



The Hindu Important News Articles & Editorial For UPSC CSE Friday, 07 Feb, 2025

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GURUKULAM





Page 07 : GS 2 : Social justice : Health

Shankar Dhange has been ghting against the private diagnostics sector in Maharashtra after his sister's death, allegedly caused by incorrect test results before her surgery.

The case highlights the problem of unqualied personnel signing off on medical tests, which can lead to wrong treatments and complications.

What ails India's massive diagnostics sector: putting labs under the lens



Background and Problem in the Diagnostics Sector

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- The diagnostics sector in India is facing a signicant crisis due to the rapid expansion of medical laboratories and diagnostic facilities.
- There are approximately 300,000 labs across India, contributing to about 9% of the healthcare industry.
- This sector is estimated to be worth ₹860 billion in 2024 and projected to reach ₹1,275 billion by 2028.
- Despite this growth, the sector remains under-regulated, fragmented, and predominantly biased toward urban areas.

Regulatory Framework and Challenges

- The Clinical Establishments (Registration and Regulation) Act, 2010, aims to regulate diagnostic centers by ensuring registration and setting minimum standards.
- As of now, only 12 states and Union Territories, excluding Delhi, have adopted the Act. Some states like Kerala and Karnataka have their own regulations, but implementation has been poor.
- The sector remains fragmented with many small, unorganised labs that lack accreditation, leading to varying quality standards.

Shortage of Skilled Manpower

- A signicant shortage of trained doctors and lab technicians affects the quality of services in diagnostic centers.
- Accredited labs are required to have full-time technicians, but many smaller labs cannot afford such staff, leading to unreliable results.
- Research shows a lack of microbiologists and trained personnel in some areas, exacerbating the problem.

Ghost Pathologists and Fraudulent Practices

- The shortage of qualied pathologists leads to practices where lab reports may be signed off by ghost pathologists or even by unqualied staff, sometimes in exchange for money.
- This is a widespread issue across many states, with "technician-only" labs being run by non-qualied personnel in some places.

Urban-Rural Divide

- A signicant disparity exists in the availability of diagnostic facilities between urban and rural areas.
- Despite nearly 70% of the population living in rural areas, only 24% of diagnostics revenue comes from these regions.
- Government-run labs are under-equipped and have limited operational hours, forcing patients to rely on expensive private labs.

Pricing and Affordability

- The private diagnostics sector is also marked by high pricing, though government initiatives in states like Telangana and Kerala are addressing these issues.
- For example, Telangana's 'T-Diagnostics' initiative has saved patients over ₹1,100 crore by providing affordable tests, but logistical challenges persist.

Problems Faced by Smaller Labs

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- Many small labs face difculties due to regulatory requirements regarding space and educational qualications.
- In states like Kerala and Tamil Nadu, small labs struggle to meet the minimum standards required by law.
- Lab associations are asking for relaxed rules regarding space requirements and better training programs for technicians from outside the state.

Sector's Desire for Standardization

- While the diagnostics sector is fragmented, there is a strong desire for better regulation and standardization.
- Associations are calling for stricter licensing and accreditation mandates, better supervision by qualied pathologists, and mandatory adherence to quality standards in testing, reporting, and sample collection.

Conclusion

- The diagnostics sector faces major challenges such as under-regulation, a shortage of qualied personnel, and widespread fraudulent practices.
- These issues directly impact patient health and safety by leading to inaccurate diagnoses and improper treatments...

UPSC Mains Practice Question

Ques : Unqualied personnel in the diagnostics sector can lead to inaccurate medical test results, affecting patient safety. Discuss the challenges in regulating private diagnostic labs in India and suggest measures to ensure quality control. (250 Words /15 marks)



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Page 10: GS 2: Indian Polity

On January 30, 2024, the Supreme Court allowed High Courts to appoint retired judges on an ad-hoc basis.

On the appointment of ad-hoc judges to High Courts

What did the Supreme Court order? Have such appointments been made previously? What did the rule set in the *Lok Prahari* judgment state? What does Article 224-A mandate?

