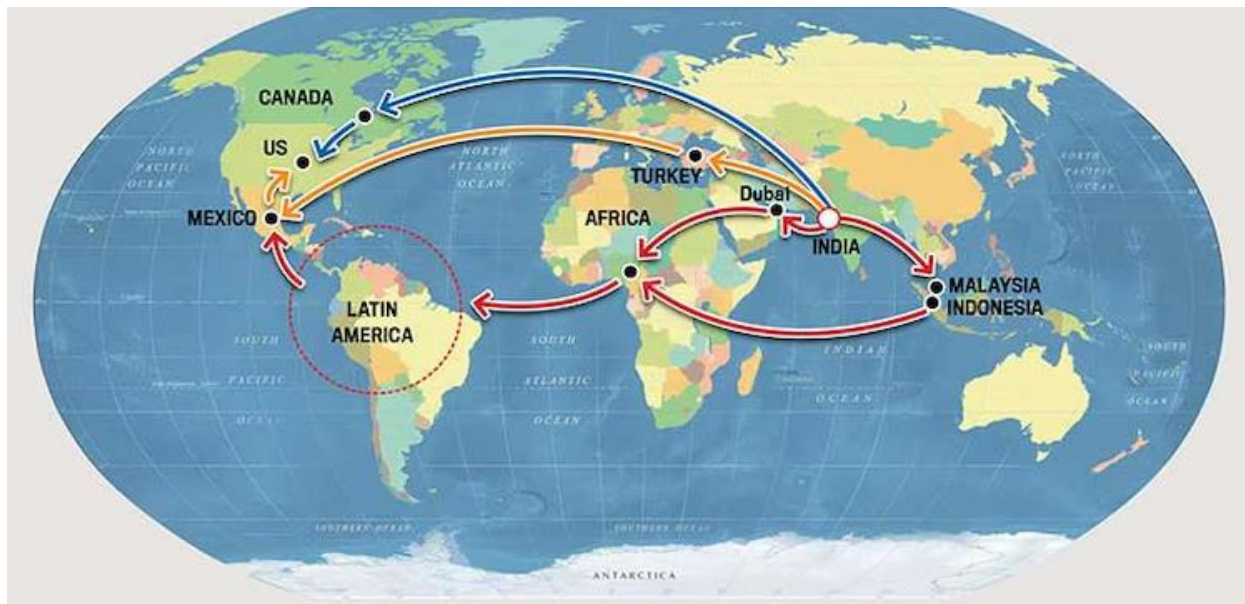
Source: [Indian Express: Told it can't drill in a national park, oil turns into a research project](#)

Dunki Route

Context

A US military plane carrying 104 Indian deportees landed in Amritsar. Many of them reached the country through multiple countries via a 'dunki route.'

About Dunki Route



- It is a term for the journey migrants take through Latin American countries to reach the US border.
- This journey often begins in countries such as Ecuador, Bolivia, or Guyana, known for their relatively easier visa processes for Indian citizens.
- Travellers face the treacherous Darién Gap, a forested region between Colombia and Panama, known for its challenges including scarce clean water, dangerous wildlife, and criminal gangs.
- After Panama, the route typically passes through Guatemala and into Mexico, with migrants confronting obstacles like fence jumping and river crossings, including the Rio Grande.
- The journey can cost between Rs 15 lakh to Rs 70 lakh, involving dealings with human trafficking rings.
- Indian agents work in conjunction with traffickers throughout the route to facilitate the journey to the US.
- Despite the inherent risks and dangers, many migrants undertake this hazardous journey driven by the hope of achieving the American Dream.

Why do some Indians undergo the hardship of illegal migration?

