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# With Thorium, India Will Be In Its Element

## Washington isn't interested in being a guarantor of anything, including energy supplies. New Delhi's strategic response must centre around the one energy source it has in abundance

**Swarnodeep Homroy**

**Prof of Finance, Univ of Groningen, Netherlands**

War in West Asia has, once again, exposed the fragility of India's energy security. Nearly 90% of its crude oil is imported, and close to half originates in the Gulf. The standoff in Strait of Hormuz has rippled through the economy, compounded by rising demand amid scorching summer temperatures. As the crisis drags on, structural lessons are coming into focus: West's use of energy security as a tool of statecraft has entered a new phase where political alliances are largely redundant.

Since the Russia-Ukraine war, India has managed this vulnerability with considerable pragmatism, buying large volumes of discounted Russian crude that Western countries chose not to import directly. By 2024, Russia had become India's largest oil supplier.

This was celebrated as strategic autonomy. In reality, it operated within a system whose rules are still largely shaped by Western institutions. Washington tolerated these purchases for pragmatic reasons. The arrangement keeps Russian crude flowing into global markets, preventing a damaging oil price spike.

Rules of the trade remain governed by Western shipping, insurance, and financial networks, preserving American leverage over every barrel. India's access to Russian oil does not reflect geopolitical freedom, but participation in a managed energy system whose architecture it cannot yet shape.

When Washington imposed tariffs on Indian exports, partly related to the continued purchases of Russian crude, New Delhi had to adjust its import mix, accepting costlier energy inputs. The use of multiple policy instruments to control global energy flows, is now an unmistakable American priority.

India is not the first country to face this recalibration. For decades, cheap Russian pipeline gas underwrote Europe's industrial competitiveness, particularly Germany's. When that supply collapsed after Russia's invasion of Ukraine, American LNG filled the gap, but at a structural cost. By 2025, US had become Europe's dominant supplier. In July of that year, EU signed a $750bn energy purchase agreement, stabilising supplies, but tying the continent's energy future to Washington more tightly than at any point in history.

The dependence extended beyond fuel. Biden's Inflation Reduction Act, channelled hundreds of billions of dollars in subsidies to clean energy manufacturing, on the condition that production take place in US. Volkswagen, Siemens, and BASF began shifting investment across the Atlantic, while thyssenkrupp closed European facilities. What began as an energy emergency had become an industrial migration.

In Washington, there is bipartisan consensus to


rebuild American industrial capacity, and shorten supply chains in semiconductors, batteries, critical minerals, and energy technology. India does not yet face Europe's predicament. However, the underlying risks are the same.

The Feb 2026 India-US proposed trade agreement illustrated the dilemma. In exchange for tariff relief and removal of punitive duties, India agreed to reduce purchasing Russian oil, and committed to buying roughly $500bn worth of American energy, technology, and industrial products over five years.

Europe's own $750bn energy agreement with US, emerged under the pressure of crisis. India's deal emerged under the pressure of tariffs. The circumstances differ, but in both cases, they lead to a greater dependence on US. This dependence is manageable only as long as American commitments remain credible. But Iran war has exposed the fragility of American security guarantees. Much as Britain's standing as a global power collapsed after the Suez crisis, the credibility of American security guarantees is likely to be reassessed.

The current energy crisis offers a lens into this emerging order – one in which energy and industrial policies are no longer separable from foreign policy, and strategic supply chains cannot be left entirely to global markets. India's tradition of strategic multilateralism, may prove to be exactly the capability the next phase of globalisation demands. But political multilateralism needs to be paired with an accelerated push towards energy sovereignty.

While the world's attention was fixed on Hormuz, and diplomatic manoeuvring in Islamabad, India's thorium programme reached a major developmental milestone on April 6. With the world's largest deposits in India, thorium offers something no Gulf relationship or trade deal can: domestic energy at scale, and immunity to geopolitical disruption. Renewable energy generation has also expanded rapidly, and the opening up of the nuclear sector to private participation may expand nuclear power in coming decades.

But breeder and thorium systems are capital-intensive, slow to commercialise. They won't deliver near-term power at a cost that competes easily with renewables, gas, conventional reactors. In the interim, India must navigate the multi-polar geopolitics of energy.

This demands a foreign policy that is more institutionalised and less reactive. India's energy relationships have historically been managed episodically, rather than by a long-term strategy to diversify sources and build leverage.

India does have a head start: its multilateral traditions, diplomatic reach across competing blocs, and now a credible path to domestic energy at scale. But converting that position into a durable advantage will require stronger institutions, and a political class willing to think in decades, rather than electoral cycles.

- **Key Terms and Explanations**

- **Price Cap Mechanism**

A G7-led regulatory tool that caps the price at which Russian crude can be sold using Western shipping and insurance services. It's designed to keep Russian oil flowing (to prevent a global price shock) while limiting Moscow's revenue. India exploited this to buy discounted Urals crude, but its compliance is monitored through Western financial networks—showing how "cheap oil" isn't truly independent.

- **Inflation Reduction Act (IRA) – USA**

A landmark US law (2022) offering massive subsidies and tax credits for clean energy manufacturing, but with local content conditions. It sparked an industrial migration: European firms shifted investments to the US to qualify, fundamentally altering transatlantic economic ties. For India, it's a warning sign—energy transitions can become tools of industrial policy that pull investment away from developing nations.

- **Energy Sovereignty**

Beyond security, sovereignty means control over the entire energy value chain—generation, transmission, storage, and technology—such that external actors cannot weaponise energy dependence. Thorium-based nuclear power, because the fuel is domestically available, is often cited as a path to genuine sovereignty, unlike imported uranium or gas.

- **Thorium Programme (India)**

India's three-stage nuclear programme envisions using its vast thorium reserves (found in monazite sands of Kerala, Tamil Nadu, Odisha) as blanket material in Advanced Heavy Water Reactors. Stage 3 aims for thorium-uranium-233 cycle reactors. The "developmental milestone" referenced could be prototype criticality or fuel cycle breakthrough. Thorium offers a closed fuel cycle with minimal proliferation risk and abundant domestic fuel.

- **Strategic Multilateralism**

The practice of engaging multiple international platforms—BRICS, SCO, Quad, G20, International Solar Alliance—simultaneously to advance national interests without exclusive dependence on any one. India's ability to be a bridge between competing blocs allows it to hedge energy bets, but it requires institutional capacity and consistent diplomatic bandwidth.

- **Main Arguments and Substantive Parts**

- The central thesis: India's energy vulnerability is structural, and the present geopolitical churn has revealed that "strategic autonomy" in energy is largely an illusion when the rules of the global energy trade are set by Western institutional networks.

- **Core Arguments**

- India's celebrated diversification to discounted Russian crude post-2022 was tolerated by Washington not as a concession to Indian sovereignty, but as a pragmatic measure to stabilise global markets. It operated *within* a managed system, not outside it.

- The architecture of global energy—shipping, insurance (London's P&I clubs), dollar-denominated payments, SWIFT—remains embedded in Western institutions. This gives the United States enormous leverage, demonstrated by tariff imposition on Indian exports linked to Russian oil purchases.

- The "tariff-to-energy-deal" pattern is now established. Europe's shift from Russian pipeline gas to American LNG (cemented by a $750bn agreement) shows how crises accelerate structural dependence. India's proposed 2026 trade pact follows the same logic: tariff relief in exchange for phased reduction of Russian crude and commitment to buy American energy and technology.

- Such dependence is manageable only as long as American security commitments are credible. Yet events like the Iran war (hypothetical scenario mentioned) erode that credibility, much as Britain's Suez crisis punctured its global standing. Relying on a single hegemon's guarantees is risky.

- The solution is two-pronged: (a) institutionalised energy diplomacy, moving from episodic crisis management to a long-term strategy of diversification and leverage-building, and (b) an accelerated push towards domestic energy sovereignty, with thorium and renewables as the cornerstones.