Aaratrika Bhaumik

The story so far:

o address the growing backlog of criminal cases, the Supreme Court on January 30, allowed High Courts to appoint retired judges on an ad-hoc basis, provided they hear only criminal appeals as part of a Bench led by a sitting judge. A Bench of Chief Justice of India (CJI) Sanjiv Khanna and Justices B.R. Gavai and Surya Kant relaxed a rule set in Lok Prahari Through Its General Secretary S.N. Shukla IAS (Retd.) vs Union of India (2021), which had limited such appointments to High Courts where judicial vacancies exceeded 20% of the sanctioned strength.

How are ad-hoc judges appointed? Article 224-A, introduced by the Constitution (Fifteenth Amendment) Act, 1963, allows the appointment of retired judges to High Courts on an ad-hoc basis Such appointments require the consent of both the retired judge and the President of India. These judges receive allowances as determined by the President's order and exercise the same jurisdiction, powers, and privileges as a sitting High Court judge. The detailed procedure for such appointments is outlined in the 1998 Memorandum of Procedure (MoP).

When are such appointments made? In Lok Prahari, the Court identified specific circumstances that could warrant the appointment of ad-hoc judges in certain High Courts. At the time, nearly 40% of judicial positions across all High Courts were vacant. The Court also referred to Law Commission reports from 1979, 1988, and 2003, which advocated for the temporary appointment of retired judges as an effective measure to address the mounting backlog of cases. However,

the Supreme Court expressed concerns that Article 224A could result in "inaction in making recommendations" for regular judicial appointments. Consequently, the Court clarified that ad-hoc judges can only be appointed when recommendations for filling less than 20% of vacancies have not been made, after considering both the number of sitting judges and the pending proposals for judicial appointments.

The Court outlined several "trigger points" for such appointments, although the list is not exhaustive. These include — 1) if vacancies in a High Court exceed 20% of its sanctioned strength; 2) if cases in a specific category have been pending for more than five years; 3) if more than 10% of the High Court's cases are pending for over five years; 4) if the case disposal rate is lower than the rate at which new cases are filed (case clearance rate). The Court also recommended that each Chief fustice

form a panel of retired judges, along with soon-to-retire judges, for appointments.

What does the latest order say?
The CJI-led Bench noted that, as of January 25, there are 62 lakh pending cases across High Courts, according to data from the National Judicial Data Grid. Of these, over 18.2 lakh are criminal cases, while more than 44 lakh are civil cases. To tackle this growing pendency, the Court decided to set aside the condition laid down in Lok Prahari, which permitted the appointment of ad-hoc iudges only when iudicial vacancies

It further ruled that ad-hoc judges can only hear criminal appeals. Additionally, the number of ad-hoc judges cannot exceed 10% of a High Court's sanctioned judicial strength, meaning each High Court can have only 2 to 5 such appointments.

exceeded 20% of the sanctioned strength.

Have there been prior instances?

There have only been three documented instances of ad-hoc judicial appointments. In 1972, Justice Suraj Bhan was appointed to the Madhya Pradesh High Court shortly after his retirement to adjudicate election petitions. Justice P. Venugopal was similarly appointed to the Madras High Court in 1982. More recently, in 2007, Justice O.P. Srivastava was appointed to the Allahabad High Court to preside over the Avodhya title suits.

THE GIST

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A Bench of Chief Justice of India (CJI) Sanjiv Khanna and Justices B.R. Gavai and Surya Kant relaxed a rule set in Lok Prahari Through Its General Secretary S.N. Shukla IAS (Retd.) vs Union of India (2021).

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Supreme Court's Decision on Ad-hoc Judges

- These judges can only hear criminal appeals and must work as part of a Bench led by a sitting judge.
- The decision relaxes a previous rule set in the Lok Prahari case (2021), which limited such appointments to High Courts where judicial vacancies exceeded 20% of the sanctioned strength.