- **Lack of Economic Opportunities**
 - **Unemployment & Underemployment:** Despite economic growth, many Indians, especially in rural areas, struggle to find stable jobs with decent wages.
 - **Even Developed States Face Job Shortages:** Illegal migrants often come from economically advanced states like Gujarat and Punjab, where lack of high-paying jobs pushes people to seek opportunities abroad.
- **Better Income Prospects Abroad**
 - **Higher Wages in Developed Countries:** Even low-skilled jobs in countries like the US, Canada, and UK pay significantly higher salaries than many professional jobs in India.
 - **Aspiration for Financial Stability:** Many illegal migrants hope to remit money back home and improve their family's financial situation.
- **Social & Peer Pressure**
 - **Established Migrant Networks:** Communities in Punjab and Gujarat have large overseas populations, making migration a social norm.
 - **Family & Peer Expectations:** Success stories of relatives abroad create pressure to migrate, often leading people to take illegal routes if legal options are unavailable.
- **Perception of a Better Life in the West**
 - **The "First World Dream":** Many believe that countries like the US, Canada, and Europe offer a better quality of life, education, healthcare, and security.
 - **Influence of Social Media & Films:** Western lifestyles, showcased in movies, social media, and news, make migration more desirable.
- **Legal Migration Barriers & High Costs**
 - **Stringent Visa Rules:** Many Indians fail to qualify for skilled worker visas, forcing them to take illegal routes.
 - **High Costs of Legal Migration:** Student and work visas require significant financial investment, which many cannot afford.

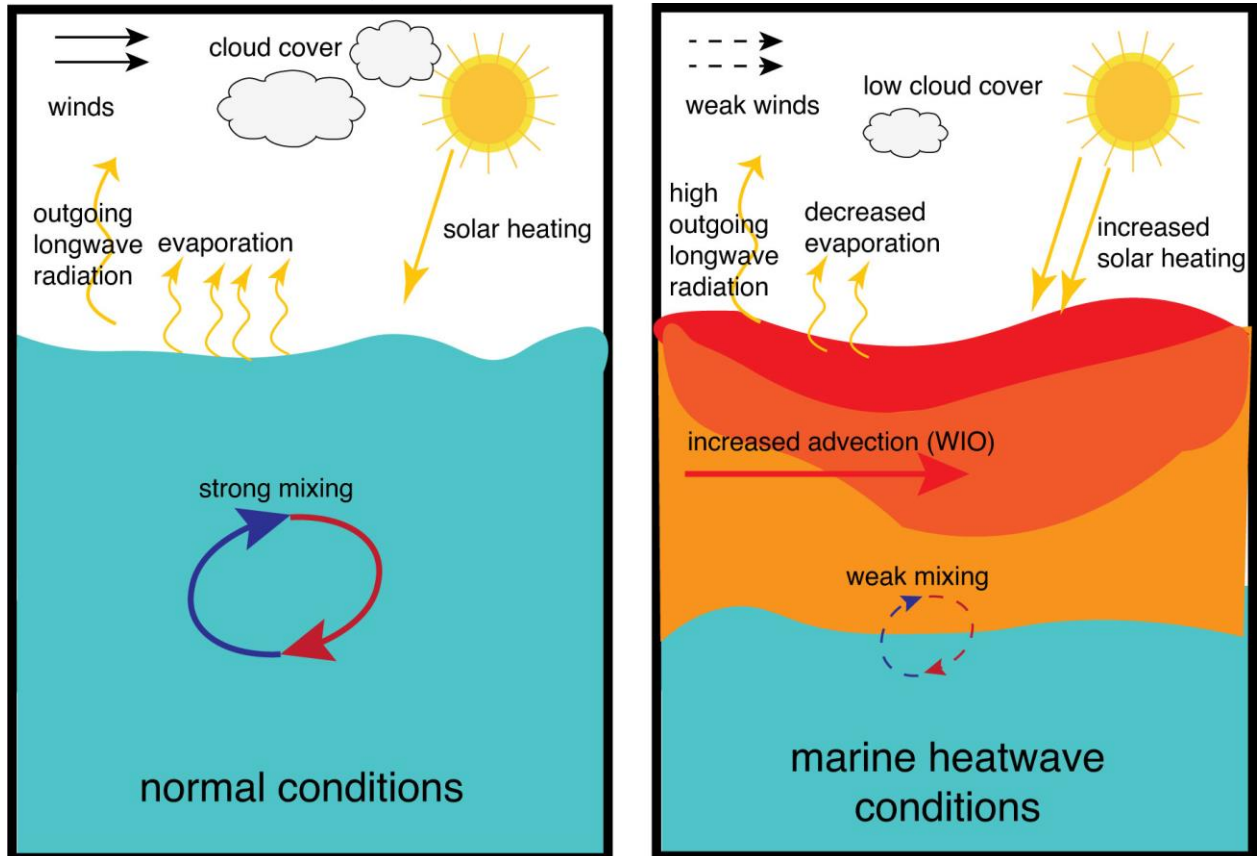
Source: [Indian Express: Jumping fences, crossing jungles: How migrants use 'dunki routes' to reach US](#)

Marine Heatwaves (MHWs)

Context

The **MHWs off the coast of Western Australia (WA) in January 2025** led to the **death of over 30,000 fish** according to a study conducted by the non-profit group Climate Central.