- **Counterarguments Implicit in the Narrative**

- The narrative downplays India's genuine diplomatic skill in balancing the US, Russia, and Gulf states simultaneously—a feat few major powers have achieved without major rupture.

- Over-reliance on thorium is risky; breeder reactors are costly, technologically complex, and decades away from mass deployment. Over-optimism can stall urgent transitions.

- The narrative assumes Western institutions will remain dominant. Yet China's alternative financial infrastructure (CIPS, Belt and Road energy investments) is evolving; a multipolar energy order might provide India more room to manoeuvre than the article suggests.

- **Historical Evolution of the Issue**

- **Pre-Independence to 1970s**

Colonial India was primarily a coal-based economy. Oil exploration began with Digboi (Assam) in 1889, but production remained negligible. The strategic importance of Gulf oil was recognised early; British geopolitical interest in the Persian Gulf was partly driven by the need to fuel the Royal Navy after its shift from coal to oil pre-WW1.

- **Oil Shocks and the Birth of Energy Insecurity (1973-1990)**

The 1973 Arab oil embargo quadrupled crude prices. India, then importing over 60% of its oil, was hit hard—balance of payments crisis, inflation, and economic disruption. This catalysed the creation of ONGC as a national champion and the beginning of strategic oil diplomacy with the Arab world. The 1990-91 Gulf War again exposed India's absolute dependence on Gulf crude, triggering the balance of payments crisis that forced economic liberalisation.

- **Post-Liberalisation and the "Look East" for Energy (1990s-2000s)**

Economic reforms made India more reliant on imports as demand surged. Diversification attempts included investments in Sakhalin (Russia), Sudan, Vietnam, and Venezuela. The India-US civilian nuclear deal (2008) was a landmark, ending India's nuclear isolation and opening uranium imports, but also brought India closer to the US-led energy order. Strategic petroleum reserves were conceived (constructed in Visakhapatnam, Mangaluru, Padur) for emergency stocks.

- **Shale Revolution and Gulf Volatility (2010-2020)**

US shale oil and gas transformed global energy flows; India began importing US crude (2017). However, Gulf remained primary supplier due to proximity and freight economics. The US-Iran tensions under Trump (2018-19) forced India to zero out Iranian imports despite long-standing ties, demonstrating Washington's leverage. India also joined the International Energy Agency as an associate member (2017).

- **Russia-Ukraine War and "Discounted Crude" (2022-2024)**

Western sanctions on Russian oil created a price discount. India's public-sector refiners and private players ramped up purchases, with Russia becoming the top supplier by 2023-24. This was hailed as "strategic autonomy" but India had to navigate the G7 price cap, using non-Western insurers, yuan/dirham payments, and facing diplomatic pushback. The era revealed deep interdependence: India saved billions but remained anxious about secondary sanctions.

- **Projected Near-Future Developments (2025-2026)**

The scenario posits an Iran-linked Strait of Hormuz crisis in 2026, leading to a sharp energy shock. Simultaneously, an India-US trade deal ties India's tariff relief to reduced Russian crude purchases and an enormous American energy procurement commitment. This mirrors Europe's 2025 $750bn deal with the US. Domestically, India's thorium programme hits a milestone, and renewable expansion continues, offering a partial hedge.

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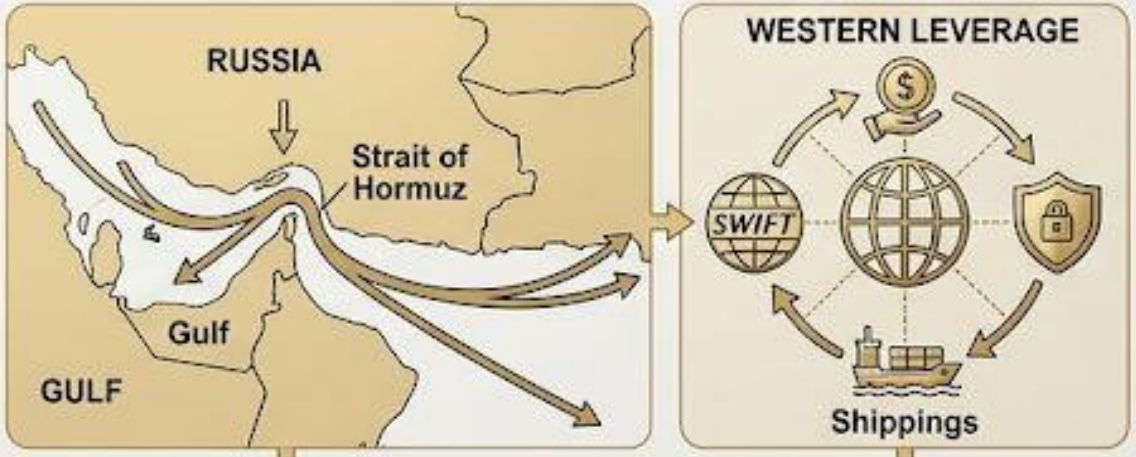
# INDIA'S ENERGY PREDICAMENT: A STRUCTURAL ANALYSIS

## VULNERABILITY TO THE MANAGED ENERGY SYSTEM







### Tolerated Russian Purchases

Oil are Russian Purchases

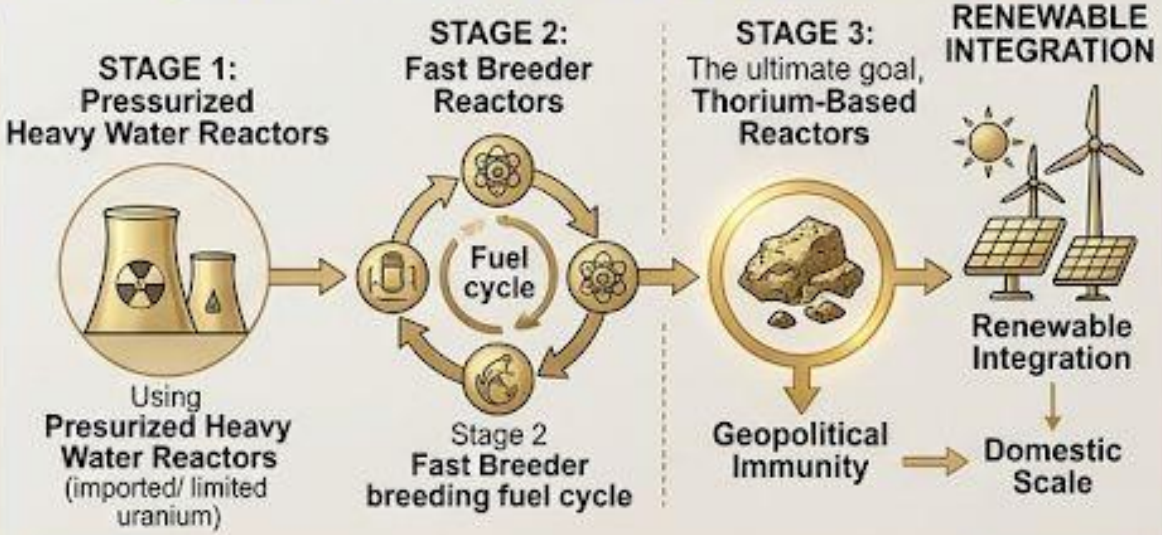
Global market stability

### Managed Control

**Dependencies** dependendencies and connectiing finance shipping

**Managed Control** ianalyges from unevery dependencies to global charget control

# A PATH TO TRUE ENERGY SOVEREIGNTY




## INDUSTRIAL IMPACT: THE EUROPEAN WARNING

Cheap Russian pipeline gas collapse

Replaced by Amperican gas mirriaged

American LNG American LNG (at cost)

**Industrial Migration** (e.g. Volkswagen, Siemens, Siemens movings moving to US due to IRA subsidies)

- **Logical and Philosophical Base**

- **Geopolitical Realism**

The arguments rest on classical realism: the international system is anarchic, states seek power and security, and economic interdependence is a tool of statecraft, not a guarantee of peace. The West's use of energy networks as instruments of leverage reflects the realist maxim that powerful states shape the rules of global trade. India's "autonomy" is more aspirational than real because structural power lies with the rule-makers.