How are Ad-hoc Judges Appointed?

- Article 224-A, introduced in 1963, allows the appointment of retired judges to High Courts.
- Such appointments require the consent of the retired judge and the President of India.
- Ad-hoc judges receive allowances as determined by the President's order and hold the same powers as sitting High Court judges.
- The process is detailed in the 1998 Memorandum of Procedure (MoP).

When are Ad-hoc Judges Appointed?

- The Lok Prahari case set conditions for appointing ad-hoc judges.
- The Supreme Court identied several "trigger points" for appointments, including:
- Vacancies exceeding 20% of the High Court's sanctioned strength.
- Cases pending for over ve years in a particular category.
- More than 10% of total cases pending for ve years or more.

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- Case clearance rate is lower than the rate of new lings.
- The Supreme Court recommended forming a panel of retired and soon-to-retire judges for appointments.

Key Changes in the Latest Order

- As of January 25, 2024, 62 lakh cases are pending in High Courts.
- Of these, 18.2 lakh are criminal cases, and 44 lakh are civil cases.
- The Supreme Court removed the 20% vacancy rule, allowing more High Courts to appoint ad-hoc judges.
- However, these judges can only hear criminal appeals.
- The number of ad-hoc judges cannot exceed 10% of a High Court's sanctioned judicial strength.
- This means each High Court can appoint only 2 to 5 ad-hoc judges.

Past Instances of Ad-hoc Judicial Appointments

- Only three documented cases of ad-hoc judicial appointments exist:
- 1972: Justice Suraj Bhan (Madhya Pradesh High Court) handled election petitions.
- ▶ 1982: Justice P. Venugopal (Madras High Court) was appointed as an ad-hoc judge.
- **2007:** Justice O.P. Srivastava (Allahabad High Court) presided over the Ayodhya title suits.

Conclusion

- The Supreme Court's decision to appoint retired judges as ad-hoc judges for criminal appeals aims to tackle the massive backlog of cases in High Courts.
- This move seeks to enhance judicial efciency while maintaining accountability and fairness.

UPSC Mains Practice Question

Ques: Discuss the signicance of appointing retired judges as ad-hoc judges under Article 224-A of the Indian Constitution in addressing judicial backlog. (150 Words /10 marks)



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Page 15: GS 2: International Relations

The U.S. administration's decision to close USAID has led to widespread criticism and concerns over its global impact.

- The aid freeze affects humanitarian efforts in healthcare, education, and development across multiple countries.
- China is stepping in to II the aid vacuum.

Trump's decision to shut down USAID could set off ripples around the world

The U.S. is by far the world's largest source of foreign assistance, although several European countries allocate a much bigger share of their budgets to aid; the USAID funds projects in some 120 countries aimed at fighting epidemics, educating children, and supporting other areas of development

Associated Press

he Trump administration's decision to close the U.S. Agency for International Development (USAID) has drawn widespread criticism from congressional Democrats and raised questions and concern about the influence billionaire ally Elon Musk wields over the federal government.

The United States is by far the world's largest source of foreign assistance, although several European countries allocate a much bigger share of their budgets to aid. The USAID funds projects in some 120 countries aimed at fighting epidemics, educating children, providing clean water, and supporting other areas of development.

The USAID has been critical in providing humanitarian assistance in Colombia, conservation efforts in the Brazilian Amazon, and coca eradication in Peru. Recent USAID money has also supported emergency humanitarian aid to more than 2.8 million Venezuelans who fled economic crisis.

In 2024 alone, the agency transferred some \$45 million to the U.N. World Food Programme, mostly to assist Venezuelans.

In Brazil, the USAID's largest initiative is the Partnership for the Conservation of Amazon Biodiversity, which focuses on



Cut off: People protest against U.S. President Donald Trump and his billionaire advisor Elon Musk's plan to shutdown USAID outside the U.S. Capitol on Wednesday. AFP

conservation and improving livelihoods for Indigenous peoples and other rainforest communities.