What Are Marine Heatwaves (MHWs)?



- MHWs are **extreme oceanic heat events**, where **sea surface temperatures (SST) rise 3-4°C above normal for at least five days**.
- They can **last for weeks, months, or years**, affecting large marine ecosystems.
- Studies show MHWs have become **twice as frequent** since 1982, with a **50% increase in duration over the past decade**.

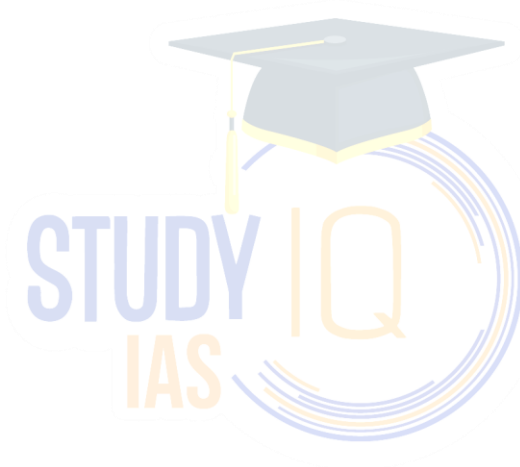
Why Have Marine Heatwaves Intensified?

- **Climate Change:**
 - **90% of global warming's excess heat is absorbed by oceans**, raising SST.
 - Since **1850**, global SST has risen by **0.9°C**, with **0.6°C of this occurring in the last 40 years**.
- **Projected Increase in MHWs:**
 - At **1.5°C warming**, MHWs could be **16 times more frequent**.
 - At **2.0°C warming**, they could be **23 times more frequent**.
- **Western Australia's Increasing Anomalies:**
 - **September 2024:** SST anomalies were **1.2°C above normal**.
 - **January 2025:** SST anomalies **crossed 2°C multiple times**, worsening the MHWs.

Impact of Marine Heatwaves

- **Ecosystem Disruptions:** These events cause habitat destruction due to **coral bleaching, seagrass destruction, and loss of kelp forests, affecting the fisheries sector** adversely.
 - **E.g.,** An underwater survey showed that 85% of the corals in the Gulf of Mannar near the Tamil Nadu coast got bleached after the marine heatwave in May 2020.
 - **Kelp Forest Destruction:** Kelps thrive in **cool waters**, and MHWs **destroy these habitats**, impacting marine biodiversity.
 - **Coral Bleaching:** Warmer waters **stress corals, reduce their reproduction**, and make them **vulnerable to diseases**.
 - **2024 Great Barrier Reef Bleaching:** Reached "**catastrophic**" levels due to MHW-induced stress, marking its **seventh mass bleaching event**.

Source: [Indian Express: Climate Crisis Intensifying Marine Heatwaves](#)



Editorial Summary

The saga of regulating India's thermal power emissions

Context

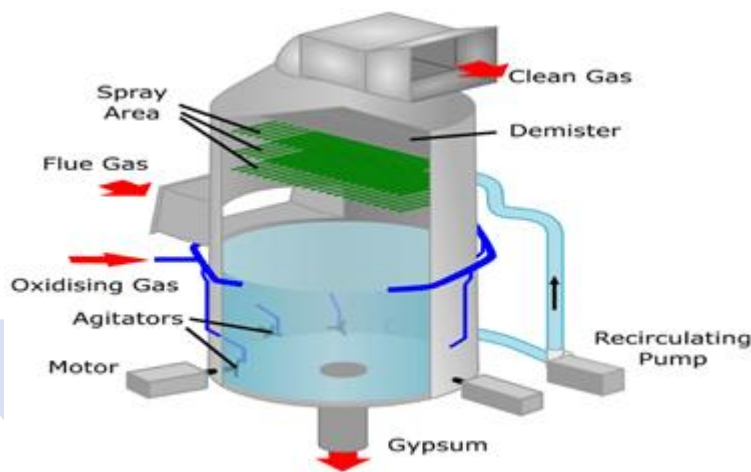
On **December 30, 2024**, the **Ministry of Environment, Forest, and Climate Change (MoEFCC)** amended the **Environment Protection Rules**, delaying the compliance deadline for **thermal power plants** to meet **sulphur dioxide (SO₂) emission norms** by another three years.