- **Structural Interdependence (Complex Interdependence Theory revised)**

Liberal institutionalists would argue that India benefits from Western-anchored systems—secure sea lanes, insurance markets, stable dollar transactions. The narrative accepts that but flips it: the *dependence asymmetry* gives the US coercive power. When the hegemon mixes economic and security tools (tariffs, sanctions, technology controls), the system is not neutral; it's hierarchical.

- **Security-Dependency Dilemma**

A philosophical puzzle: buying cheap Russian oil preserved Indian welfare but invited US tariff retaliation. The dilemma is whether short-term pragmatism undermines long-term strategic autonomy by deepening reliance on a single facilitator (US), or whether it's possible to "sail between Scylla and Charybdis" indefinitely. The article suggests that without domestic energy sovereignty, this oscillation will converge to greater American dependence.

- **Statecraft as Managed Interdependence**

The article's core logic is that "energy security is a tool of statecraft" has entered a new phase where political alliances—old Cold-War-style blocs—are redundant, replaced by transactional, interest-driven relationships enforced through control of infrastructure and technology. This echoes concepts of "weaponised interdependence" (Farrell and Newman) where networks like SWIFT, dollar clearing, and shipping insurance become chokepoints.

- **Developmental Ethics and Intergenerational Justice**

Betting on thorium and renewables is not just technical strategy; it's an ethical stance. It recognises that fossil fuel dependencies leave future generations vulnerable to price shocks and climate change, and that sovereignty over energy sources aligns with a nation's right to self-determination. The philosophical underpinning is a blend of Gandhian self-reliance and a modern understanding of distributive justice across time.

- **Multidimensional analysis**
  - **Social dimension**

- Energy access is tied to poverty alleviation, education, health (cooling, hospitals, digital access).
- Sudden price spikes or shortages disproportionately impact low-income households.
- Large energy projects can trigger social movements over land rights, livelihood, and environmental impacts.

- **Political dimension**

- Energy choices reflect political trade-offs between great-power alignments, domestic lobbies, and regional interests.
- Federal tensions often arise between Centre and States on siting of plants, revenue sharing, and environmental clearances.
- Energy pricing reforms can be politically unpopular but economically necessary.

- **Legal dimension**

- Regulatory regimes for nuclear safety, environmental clearance, and land acquisition are central.
- International legal commitments (Paris Agreement, nuclear liability conventions, WTO rules) shape policy space.
- Sanctions regimes and extraterritorial laws of major powers complicate India's room for manoeuvre.

- **Ethical dimension**

- Intergenerational equity: using finite fossil resources and creating long-lived nuclear waste affects future generations.
- Fairness in global climate negotiations: historical responsibility vs current emissions.
- Ethics of dependence: to what extent is it acceptable for one country to leverage another's energy vulnerability for geopolitical ends?

- **International dimension**

- India's choices influence and are influenced by:
  - OPEC+ strategies
  - US–China competition
  - Russia's search for markets
  - West Asian stability
- India's role in climate diplomacy, technology coalitions, and energy governance forums is growing.

- **Economic dimension**

- Energy costs shape competitiveness of Indian industry, inflation, and current account balance.
- Industrial migration (as in Europe to US) demonstrates how energy and subsidy regimes can re-draw global manufacturing maps.
- Long-term contracts and infrastructure lock in certain cost structures for decades.

- **Linkages with NCERTs**

- **Class 9–10, Economics (India and the Contemporary World, Understanding Economic Development)**
    - Chapters on “Sectors of the Indian Economy” and “Globalisation and the Indian Economy”:
        - Show how energy underpins all sectors and how globalisation creates vulnerabilities and opportunities.
- **Class 11, Indian Economic Development**
    - Chapters on “Indian Economy 1950–1990”, “Economic Reforms since 1991”:
        - Use to trace the evolution from import substitution to global integration of energy markets.
- **Class 11, Political Science – “Indian Constitution at Work”, “Political Theory”**
    - Chapters on foreign policy, sovereignty, and globalisation:
        - Connect strategic autonomy, multilateralism, and energy dependence.
- **Class 12, Macroeconomics**
    - Chapters on “Open Economy Macroeconomics” and “Balance of Payments”:
        - Energy imports, current account deficit, and exchange rate vulnerability.
- **Class 12, Political Science – Contemporary World Politics**
    - Chapters on US hegemony, globalisation, and alternative centres of power:
        - Integrate examples of sanctions, trade controls, and weaponisation of interdependence.
- **Class 11–12, Geography (India: Physical Environment; Fundamentals of Human Geography)**
    - Chapters on “Resources and Development”, “Energy Resources”:
        - Map India’s thorium, coal, and hydro potential; understand regional distribution and constraints.

## Linkages with UPSC CSE syllabus

### GS Paper I

World history (Cold War, US hegemony, Suez crisis analogy, shifting power centres).

Indian society and regional disparities (energy availability and social outcomes).

### GS Paper II

International relations:

- India–US, India–Russia, India–Gulf relations
- Role of sanctions, trade agreements, and multilateralism.

Governance and policy:

- Institutionalisation of energy diplomacy; role of Parliament and regulatory bodies.

### GS Paper III

Energy, infrastructure, and investment:

- Energy security, nuclear policy, renewables, critical minerals.

Economy:

- Balance of payments, industrial competitiveness, impact of oil prices.

Environment:

- Climate change, sustainable energy, environmental clearances.

### GS Paper IV (Ethics)

Ethics of public policy:

- Balancing development and sustainability, intergenerational equity, distributive justice.

Ethics in international relations:

- Sanctions, weaponisation of dependence, fairness in global rules.

- **Way forward**
- **Diversified and resilient energy mix**
    - Reduce excessive reliance on any single region or route; enhance sourcing from Africa, Latin America, Central Asia, and domestic resources.
    - Invest in LNG terminals, strategic reserves, and alternative routes (e.g., via Red Sea, overland where feasible) to de-risk Hormuz dependence.
- **Accelerate domestic clean energy and nuclear capacity**
    - Scale up solar, wind, and storage with strong grid modernisation.
    - Pursue thorium and breeder technologies in a phased, safety-first manner, with clear cost–benefit analysis.
    - Encourage responsible private participation in nuclear supply chains while maintaining strict regulatory oversight.
- **Integrated energy and industrial policy**
    - Align energy policy with Make in India, PLI schemes, and climate commitments.
    - Use public procurement, standards, and R&D funding to build domestic capabilities in batteries, green hydrogen, and grid technologies.
- **Institutional reforms**
    - Consider a high-powered, statutory body or reformed energy ministry structure that integrates oil, gas, coal, power, renewables, and nuclear perspectives.
    - Strengthen analytical capacity for scenario planning, risk assessment, and negotiation support.
- **Strategic multilateralism and “issue-based” coalitions**
    - Use platforms like G20, BRICS, IEA partnerships, ISA, and climate alliances to:
        - Shape rules on energy finance, technology access, and just transition;
        - Advocate for fairer sanctions norms and carve-outs for developmental needs.
- **Social and ethical safeguards**
    - Ensure energy projects are accompanied by robust environmental and social impact assessments.
    - Provide fair compensation, rehabilitation, and participatory decision-making for affected communities.
- **Long-term political vision**
    - Build cross-party consensus on core elements of energy strategy, so that policies survive electoral cycles.
    - Use parliamentary committees and expert bodies to create continuity and accountability.

- **UPSC Mains – GS II**

- Questions on India’s relations with West Asia, US, Russia.
- Sanctions, energy routes, and India’s response to global conflicts.
- Role of multilateralism and Non-Alignment 2.0 in contemporary foreign policy.