Over in Peru, part of the USAID's \$135 million funding in 2024 was dedicated to financing cocaine-production alternatives such as coffee and cacao. The humanitarian agency has been seeking to curb production of the drug since the early 1980s.

The effects of halting U.S. aid are also rippling across sub-Saharan Africa. Last year, the U.S. gave the sub-Saharan region more than \$6.5 billion in humanitarian assistance.

But since Mr. Trump's announcement, HIV patients in Africa found locked doors at clinics funded by an acclaimed U.S. programme that helped rein in the global AIDS epidemic.

In Ghana, the Chemonics International development group said it's pulling logistics for programmes in maternal and child health, malaria response, and HIV.

Education programmes have been halted in Mali, a conflict-battered West African nation where the USAID has become the country's main humanitarian partner after others left following a 2021 coup.

In civil-war-torn Sudan, which is grappling with cholera, malaria, and measles, the aid freeze means 6,00,000 people will be at risk of catching and spreading those diseases, said an official who spoke on condition of anonymity because they were

not authorised to speak publicly on the matter.

In Kosovo, which has received more than \$1 billion from the USAID since 1999, women's groups fear the impact of losing American funding for gender and diversity-related projects in the conservative country.

"This might leave women's groups stranded and unsupported," said Ariana Qosaj Mustafa of the Kosovo Women's Network.

Emina Bosnjak of the Sarajevo Open Center said the USAID promotes awareness of discrimination, violence, and hate speech, and marginalised groups would suffer if that stops.

"Stronger narratives that stand against human rights and stand against democracy and rule of law will actually become more visible," she said.

A non-profit organisation supporting LGBTQ people in Uganda also feels under threat. Pius Kennedy, a programme officer with the Kampala-based nonprofit Africa Queer Network, said he and five other permanent employees had been ordered by the USAID to stop work.

He said the funding freeze could erase years of gains made in protecting sexual minorities in Uganda, one of more than 30 African countries where homosexuality is criminalised.

"We would always look at the United States as something that we would always run to in case you are facing a number of insecurities in the country," Mr. Kennedy said – but that may no longer be the case.

The freeze of foreign assistance from the USAID include \$39 million for rights, democracy, and media in Myanmar, whose military seized power from the elected government of Aung San Suu Kyi in 2021, a human rights group said on Thursday.

The group Human Rights Myanmar said the frozen funds "are vital for organisations challenging military rule and promoting democracy, which advance U.S. interests by upholding American values and countering China's authoritarian influence."

The U.S. has also frozen funding for landmine removal in Cambodia.

Geopolitics of aid

In an illustration of the geopolitics of foreign aid, China has stepped in to fill the gap. Beijing and Washington vie for influence in Southeast Asia, with China gaining ground in the past decade. Heng Ratana, director-general of Cambodian Mines Action Center said China has released \$4.4 million to support continuing demining operations in seven Cambodian provinces.

In the southern Mexican city of Villahermosa, the Peace Oasis of the Holy Spirit Amparito shelter is one of several beneficiaries of U.S. humanitarian assistance to those fleeing persecution, crisis, or violence.

However, under the funding freeze, the charitable organisation that runs the shelter had to cut its only doctor as well as a social worker and child psychologist. The shelter has since appealed to the Mexican government for alternate funding for programmes managed by the United Nations to pay for flights and bus rides to Mexico's border with Guatemala for migrants who want to return home.

"The crisis is only going to worsen," the shelter said in a statement. "The most affected will be the population we serve."

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USAID (United States Agency for International Development):

- **Purpose:** USAID is a U.S. government agency that provides foreign aid to support global development and humanitarian efforts.
- **Establishment:** It was created in 1961 by President John F. Kennedy to promote economic growth, democracy, and disaster relief worldwide.
- **Key Areas of Work:** USAID funds programs in healthcare, education, agriculture, environmental protection, and poverty reduction.
- Global Reach: It operates in over 120 countries, including Africa, Asia, Latin America, and the Middle East.
- **Health Initiatives:** It has supported HIV/AIDS treatment, maternal healthcare, and malaria prevention programs.
- Recent Works: In 2024, USAID allocated billions of dollars to humanitarian and development projects worldwide.