More in News

- The **previous deadline** for about **20 GW of thermal plants** (located in densely populated areas) was **December 31, 2024**.
- This marks the **4th extension** of deadlines since the norms were first introduced in **2015**.

Concerns Regarding Delay in SO₂ Emission Norms Compliance

- **Air Pollution Impact:** SO₂ is a major contributor to **acid rain** and **secondary aerosols**, leading to **respiratory diseases** and **cardiovascular issues**.
- **Public Health Risk:** People living near thermal plants continue to suffer from **poor air quality** due to prolonged inaction.
- **Increased SO₂ Emissions:** Satellite images have shown that SO₂ emissions from thermal power plants in India have increased since 2019.
 - **In 2022, India was the largest emitter of SO₂ globally**, accounting for **over 20%** of the world's anthropogenic emissions.
- **Non-Compliance:** Many polluting thermal power plants have missed multiple deadlines to implement emission standards for SO₂.
 - **E.g.,** Centre for Research on Energy and Clean Air (CREA) found that 92% of the country's coal power plants function without Flue Gas Desulphurisations (FGDs).
- **Disproportionate Impact:** Thermal power plants emit significantly more PM_{2.5} and SO₂ than sources like stubble burning.
 - **E.g.,** Thermal power plants emit 10 times more kilotonnes of PM_{2.5} compared to crop residue burning, and over 200 times more kilotonnes of sulfur dioxide.
- **Lax Enforcement:** Regulatory enforcement on thermal power plants remains less stringent compared to restrictions and penalties imposed on stubble burning.
- **Financial Burden on Consumers:** Electricity regulators allowed **FGD costs to be passed on to consumers**, even if emission norms are not met.
 - Plants with installed FGDs may **not operate them** to avoid higher electricity generation costs, leading to **wasted public expenditure**.



Impact of FGD Installation

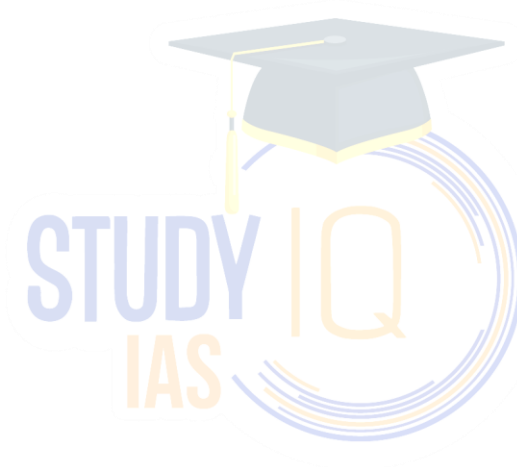
- **IIT Delhi Study:** A study by the Indian Institute of Technology (IIT), Delhi, found that implementing FGD technology in thermal power plants can reduce the concentration of SO₂ by up to 55% as far as 60-80 km away from the plants.

- It also showed a significant decrease in the concentration of sulfate aerosols up to 30% as far as 200 km from the thermal power plant site.
- **CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) Study:** A draft study report by CSIR-NEERI recommended stopping new orders for installation of FGD units.

Way Forward

- **Reassessment of ongoing delays:** It may be time to reassess ongoing delays.
- **Stringent Enforcement:** Improve regulatory enforcement on thermal power plants to ensure compliance with emission norms. Environmental compensation for non-compliance could be imposed on thermal power plants.
- **Prioritize FGD Installation:** Expedite the installation of FGD systems in private and state-operated power plants, as these have the maximum reduction potential.
- **Climate Action and Pollution Control:** Implementing climate action and pollution control measures are needed to keep sulfur dioxide in check.

Source: [The Hindu: The saga of regulating India's thermal power emissions](#)



What ails India's massive diagnostics sector?

Context

India's diagnostics sector is **fast-growing but remains fragmented, under-regulated, and unevenly distributed**.

Facts

- Industry experts estimate that there are **around 300,000 labs across the country**, and this number is growing.
- Within the healthcare sector, diagnostics **accounts for around 9% of the industry**, estimated to be worth **₹860 billion in the FY 2024**, and projected to grow to about **₹1,275 billion by the FY 2028**.