- **UPSC Mains – GS III**

- “What do you understand by energy security? Discuss India’s vulnerabilities and policy responses.”
- “Critically examine the role of nuclear energy in India’s energy mix.”
- “Discuss the challenges and opportunities of India’s renewable energy transition.”
- “How do global trade and industrial policies affect India’s manufacturing competitiveness?”

- **Essay**

- Topics like:
    - “Energy security and national security are two sides of the same coin.”
    - “Globalisation in retreat: from free markets to strategic interdependence.”

# A recusal test the Delhi High Court failed

**Kaleeswaram Raj**

Lawyer at the Supreme Court of India

Judicial recusal principles have been tested in the Delhi liquor policy case

Justice Swarana Kanta Sharma of the Delhi High Court refused to recuse herself from hearing the Delhi liquor policy case – *Central Bureau Of Investigation vs Kuldeep Singh and Ors.* (April 20, 2026) – involving the former Chief Minister of Delhi, Arvind Kejriwal, and others. This episode marks an unfortunate deviation from India's jurisprudence on judicial recusal.

Mr. Kejriwal argued the recusal plea by appearing as party in person in the High Court. He submitted that the judge should not hear the Central Bureau of Investigation's plea against the discharge of the accused, including himself, in the excise policy case, as ordered by the trial court. The prominent grounds cited in his plea included adverse findings by the judge in earlier proceedings in the same case; the judge's alleged ideological proclivity, as reflected in her attendance at events organised by the Akhil Bharatiya Adhivakta Parishad, or ABAP (a lawyers' organisation inclined towards the political philosophy of the ruling regime at the Centre); the fact that the judge's children were working as panel advocates under the Centre/government, with case files to be allotted by the Solicitor General, who, incidentally, was representing the opposing side in the case; and a statement by Home Minister Amit Shah implying that Mr. Kejriwal would lose the case in the High Court. Because of these factors, he contended that he reasonably apprehended bias in the process of adjudication.

**Law on recusal**

The law on recusal of a judge is not codified in India. It is more an ethical issue than a technical one. Yet, the jurisprudence on recusal is rich as it takes in precedents and best practices across the globe. The 19th century idea about judges with its Victorian overtones is reflected in the British case of *Leeson vs General Council of Medical Education and Registration* (1889) where Lord Bowen said that like Caesar's wife, judges should be above suspicion. The proverbial idea that justice should not only be done but also be seen to have been done was articulated by *Lord Hewart in R vs Sussex Justices* (1923).

What transpired in the Delhi High Court exposes the risk of judges not strictly adhering to the Bangalore Principles of Judicial Conduct, the draft of which was finalised at the Round Table Meeting of judges from many countries at The Hague in 2002. They enumerate independence, impartiality, integrity, propriety, equality, competence and diligence as accepted 'judicial values'. Among other things, they say that " a judge shall avoid impropriety and the appearance of impropriety in all of the judge's activities" .

In *Ranjit Thakur vs Union Of India And Ors.* (1987), the Supreme Court of India explained that the 'proper approach' for a judge when faced with a request for recusal "is not to look at his own mind and ask himself, however, honestly, 'Am I biased?', but to look at the mind of the party before him". In *P.K. Ghosh, I.A.S. and Ant. vs J.G. Rajput* (1995) the Court said that when the litigant feels on reasonable basis that a particular judge should not hear his case, and when there are alternatives, recusal by the judge is the appropriate course, for maintaining public confidence in the system. In *State Of Punjab vs Davinder Pal Singh Bhullar and Ors. Etc.* (2011), the Court said that "a mere ground of appearance of bias and not actual bias is enough to vitiate the judgment/order".

In *Supreme Court Advocates-On-Record Association vs Union Of India* (2015), the Court reiterated some of the judicial values. The judgment said, "The simple question is, whether the adjudication by the Judge concerned, would cause a reasonable doubt in the mind of a reasonably informed litigant and fair-minded public as to his impartiality." Unlike administrative decision making, where the adjudicative authority is often stipulated in the statute or the rule, there is no doctrine of necessity in judicial proceedings when there are alternatives.

The judgment of the top court in *State of W.B. vs Shivananda Pathak* (1998) was an admonition against judicial obstinacy. Thus, with the possible exceptions such as Justice Arun Mishra's refusal to recuse in *Indore Development Authority vs Manoharlal And Ors.* (2019), the Supreme Court has, by and large, rejected the "duty to sit doctrine" evolved in the United States.

**The challenge before the judge**

Legal scholar James Sample opined that "the teachable moments on disqualification are in the Court's Court". This, again, is a call not only for ensuring fairness but also for maintaining the appearance of fairness. The real challenge before the judge is to overcome the possibility for subjectivity in adjudicative process especially when the very same judge whose recusal is sought is deciding the question of recusal.

Distinguished American jurist Benjamin N. Cardozo famously wrote, "We may try to see things as objectively as we please. None the less, we can never see them with any eyes except our own.". The maxim that no one should sit in judgment in her own cause is too well settled.

Viewed in the light of these principles, Justice Swarana Kanta Sharma should have recused herself or at least insisted that the recusal plea should be placed before another judge for hearing. Such a course would have facilitated a more objective evaluation of the contentions raised by Mr. Kejriwal apart from averting the present scenario. But neither of these happened and the present judgment followed.

**Fairness of process**

The judgment issued on April 20, 2026 does not reflect the correct judicial approach. The judge said that she had to decide between a litigant and herself. It was further stated in the judgment that the suspicion of bias expressed in the recusal plea was unfounded and that the allegations were manufactured. The judge asked, "... if the children of politicians can enter politics, how would it be just to question the children of a Judge who study like others, struggle like others, and prove themselves in Court like others to earn their livelihood?" One would wonder if this was the argument made by Mr. Kejriwal.

Mr. Kejriwal, in his rejoinder, had reportedly said that "conflict arises not from prior participation in the present proceedings, but from the admitted existence of a live, active and ongoing professional relationship with the prosecuting side". The judge also justified her attendance at an event organised by the ABAP, and stated that she had attended events conducted by academic bodies as well. The judgment mistakes criticism of the judge as one of judicial establishment. The verdict is also self defensive, argumentative and accusational rather than analytical. It is vulnerable to further legal challenge. After the judgment, Mr. Kejriwal and Manish Sisodia wrote letters to the judge stating that they would not participate in further proceedings before her in the present matter.

In a case with serious political ramifications, the grounds raised by Mr. Kejriwal and others were relevant and required a more objective assessment, rather than a subjective affirmation based on a notion of a "presumption of impartiality", as stated in the judgment. The verdict substitutes the well-settled legal position that a reasonable apprehension of bias is sufficient for a plea of recusal with a requirement to demonstrate actual bias. This is patently erroneous.

The judge rightly said that, in the recusal plea, she was effectively being tried by the litigant. But the outcome of this "trial", unless corrected, will remain an embarrassing precedent for a system already in crisis.

- **Key Terms and Explanations**

- **Judicial Recusal**

The voluntary or mandated withdrawal of a judge from hearing a case because of a potential conflict of interest or perceived lack of impartiality. It is a procedural tool to uphold the integrity of the judicial process. For instance, if a judge holds shares in a company that is a party to a case, recusal is warranted.

- **Actual Bias vs. Apprehension of Bias**

Actual bias requires evidence that the judge has prejudged the matter or has a personal stake. Apprehension (or appearance) of bias is a lower threshold—it only needs a reasonable person to suspect that the judge might not be impartial. The case criticises the judge for insisting on proof of actual bias instead of acknowledging a reasonable apprehension.

- **Bangalore Principles of Judicial Conduct (2002)**

Drafted at The Hague, this international soft-law instrument lists six judicial values: independence, impartiality, integrity, propriety, equality, competence and diligence. The principle “a judge shall avoid impropriety and the appearance of impropriety in all activities” is central to the recusal debate. Indian judiciary has adopted these principles as a guide for ethical conduct.

- **Doctrine of Necessity**

A narrow exception where a judge may hear a case despite a conflict, because no other judge is legally available to take it. In judicial recusal, however, when alternative benches exist, this doctrine generally does not apply, as held in Supreme Court Advocates-On-Record Association vs Union of India (2015).