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In News: National Lok Adalat Scheme

Lok Adalats serve as an effective alternative dispute resolution mechanism.

Lok Adalats aim to reduce court pendency and settle disputes at various stages.

Purpose of Lok Adalats

- Lok Adalats help in reducing the number of pending cases in courts.
- They settle disputes quickly, even before they reach the courts.
- This system ensures easy and cost-effective justice for people.

Role in Alternative Dispute Resolution (ADR)

- Lok Adalats are an effective way to resolve disputes outside regular courts.
- They reduce the burden on the judiciary and help in faster justice delivery.
- The process is simple, informal, and does not involve complex legal procedures.

Types of Lok Adalats

State Lok Adalats

- o Organized based on local requirements by Legal Services Authorities.
- o Handle both pre-litigation and post-litigation cases.

National Lok Adalats

- o Conducted four times a year across all courts, including the Supreme Court.
- Scheduled in 2025 for 8th March, 10th May, 13th September, and 13th December.

Permanent Lok Adalats

- o Set up in districts for resolving public utility service disputes.
- o They provide a compulsory pre-litigation mechanism.

Impact of Lok Adalats

- o They have successfully resolved many cases in the past two years.
- o They help in speedy dispute resolution, beneting both courts and people.
- o Lok Adalats make the legal system more accessible, efcient, and people-friendly.

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In News: G20 Boycott

US Secretary of State Marco Rubio announced he would not attend the G20 Foreign Ministers' meeting in Johannesburg, citing concerns over South Africa's policies.

Analysis of the news:

What is G20?

The G20 is an informal group of 19 countries and the European Union, with representatives of the International Monetary Fund and the World Bank.

The G20 membership comprises a mix of the world's largest advanced and emerging economies, Together,

South Africa's Case Against Israel at ICJ

- the G20 members represent more than 80% of world GDP, 75% of international trade and 60% of the world population.
- The core reason behind Rubio's announcement appears to be South Africa's genocide case against Israel at the International Court of Justice (ICJ).
- Many US Republicans, including Senator Lindsey Graham, have opposed the ICJ's proceedings, viewing them as biased.
- South Africa, along with Malaysia, has formed a "Hague Group" to support the ICJ and counter potential US sanctions against the court.
- This legal and diplomatic stance has further strained US-South Africa relations.

Targeting the ICC and ICJ: US-Israel Nexus

- The US has historically opposed international legal action against Israel, with Trump's rst administration imposing sanctions on the International Criminal Court (ICC). While Biden reversed these measures, the US reconsidered its stance after ICC announced investigations into both Israeli and Hamas leaders.
- The recent US House bill (H.R. 8282), which proposes new sanctions on the ICC, reects ongoing efforts to shield Israel from international legal scrutiny.

G20 and the Future of US Engagement

- Rubio's boycott raises questions about the US commitment to the G20 under Trump's leadership.
- South Africa currently chairs the G20, and Trump's past interactions with the group have been marked by isolationist policies and trade disputes.

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The uncertainty over Trump 2.0's stance on multilateralism could impact G20's effectiveness, potentially increasing Russian and Chinese inuence if the US distances itself.

India's Concerns and Strategic Implications

- India has positioned the G20 as a key forum for addressing global challenges and has beneted from its leadership in the Global South.
- ▶ Under Biden, India's G20 presidency in 2023 received strong US support, reinforcing India's diplomatic role.
- However, a Trump administration's transactional approach could undermine India's Global South strategy if Washington deprioritizes multilateral engagement.

Conclusion:

- If the US withdraws from G20 leadership, it could weaken the institution and shift global invence toward Russia and China.
- Alternatively, Rubio's announcement may be a negotiation tactic, pressuring South Africa to soften its stance on Israel.
- India must navigate these shifts carefully, balancing its Global South leadership with its strategic partnerships with both the US and G20 members.