Issues Affecting India's Diagnostics Sector

- **Shortage of Trained Personnel:** Lack of qualified pathologists, microbiologists, lab technicians, and radiologists.
 - Many labs may not be able to employ well-trained staff, affecting quality.
 - **"Ghost employees and doctors":** labs obtaining licenses by falsely claiming to have qualified staff.
 - **E.g.,** Final-year MD pathology student in Kolkata reports a huge workload (800+ tests/day) with serious staff shortages.
- **Under-Regulation and Poor Implementation:** Fragmented market with many small, unorganized labs.
 - **Clinical Establishments Act (Registration and Regulation) 2010** not fully adopted or implemented effectively across all states.
 - Only 12 States and all Union Territories, except Delhi, have adopted this Act.
 - Lack of a strong regulatory environment leads to varying standards.
 - Lack of proper biomedical waste management, potentially leading to outbreaks.
 - **E.g.,** Tamil Nadu government's announcement in 2009 to constitute a State Council for Laboratory Technicians is yet to be implemented.
- **Fragmented and Competitive Market:** Low barriers to entry.
 - Many standalone players.
 - This leads to inconsistent quality standards.
- **Varying Standards and Quality Concerns:** Many labs are not accredited.
 - Uneven quality standards due to a lack of resources for advanced technologies and inadequately skilled manpower.
 - Emphasis is needed on the quality and accuracy of results.
- **Ethical Issues and Fraudulent Practices:** "Bought out" signatures from doctors in exchange for money, without proper supervision.
 - Labs fraudulently using doctors' names and signatures.
 - Technician-only facilities not run or owned by qualified pathologists.
 - E-signatures by pathologists connected to multiple labs without limits on the number of labs.
- **Urban-Rural Divide:** Diagnostics concentrated in urban areas.
 - Only 24% of diagnostics revenue from rural areas (as of FY23), despite nearly 70% of the population residing rurally.
 - Gaps exist in government labs, making them less favored (lack of upgrades, limited operational hours, unavailability of specialists).
- **Pricing Problems:** General concern regarding pricing in the private health sector.
 - Telangana Diagnostics Programme ('T-Diagnostics') provides some relief by offering tests at no cost and has saved significant out-of-pocket expenses for patients.

- However, supply issues (e.g., reagents) can mar these programs.
- **Unrealistic Requirements:** Lab representatives report that the space and educational requirements under the Kerala State Clinical Establishments Act are unviable.
 - The State government also does not recognise paramedical degrees/diplomas even from recognised institutions in other States.
 - Amendments to the Tamil Nadu Clinical Establishments (Regulations) Rules, 2018, stipulating minimum space for sample collection for clinical laboratories — 300 sq ft in rural areas and 500-700 sq ft in urban areas.

Way Forward

- **Stronger Regulations & Enforcement:** Make **NABL accreditation mandatory** for all diagnostic labs.
 - Expand **The Clinical Establishments Act** to cover all States.
 - Impose **strict penalties for fake reports and ghost pathologists**.
- **Address Manpower Shortage:** Set up **specialized training programs** for lab technicians.
 - Increase **microbiologist and pathologist recruitment** in rural areas.
 - Implement **needs-based licensing** to prevent lab saturation in urban areas.
- **Improving Rural & Public Healthcare Infrastructure:** **Upgrade district hospital labs** to reduce the burden on urban hospitals.
 - Ensure **free/subsidized diagnostic tests** in government hospitals.
- **Standardization of Pricing & Service Quality:** Introduce **government-regulated pricing** for common diagnostic tests.
 - Mandate **uniform testing protocols** for all labs.
- **Public Awareness & Patient Rights:** Educate patients on **lab accreditation and quality checks**.
 - Set up **grievance redressal mechanisms** for diagnostic fraud complaints.

Source: [The Hindu: What ails India's massive diagnostics sector: putting labs under the lens](#)

Tax rate cut in Recent Union Budget Announcement: Arguments

Context

In Union Budget 2025, Finance Minister presented unprecedented tax rate cuts for middle class.