- **Panel Advocate**

A lawyer empanelled by the government or its agencies to represent them in court. In the plea, the fact that the judge’s children were panel advocates for the Centre was argued to create a conflict, as the Solicitor General—the opposing counsel—assigns case files to them.

- **Solicitor General of India**

The second-highest law officer of the Union government, who appears in the Supreme Court and High Courts on behalf of the Centre. The conflict arose because the Solicitor General was opposing Kejriwal in the same case while also controlling the assignment of briefs to the judge’s children.

- **Reasonable Apprehension of Bias**

The standard test: would a fair-minded and reasonably informed person, considering the facts, conclude that there is a real possibility of bias? The article argues that this test was wrongly replaced by a “presumption of impartiality” in the judge’s reasoning.

- **Nemo judex in causa sua**

Latin for “no one should be a judge in their own cause”. A foundational principle of natural justice, violated when a judge decides a recusal plea against herself without objective external scrutiny.

- **Presumption of Impartiality**

A notion that courts operate under an presumption that judges are impartial until proven otherwise. The article contends that this cannot overrule the need to address even an appearance of bias.

- **Main Arguments and Substantive Parts**
- The core debate centers on whether judicial recusal should be a matter of individual "judicial conscience" or governed by objective, transparent standards.
- **The "Litigant's Perspective" Argument:** Established in *Ranjit Thakur v. Union of India (1987)*, this suggests that a judge shouldn't ask "Am I biased?" but rather look at the mind of the party before them to see if their apprehension is reasonable.
- **Appearance vs. Reality:** Jurisprudence suggests that for justice to be "seen to be done," even a *ground of appearance* of bias is enough to vitiate an order, regardless of whether the judge remains internally neutral.
- **The Criticism of Subjectivity:** In the case involving the Delhi High Court (April 20, 2026), critics argue that the judge adopted a "subjective affirmation" of impartiality. By deciding the recusal plea herself and labeling the apprehension as "manufactured," the process arguably violated the principle that one cannot adjudicate their own conflict.
- **Conflicts of Interest:** The presence of a judge’s family members in roles directly connected to the opposing party (e.g., panel advocates for the government) is cited as a significant ground for apprehension, even if no direct "actual bias" is proven.

- **Historical Evolution of the Issue**

- **Pre-Independence Roots**

The common law principle that no man shall be a judge in his own cause was firmly established in British courts through cases like *Dimes vs Grand Junction Canal (1852)*, where even a faint pecuniary interest led to disqualification. *Leeson (1889)* and *Sussex Justices (1923)* reinforced the need for both justice and its appearance.

- **Constitutional Scheme (1950)**

India adopted the common law system. Although the Constitution guarantees the independence of the judiciary and fair procedure (Articles 14, 21), it did not codify recusal rules. The Supreme Court and High Courts retained inherent powers to recuse based on judicial conventions.

- **Development Through Supreme Court Judgments**
    - *Ranjit Thakur (1987)*: Laid down the litigant-centric test for bias, shifting focus from the judge's subjective conviction to the reasonable mind of the party.
    - *P.K. Ghosh (1995)*: Emphasised that in multi-judge courts, where alternative benches exist, recusal is the wiser course to maintain public confidence.
    - *Shivananda Pathak (1998)*: Criticised judicial stubbornness when faced with recusal requests, indicating that refusal can itself constitute bias.
    - *Davinder Pal Singh Bhullar (2011)*: Clarified that appearance of bias alone vitiates proceedings, lowering the threshold for recusal.
    - *NJAC Case (2015)*: Reiterated the reasonable doubt standard, cementing the "informed litigant and public" test.
    - *Indore Development Authority vs Manoharlal (2019)*: Justice Arun Mishra's controversial refusal to recuse despite earlier views in a related matter drew criticism, but the Supreme Court eventually upheld his decision. This showed a wobble in the consistency, yet the predominant line of cases supports easy recusal.

- **Institutional Guidelines**
    - **Restatement of Values of Judicial Life (1997)** adopted by the Supreme Court, not statutory but binding as a code of ethics.
    - **Bangalore Principles (2002)** incorporated into judicial training and disciplinary standards.
    - **In-house procedure (1999)**: A mechanism where a complaint against a judge is examined by a collegium, but recusal matters are left to individual judges.

- **Current Context**

The Delhi liquor policy case recusal controversy underscores the continuing gap between the ideal and judicial practice. The article reflects a fear that judicial obstinacy is resurging in sensitive political matters, threatening the institutional legitimacy that earlier judgments tried to build.

# AXIA IAS ACADEMY: Rise Above The Rest

AXIA IAS ACADEMY

AXIA COMPETITIVE EXAM CENTRE

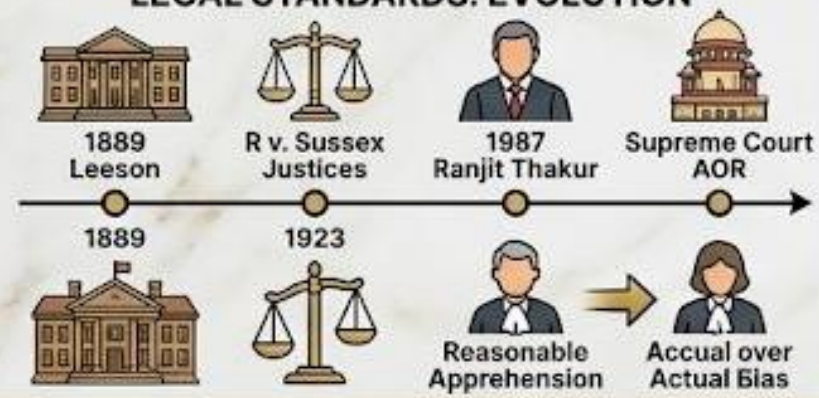
## AXIA IAS ACADEMY
## COMPREHENSIVE ANALYSIS: JUDICIAL RECUSAL & NATURAL JUSTICE

### THE PRINCIPLES OF NATURAL JUSTICE


### GROUNDS FOR JUDICIAL RECUSAL

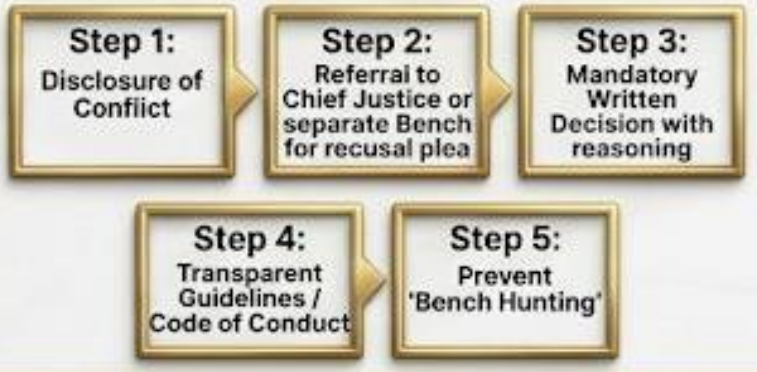

### BANGALORE PRINCIPLES OF JUDICIAL CONDUCT (2002)


### LEGAL STANDARDS: EVOLUTION





### TOWARDS OBJECTIVITY: THE WAY FORWARD



- **Logical and Philosophical Base**

- **Natural Justice: Nemo Judex in Causa Sua**

The core idea that a decision-maker must be free from bias is non-negotiable. When the judge decides the recusal motion against herself, she becomes both judge and party, violating the first principle of fairness. The article implies that the current judgment exemplifies this violation.

- **Appearance as Substance**

Lord Hewart's dictum highlights that the public's perception of fairness is as valuable as actual fairness. Even if a judge is genuinely impartial, a situation that creates reasonable suspicion destroys trust. The philosophical underpinning is that legitimacy rests on public confidence, not just on internal virtue.