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Page : 08 Editorial Analysis The saga of regulating India's thermal power emissions

n December 30, 2024, India's Ministry of Environment, Forest and Climate Change (MoEFCC) issued a notification amending the Environment Protection Rules by pushing back the deadline for thermal plants to comply with sulphur dioxide (SO2) emission norms by three years without any reasons being given. As it happens, the existing deadline for about 20 gigawatts (GW) of thermal plants, all located in close proximity to densely populated areas, was December 31, 2024. This is the latest instance in a nearly decade-long saga that fans of Franz Kafka would find appealing.

The MoEFCC revised the emission norms for Indian thermal plants in December 2015 after public consultations, and all thermal plants were expected to comply with them by December 2017 despite it being a tight deadline.

This notification tightened the prevalent norms for particulate matter emissions and introduced norms for other emissions, including SO2, for the first time. These norms were understood to be broadly on a par with existing practices in countries such as Australia, China and the United States.

The morphing of a debate

Indian coal generally has a lower sulphur content than other coal, which should have made it easier for Indian thermal plants to meet the SO2 emission norms. But rather than focusing on the best ways to meet the norms - given Indian coal's characteristics - the debate morphed into the challenges around implementing the flue gas desulphurisation (FGD) technology for desulphurisation of high-sulphur coal. Despite the norms never mandating FGDs, the discussion became one about issues such as the scheduling of FGD installations given their long gestation periods and the likely costs of installing them.

In parallel, a different discourse questioning the SO2 emission norms themselves also took



Ashok Sreenivas is with the Prayas (Energy Group)



is with the Prayas (Energy Group)

Electricity consumers are likely to pay for installed but unused equipment, even as citizens living around thermal plants do not get the benefit of cleaner air

shape, often driven by different arms of the government. The Central Electricity Authority (CEA) published papers in 2020 and 2021, questioning the need for uniform norms across the country and proposing that its country-wide implementation be phased out till 2035. The CEA also commissioned a study from IIT Delhi in 2022 which concluded that the installation of FGDs does provide air quality benefits but argued for extending the timelines due to issues such as FGDs being expensive, their supply chain being inadequate, and their operation leading to increased coal consumption (and hence greenhouse gas emissions).

In 2024, NITI Aayog commissioned the CSIR-National Environmental Engineering Research Institute to conduct a study on this. This study concluded that SO2 emission norms are not important to achieve good ambient air quality in India, and instead the focus should be on particulate emissions. There was also one strand of debate about secondary aerosol formation from SO2 emissions as the reason to have norms for it even though Indian coal is relatively low sulphur. Thus, rather than debating these issues and building a consensus before notifying the first set of norms, it continues robustly nearly a decade after their notification.

Different deadlines

In the midst of these debates, the MoEFCC diluted some norms and also extended, multiple times, the deadlines for compliance, with the notification of December 2024 being the fourth in the series. As a result, there are different deadlines for thermal plants in different locations and for different types of emissions, with SO2 emission deadlines being well after the deadline for other emissions.

Indeed, the final deadline for compliance with other emissions, which include particulate matter emissions that are considered important by all

government agencies, was December 31, 2024 with many plants having to comply from December 31 of 2022 and 2023. But it is not clear if various pollution control boards are verifying adherence to even these norms as there is no public source easily available that provides this information.

Consumer pays

Given the evolving timelines in the various notifications by the MoEFCC, many thermal plants have already tendered contracts to install FGDs – though not at a pace required to meet their deadlines before the latest notification. This was enabled by electricity regulators introducing regulations to pass on the costs of installing FGDs and other pollution control equipment to electricity consumers, irrespective of whether emission norms are met (so that it is not a burden on thermal plants).

As a result, though the earliest deadline for meeting SO2 emission norms is now December 31, 2027, 22 GW of thermal plants have already installed FGDs. Additionally, 102 GW (nearly 50% of installed thermal capacity) is in advanced stages of setting up FGDs.