Arguments in Favour of Tax Cuts

- **Increases Disposable Income:** The Rs 1 lakh crore tax cut gives urban middle-class households more money to spend.
- **Consumption Multiplier Effect:** With a **Marginal Propensity to Consume (MPC) of 0.7**, the consumption multiplier is estimated at five, leading to Rs 5 lakh crore in additional consumption.
- **Higher GDP Growth:** The increased consumption is projected to **raise GDP growth by 2.7%** and **consumption growth by 4.8%**, reinforcing economic expansion.
- **Demand-Driven Growth:** Higher consumer spending signals **greater demand**, encouraging businesses to **expand production and invest in new projects**.
- **Crowds in Investment:** Unlike tax cuts that increase government borrowing and crowd out private investment, this PIT cut **stimulates demand and investment simultaneously**.
- **Employment Generation:** More investment **leads to job creation**, further boosting incomes and sustaining the consumption cycle.
- **Supports Sectors like Electronics, Consumer Durables, and Entertainment:** These are **locally produced**, ensuring that **less money leaks abroad**.
- **Addresses Lagging Urban Demand:** While **rural consumption has been growing**, urban middle-class spending has been **relatively weaker**, making this tax cut well-targeted.
- **No Major Fiscal Deficit Concerns:** Despite the tax cut, the government has kept the **fiscal deficit at 4.4% of GDP**, ensuring **macroeconomic stability**.
- **Boosts Tax Revenues in the Long Run:** Higher consumption and business expansion **lead to increased tax revenues**, partially offsetting the initial revenue loss.
- **Quick Economic Impact:** Unlike infrastructure investments that take years to show results, **tax cuts offer an immediate economic boost**.
- **Complements Capital Investment:** While tax cuts **spur short-term demand**, infrastructure spending enhances **long-term productivity and growth**.
- **Aligns with RBI's Role:** The **RBI can adopt an easier monetary policy**, fostering **low interest rates, higher private investment, and stronger growth momentum**.

Arguments Against Tax Cuts

- **Limited Benefit for the Middle Class:**
 - **Not All Middle-Class Taxpayers Benefit:** The new tax slabs apply only to those opting for the **new tax regime**, leaving **2.5–3 crore taxpayers** in the **old regime** without benefits.
 - **Only 50 Lakh Taxpayers Likely to Benefit:** A **small fraction** of India's middle class will experience relief, raising doubts about its broader economic impact.
- **Exaggerated Fiscal Sacrifice by the Government:** The Claimed Rs 1 Lakh Crore Tax Relief is Overstated:
 - Despite the tax cuts, **personal income tax revenue is projected to grow by 21.15% in 2025-26**, far higher than the growth of corporate tax (6.08%) and GST (10.93%).
 - The **actual fiscal impact is estimated to be only Rs 25,000 crore**, much lower than the **claimed Rs 1 lakh crore sacrifice**.
- **Weak Impact on Consumption Growth:**
 - **Private Consumption is Rs 200.30 Lakh Crore:** A tax relief of Rs 25,000 crore is too small to significantly **boost overall consumer spending**.
 - **Real Incomes Have Declined:** The **Economic Survey 2024-25** shows:

- **Real earnings** of salaried male workers **fell from Rs 12,665 (2017-18) to Rs 11,858 (2022-23)**.
- For self-employed women, real earnings **fell from Rs 4,348 to Rs 2,950** in the same period.
- **Tax Cuts Do Not Help Non-Taxpayers:** The majority of **low-income and informal workers** (who do not pay income tax) **see no benefit**, limiting the tax cut's impact on broad-based consumption.
- **Encourages Short-Term Gains Over Long-Term Investment:**
 - **Tax Cuts Provide Temporary Relief:** Unlike **capital expenditure (capex)** in infrastructure, which has long-term benefits, tax cuts primarily act as a **short-term stimulus**.
 - **Does Not Address Structural Growth Issues:** Real economic growth depends on **employment generation and wage growth**, which tax cuts do not directly address.
- **Could Increase Fiscal Imbalance:**
 - **Revenue Loss Needs to be Offset:** While the government claims to keep the fiscal deficit in check, **lower tax collections could lead to reduced public spending on welfare and infrastructure**.
 - **Potential Long-Term Fiscal Risks:** If not matched by economic growth, tax cuts could lead to **higher deficits in future budgets**, requiring future tax hikes or spending cuts.
- **Urban Bias – Ignores Rural India:**
 - **Skewed Towards Higher-Income Urban Taxpayers:** The tax cuts mainly benefit urban, salaried professionals, while rural and informal sector workers **see no direct gains**.
 - **Rural Demand is a Bigger Concern:** Recent data shows **rural consumption** is growing faster than urban consumption, indicating that **supporting rural income would be a better economic stimulus** than tax cuts.

Source: [Indian Express: Tax cut will have multiplier effect and Only a few benefit](#)