- **Epistemological Constraint: The Limits of Self-Knowledge**

American jurist Benjamin Cardozo's observation that "we can never see things with any eyes except our own" underscores the problem. A judge cannot objectively assess her own biases because the very faculty of judgment is tainted by subjective blind spots. Therefore, an external adjudicator is philosophically necessary when bias is alleged.

- **Kantian Ethics**

Treating the litigant as an end in herself demands a fair hearing by an impartial tribunal. When a judge refuses recusal in the face of reasonable apprehension, the litigant's dignity and right to a fair process are compromised, reducing her to a means of demonstrating judicial resoluteness.

- **Rawlsian Justice as Fairness**

Under the "veil of ignorance," designing a system where no one knows their position, parties would choose a rule that recusal decisions are made by an independent judge, not the judge in question. This ensures impartiality is not left to individual will.

- **Institutional vs. Individual Integrity**

The article suggests that the judge mistook an institutional principle (presumption of impartiality) for a personal shield. The presumption applies to the judiciary as a systemic value, but when individuality-specific facts create an appearance of bias, that presumption is rebutted. The logical mistake is treating the presumption as irrebuttable.

- **Multidimensional Analysis**
- **Social:** Public perception of "political-judicial nexus" erodes social faith in the "neutral umpire" of the state.
- **Political:** High-stakes cases involving political leaders make every judicial association (like attending ABAP events) a subject of intense scrutiny.
- **Legal:** Disregard for the "litigant's perspective" test contradicts nearly 40 years of Supreme Court jurisprudence.
- **Ethical:** It raises questions about the "Appearance of Impartiality" vs. "Professional Integrity."
- **International:** India's adherence to the Bangalore Principles impacts its global standing as a rules-based democracy.
- **Economic:** Judicial uncertainty and perceived bias can affect the "Ease of Doing Business," as investors rely on impartial dispute resolution.

- **Linkages with NCERTs**

- **Class 8 Civics (Social and Political Life – III), Chapter 5: “Judiciary”**

Explains the need for an independent and impartial judiciary. The idea that “justice should be seen to be done” is introduced at this level. The recusal episode illustrates why impartiality is not just about honesty but also about perception, a key concept in the chapter.

- **Class 11 Political Science (Indian Constitution at Work), Chapter 6: “Judiciary”**

Discusses judicial independence, appointment, and accountability. Recusal connects to the sub-topic of impartiality as a pillar of independence. The chapter also explains how the judiciary keeps a check on the executive, and an appearance of bias weakens that constitutional role.

- **Class 11 Political Science (Political Theory), Chapter 10: “Development”**

Not directly, but the idea of fair procedure as part of the broader concept of justice and development can be linked. Justice and fairness are prerequisites for sustainable development, and judicial recusal reinforces procedural fairness.

- **Class 12 Political Science (Politics in India since Independence), Chapter on “Crisis of the Democratic Order” and “Recent Developments”**

The increasing politicisation of institutions and the importance of judicial credibility in addressing political cases resonate with the theme of institutional integrity during political turmoil.

# Linkages with UPSC CSE Syllabus

| GS Paper | Syllabus Topic | How the Issue Connects |
|---|---|---|
| **GS2** | Structure, organization and functioning of the Judiciary; judicial appointments, accountability, and conduct | Recusal is an integral part of judicial functioning that ensures accountability and maintains impartiality. The controversy exposes gaps in the in-house mechanisms. |
| **GS2** | Mechanisms for dispute resolution; importance of rule of law | A fair judge is the cornerstone of any dispute resolution mechanism. The episode tests the rule of law's demand for an unbiased tribunal. |
| **GS4 (Ethics)** | Concept of ethics, determinants and consequences; impartiality and non-partisanship | The recusal debate directly engages with the virtue of impartiality, the idea of conflict of interest, and the ethical dilemma of a judge deciding her own cause. |
| **GS4** | Code of Conduct for public functionaries; Bangalore Principles of Judicial Conduct | The case demonstrates what happens when the ethical code is not backed by enforceable procedure. |
| **GS4** | Bias and its forms; appearance of bias | The shift from "appearance of bias" to "actual bias" is the central ethical and legal error highlighted. |

## Way Forward

**Codify Recusal Law**
A comprehensive Judicial Recusal and Disqualification Act should be drafted, specifying grounds for recusal (personal interest, familial relationship, prior involvement, ideological alignment creating reasonable apprehension) and the procedure. This will replace ad-hocism with legal certainty.

**Mandatory Reference to Another Bench**
The Supreme Court, through a practice direction or a judgment, should mandate that every recusal application be placed before a bench of which the concerned judge is not a member. This simple procedural shift eliminates the self-judging paradox without impugning the judge's integrity.

**Transparency in Conflicts**
Judges should be required to disclose on record, when taking up a case, any past or present association—familial, professional, or ideological—that may reasonably raise questions. The disclosure must be made at the commencement of proceedings so that parties can make an informed decision.

**Strengthen In-House Mechanism**
The existing in-house procedure of the higher judiciary can include a standing Ethics Committee of senior judges who give advisory opinions on recusal. Though non-binding, an adverse advisory would make it politically and institutionally costly for a judge to ignore the recommendation.

**Judicial Training on Unconscious Bias**
National Judicial Academy should incorporate modules on implicit bias, appearance of impropriety, and the psychological aspects of self-judgment. Training can inculcate the humility to step aside when needed, viewing recusal not as surrender but as a mark of judicial strength.

**Addressing Family Professional Ties**
While judges' relatives have the right to practice, clear guidelines should be laid down: if a relative is on the panel of a party or law officer appearing before a judge, the judge must recuse from that case, or the law officer must reassign the file to avoid conflict.

**Balancing Bench-Hunting Concerns**
To prevent frivolous recusal pleas, the new law can impose costs if a plea is found to be mala fide by an independent bench. This strikes a balance between protecting the litigant's right and the court's time.

**UPSC CSE (Mains) Relevant Questions:**

| Year & Paper | Question |
|---|---|
| **2013 GS4 (Section A, Q8a)** | "What is 'bias'? Explain its types." |
| **2020 GS4 (Section A, Q1d)** | "Explain the term 'conflict of interest' with the help of examples from the field of public service." |
| **2015 GS2** | "Critically examine the concept of judicial activism and its implications for Indian democracy." (indirect link to judicial role and impartiality) |
| **2019 GS2** | "The judiciary's role as the guardian of the Constitution has been challenged by charges of overreach. Discuss." (relates to judicial conduct in politically sensitive cases) |
| **2021 GS2** | "Discuss the desirability of bringing judges under the ambit of the Lokpal." (accountability dimension) |
| **2022 GS4 (Section B)** | "What is the difference between 'Code of Ethics' and 'Code of Conduct'? Discuss their importance in public service." (judicial codes as example) |
| **2023 GS4 (speculative, but relevant themes)** | Often a question on ethical governance in the judiciary appears; for instance, "Ethical governance in the judiciary is a sine qua non for maintaining public trust. Discuss." |

GIRIRAJ SINGH

# Technical textiles critical to footwear sector

**SMART MOVE.** Bringing the footwear sector more explicitly within the technical textiles ecosystem can drive innovation, expand exports and create high quality employment.

When we speak of an Aatmanirbhar Bharat we are not just speaking of self-reliance in production but of leadership in global value chains. Few sectors capture this opportunity as clearly as footwear. It is one of the most universal products in daily life used by a school student walking to class, a worker standing through long shifts, a delivery partner constantly on the move and an athlete pushing physical limits. Yet, despite being the world's second largest producer India holds only a marginal share in global footwear exports.

The gap is not due to lack of capacity but due to the need for a shift towards materials design and performance. At the centre of this shift lies a category that often goes unnoticed — technical textiles. I began to understand this more clearly during a recent visit to Agra. Agra is known for its footwear industry. Walking through its production clusters and interacting with manufacturers it became evident that innovation was already underway. Several units were using materials that improved comfort, durability and flexibility. Yet many of them did not describe these as technical textiles, they simply saw them as better inputs that met evolving consumer needs.