Given the new timelines for compliance, the chances are that plants with FGDs will not run them since this would increase the cost of generation and hence push them down the preferred list of generators. Thus, electricity consumers are likely to be paying for installed but unused equipment, even as citizens living around thermal plants do not get the benefit of cleaner air for at least three more years, if not longer.

Perhaps this modern variant of Birbal's khichdi will get cooked one day, but the institutional, environmental, health and financial costs of doing so are likely to end up being high. And, unlike the original fable, it is not even clear whether the right lessons would be learnt from this saga.

Enviroment

GS-3 2014): Environmental impact assessment studies are increasingly undertaken before the project is cleared by the government. Discuss the environmental impacts of coal-red thermal plants located at Pitheads. (200 words/12.5m)

UPSC Mains Practice Question: Analyze the role of thermal power in India's energy mix. Discuss the challenges it faces in terms of environmental sustainability and the transition towards cleaner energy sources. (250 Words /15 marks)

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Context:

- → On December 30, 2024, India's Ministry of Environment, Forest, and Climate Change (MoEFCC) extended the deadline for thermal power plants to meet sulphur dioxide (SO₂) emission norms.
- The new deadline pushes compliance back by three years.

Deadline Extension Without Justication

- This delay affects around 20 GW of thermal plants, which are located in densely populated areas.
- No reason was provided for the extension, marking another delay in a decade-long process of implementing emission norms.

Revised Norms Introduced in 2015

- ▶ In December 2015, MoEFCC introduced stricter emission norms after public consultations.
- All thermal plants were expected to comply by December 2017.
- The norms included limits on particulate matter emissions and, for the rst time, introduced standards for SO₂ emissions.
- These norms aligned with those in countries like Australia, China, and the United States.

Shifting Focus in the Debate

- Indian coal has lower sulphur content, making it easier to meet SO₂ emission norms compared to high-sulphur coal.
- However, discussions focused on challenges in using Flue Gas Desulphurisation (FGD) technology, which removes sulphur from high-sulphur coal.
- FGDs were never mandatory, but debates centered around their high cost, long installation time, and supply chain issues.

Government Reports and Changing Opinions

- **2020-2021:** The Central Electricity Authority (CEA) questioned uniform emission norms and proposed extending deadlines to 2035.
- **⇒ 2022:** A study by IIT Delhi found FGDs improve air quality but recommended delays due to high costs and increased greenhouse gas emissions.
- **2024:** A study by NITI Aayog and CSIR-NEERI suggested SO₂ norms were less important than particulate matter norms for air quality.

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Despite these studies, a consensus was never reached before norms were rst implemented, leading to repeated extensions.

Repeated Extensions and Varying Deadlines

- Over the years, MoEFCC weakened some norms and extended deadlines four times.
- New deadlines:
 - o Particulate matter emissions: Final deadline December 31, 2024 (some plants had to comply by 2022-2023).
 - o SO₂ emissions: New deadline December 31, 2027.
- There is no public data on whether plants follow particulate matter norms.

Financial Burden on Electricity Consumers

- Many plants tendered contracts for FGDs but not fast enough to meet deadlines.
- Electricity regulators allowed plants to pass FGD costs to consumers, even if they do not meet emission norms.

Current status:

- 22 GW of thermal plants have installed FGDs.
- → 102 GW (nearly 50% of India's thermal power) is in advanced FGD installation stages. With deadlines extended, many plants may not use FGDs to save costs, leading to:
 - o Consumers paying for unused equipment.
 - o No air quality improvement for nearby areas for at least three more years.

Long-Term Implications

- Delays in SO₂ norms cause serious environmental, health, and nancial impacts.
- It is uncertain whether India will learn from these delays and improve pollution control policies.

Conclusion

- Repeated extensions in SO₂ emission norms show regulatory inefciencies and nancial strain on consumers.
- These delays increase environmental risks and raise concerns about India's commitment to pollution control and public health.

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