This insight deepened during a subsequent meeting in Delhi with the footwear association. Industry stakeholders spoke about changing consumer expectations — lighter shoes, better cushioning, improved breathability, and longer durability. These were no longer premium features but were becoming standard requirements. It was in this discussion that my department highlighted a critical point: the footwear industry is already using technical textiles extensively even without formally recognising it.

That realisation reframed the entire conversation. Globally the footwear industry produces nearly 23.9 billion pairs annually with a market size of around $500 billion. India contributes about 12.5 per cent of global production yet its export share remains at only 2 per cent which highlights a clear gap between capacity and global positioning. At the same time nearly 86 per cent of global footwear is non-leather while India's industry has historically been centred around leather.

At home the story is evolving rapidly. The Indian footwear market reached a size of $20.67 billion in 2025 reflecting rising incomes and changing consumption patterns. While the average Indian still buys around two pairs of footwear per year compared to seven to eight pairs globally. As affordability improves and consumer preferences shift towards comfort and performance the domestic market is set to expand significantly.

## NEXT PHASE OF GROWTH

This is where technical textiles become central to the next phase of growth. At the Ministry of Textiles this transition is being approached through the Smart, Sustainable & Seamless framework. Smart footwear reflects the growing integration of technology and design. Digital tools, AI driven modelling and foot scanning are enabling customised solutions at scale.

This aligns with broader consumer trends. In 2025 India recorded 28.9 million smartwatch sales generating $780 million in revenue which indicates a growing preference for products that combine functionality with everyday use. The sneakers segment further illustrates this shift.

It is projected to grow from $3.2 billion in 2024 to nearly $6 billion by 2030 with volumes increasing from 55 million to 70 million pairs. Consumers are clearly moving towards footwear that delivers both comfort and performance and this is where technical textiles play a defining role.

**Consumers are clearly moving towards footwear that delivers both comfort and** performance and this is where technical textiles play a defining role

Sustainability is also becoming a decisive factor. Materials such as recycled PET and biodegradable fibres are gradually entering mainstream production. For India this represents not only an environmental imperative but also a strategic opportunity to position itself as a supplier of sustainable materials in global markets. Equally transformative is the move towards seamless manufacturing. Technologies like 3D knitting and advanced fabrication are reducing waste, improving efficiency and enabling faster production cycles. This allows manufacturers to respond more effectively to evolving demand while maintaining consistency and quality.

What strengthens this transition further is the scale of India's existing ecosystem. The footwear industry already employs over two million people with nearly 50 per cent women participation making it a major source of inclusive employment.

With an annual production of around 2.9 billion pairs, productivity stands at approximately four to five pairs per worker per day in India. In comparison global production reflects a much higher level of efficiency with workers producing 17 to 20 pairs per day. Established clusters in Agra, Kanpur, Chennai, Ranipet, Ambur and Kolkata are not just production hubs but the foundation on which India can scale efficiency competitiveness and global leadership in footwear.

The shift towards technical textiles is not about building a new industry but about unlocking the full potential of an existing one. The visit to Agra and the discussions in Delhi brought out a simple but powerful insight, that technical textiles in footwear are not an emerging concept. They are already embedded in the industry, quietly shaping products and processes.

The task ahead is to recognise, organise and scale this integration. Bringing the footwear sector more explicitly within the technical textiles ecosystem can drive innovation, expand exports and create high quality employment. It can also align India's manufacturing capabilities with global demand trends particularly in non-leather and performance-driven segments.

India's journey towards becoming a global manufacturing leader will depend on how effectively it leverages such intersections where traditional industries meet advanced materials and modern design. Footwear is one such intersection. Technical textiles are the thread that can help stitch this opportunity into a global success story.

The writer is the Union Minister of Textiles. The views expressed are personal

- **Key Terms and Explanations**
- **Technical Textiles:** These are textile materials and products manufactured primarily for their technical performance and functional properties rather than aesthetic or decorative characteristics.
    - *Example:* In footwear, this includes reinforced meshes for breathability, anti-bacterial linings, or high-tenacity fabrics for trekking boots.
- **Aatmanirbhar Bharat (Self-Reliant India):** A vision to make India a "global nerve center" of the world economy by enhancing domestic manufacturing, improving quality, and increasing global export shares.
- **Global Value Chains (GVCs):** The full range of activities (design, production, marketing, distribution) that are divided among multiple firms and geographic locations to bring a product from conception to end-use.
- **Non-Leather Footwear:** Footwear made from synthetic materials, rubber, or textiles. Globally, this segment accounts for nearly 86% of the market.
- **3D Knitting:** An advanced manufacturing process where a machine knits the entire upper part of a shoe in one continuous piece, reducing waste and seams.
- **Recycled PET:** Polyethylene terephthalate (plastic) derived from recycled water bottles, used to create sustainable shoe uppers.
- **Productivity Gap:** The difference in output per worker. Currently, Indian workers produce roughly 4–5 pairs daily, whereas global benchmarks reach 17–20 pairs.

- **Main Arguments and Substantive Parts**
- The core thesis posits that **technical textiles are the "silent" engine** that will propel India from a volume-based producer to a value-based global leader in footwear.
- **The Paradox of Scale:** India is the second-largest producer (12.5% global share) but a marginal exporter (2% share). This indicates a disconnect between manufacturing capacity and global market requirements.
- **The "Invisible" Integration:** Technical textiles are already present in Indian clusters like Agra, but they aren't formally recognized as such. Bridging this nomenclature gap is essential for policy targeting and R&D.
- **The Shift from Leather to Performance:** While India's heritage lies in leather, the global market has pivoted to non-leather performance wear (sneakers, athletic shoes). Technical textiles are the primary raw material for this transition.
- **Efficiency as a Growth Lever:** To move from 5 pairs/worker to global standards, the industry must adopt "Smart, Sustainable & Seamless" frameworks.
- **Inclusive Growth:** The sector is a massive employment generator, particularly for women (50% participation), making its success vital for social equity.

- **Historical Evolution of the Issue**
- **Pre-Independence & Early Post-Independence:** Footwear was primarily a cottage industry, largely localized and leather-centric (Kanpur and Agra). It was often associated with specific communities, carrying a social-caste dimension.
- **1970s - 1990s:** The government identified footwear as a "thrust area" for exports. The establishment of the Council for Leather Exports (CLE) helped formalize trade, but the focus remained strictly on leather.
- **2000s - 2010s:** The rise of "fast fashion" and athletic wear globally began shifting demand toward synthetics. India struggled to pivot due to a lack of a robust domestic synthetic raw material base.
- **2020 - Present:** The **National Technical Textiles Mission (NTTM)** and the **Production Linked Incentive (PLI)** schemes for textiles and footwear represent a strategic shift toward high-tech manufacturing and self-reliance.

# STRATEGIC DECOUPLING: AXIA IAS ACADEMY ANALYZES THE UAE'S OPEC EXIT

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## THE STRATEGIC SHIFT

A move for national sovereignty over collective action, emphasizing front-loading revenue.

## AXIA EXPERT ANALYSIS

A rational-actor realist policy in a post-shale market, changing natural epistemology to 'perishing asset'.

## MULTI-DIMENSIONAL IMPACTS

2026

1960 OPEC start
1970 Flamorical milestone, awarenge
1980 Governmental milestones in tistory
2010 Historyi milestones
2010 Capanited milestones
2026 Exit

### GEOPOLITICAL

Friction with Saudi Arabia, loosening of regional ties, a shift to a multipolar Mideast.

### ECONOMIC

Capitalizing on capacity (5M bpd), long-term price deflation, global inflationary effects.

### INDIAN ECONOMY

Lower CAD, manageable inflation, potential strategic supply contracts.

## CHALLENGES & SUSTAINABILITY

Logistical risks (Strait of Hormuz closure), potential price wars, environmental contradictions.

## THE WAY FORWARD

Bilateral deals, infrastructure diversification, NCERT linking Geog.), GS Papers 2&3 linkages.

## MODEL ANSWER STRUCTURE

Structure a sample 250-word on global energy security and and India's interest.

- **Logical and Philosophical Base**

- **Underlying Logic:**

- **Comparative Advantage Revisited:** The argument does not rest on cheap labour alone. It moves to a **dynamic comparative advantage** built on material innovation, process efficiency (seamless), and design (smart). The logic is that India can create a new niche by bundling its IT and manufacturing capabilities.

- **Value Chain Upgrading Theory:** The article implicitly applies a Global Value Chain framework. India is currently "stuck" in low-value assembly or basic leather manufacturing. It needs to upgrade functionally (taking on design and material development) and product-wise (producing high-performance non-leather shoes) to capture more value.

- **Epistemological Insight – Naming Reality:** A deep philosophical thread is the idea that **recognition creates reality in policy**. When manufacturers do not call advanced materials "technical textiles," they remain invisible to the grand narrative of the NTTM. The act of naming and formalising this integration unlocks access to R&D funds, standards, and ecosystem support. This is akin to the philosophical concept that language and taxonomy shape our ability to act upon the world.

- **Philosophical Foundations:**

- **Gandhian vs. Modern Swadeshi:** Traditional self-sufficiency emphasised village-scale production for local consumption. The Aatmanirbhar Bharat in this article is a modern reinterpretation – **competitive self-reliance** that aims to serve global markets. It moves from "swadeshi as protection" to "swadeshi as global excellence."

- **Sen's Capability Approach:** The footwear industry already has the *capability* (raw material, workforce, clusters), but lacks the *entitlements* (technology, policy focus, design education) to convert it into global outcomes. The article argues for providing those entitlements.

- **Pragmatic Utopianism:** The vision is ambitious (global leadership), but grounded in the reality of existing clusters and latent material usage. It's not about building from scratch but reorienting what already exists.

- **Multidimensional Analysis**
- **Social:** Empowerment of women in rural and semi-urban clusters; potential for formalizing "informal" artisans.
- **Political:** Aligning with "Make in India" and "Vocal for Local" campaigns; geopolitical advantage as companies seek "China + 1" sourcing strategies.
- **Legal:** Necessity for stricter Quality Control Orders (QCOs) to ensure Indian shoes meet global safety and performance standards.
- **Ethical:** Addressing the environmental footprint of leather tanning vs. the microplastic concerns of synthetic textiles.
- **International:** Increasing India's "soft power" through global brands; reducing the trade deficit with specialized exports.
- **Economic:** Transitioning from a low-value-added producer to a high-value-added designer, capturing more profit within India.

- **Linkages with NCERTs**

- **Economics (Class 9, 10)**
  - Chapters on “People as Resource”, “Globalisation and the Indian Economy” – examples of global value chains, labour-intensive manufacturing, and MNCs.
- **Economics (Class 11: Indian Economic Development)**
  - Chapters on “Structural Changes in the Indian Economy” and “Industrial Sector” – movement from traditional to modern industries, MSME role.
- **Geography (Class 10, 12)**
  - “Manufacturing Industries” – industrial regions, locational factors, and clusters; footwear clusters can be used as case studies.
  - “Resources and Development” – sustainable use of natural resources (link to sustainable materials).
- **Political Science (Class 11, 12)**
  - “Constitution as a Living Document”, “Directive Principles of State Policy” – socio-economic rights, labour welfare, environment.
  - “Globalisation and the Indian State” – negotiating global trade and domestic developmental needs.
- **Science (Class 10)**
  - “Carbon and its Compounds”, “Materials” – can be connected to synthetic fibres, polymers, and recycling.

- Linkages with UPSC CSE Syllabus
- 10.1 GS Paper I
- Industrial location, distribution of key industries, and urbanisation – footwear clusters and labour migration patterns.
- Social empowerment – gender participation in labour-intensive industries.
- 10.2 GS Paper II
- Government policies and interventions for industrial development, MSMEs, and exports.
- Centre-state relations in industrial policy and cluster development.
- Regulatory frameworks around labour codes and environmental compliance.
- 10.3 GS Paper III
- Indian economy: growth, development, industrial policy, and infrastructure.
- Inclusive growth and employment – potential of footwear sector and technical textiles.
- Science and technology – technical textiles, smart materials, AI in design.
- Environment and biodiversity – sustainability, circular economy, recycled materials.
- 10.4 GS Paper IV (Ethics)
- Ethical issues in business, corporate governance, and environmental ethics.
- Professional ethics of engineers, designers and managers in safe and sustainable manufacturing.

- **Way Forward**

- **Policy and Institutional Reforms:**

- **Formal Inclusion:** Explicitly list “Footwear” as a focus sector under the **National Technical Textiles Mission (NTTM)**, with dedicated funds for R&D in performance materials relevant to shoes.

- **Production Linked Incentive (PLI) 2.0:** Design a specific PLI sub-scheme for non-leather footwear using indigenous technical textiles, rewarding incremental production and exports.

- **Cluster-Based Common Facility Centres:** Establish centres in Agra, Ambur, Ranipet with shared 3D knitting machines, CAD/CAM design labs, and international testing labs so MSMEs can access technology without individual capital expenditure.

- **Skill and Human Capital:**

- **Nano-Degree Programs:** Launch short-term, industry-designed courses in technical textile application, 3D design, and machine operation targeting the existing 2-million-strong workforce, with a special focus on upskilling women.

- **Design-Industry Linkage:** Foster collaborations between NIFT (National Institute of Fashion Technology) and footwear clusters for an annual “India Performance Footwear Design Challenge” to create globally marketable products.

- **Market and Sustainability Push:**

- **Standards and Certification:** Develop BIS standards for performance footwear using technical textiles (breathability, abrasion resistance, biomechanical efficiency) and align them with ISO. Create a “Green Shoe” voluntary mark for models using >50% certified recycled/biodegradable content.

- **FTA Strategy:** In free trade agreements (with EU, UK, Canada), aggressively negotiate tariff elimination for non-leather footwear made with certified sustainable technical textiles, leveraging India’s green manufacturing image.

- **Social Safeguards:**

- **Just Transition Fund:** Allocate a portion of NTTM budget to ensure workers displaced by seamless automation are retrained for design, quality control, and marketing.

**GS-III** :

- Role of MSMEs in inclusive growth and employment generation.
- Effects of liberalisation and globalisation on small industries.
- Discuss the role of science and technology in everyday life and socio-economic development.
- “What are technical textiles? Discuss their potential in India’s industrial growth.” (Technical-textile-type questions increasingly appear in S&T.)

**GS-II**:

- Government schemes for industrial clusters, Make in India, Aatmanirbhar Bharat.
- Labour law reforms and their implications on industrial growth.

**Essay Paper**:

- “Technology as the silent factor in social transformation.”
- “Small is beautiful, but big is necessary” – debates on MSMEs vs large-scale industry.

# AI is bringing the battle to the door of the national-security bureaucracy

RAJA MANDALA
C RAJA MOHAN

ILLUSTRATION: C R SASIKUMAR

SINGAPORE'S FOREIGN minister, Vivian Balakrishnan, has opened a window into the future of diplomacy. In a Facebook post, he declared that "the diplomat who learns to work with AI will have a meaningful edge". The remark accompanied his unveiling of a personal AI agent using open-source software and a low-cost computer.

That a sitting foreign minister coded his own AI assistant is remarkable; that he published the entire architecture on GitHub is even more so. He has shown how accessible AI tools have become, how entry barriers to using AI are lowering, and how profoundly they could reshape diplomatic practice.

The AI assistant that Balakrishnan built is not a regular chatbot. It connects to the minister's communication channels, processes voice notes and images, schedules tasks, and — crucially — retains structured memory. Unlike conventional AI assistants that forget everything between sessions, his AI assistant extracts facts, synthesises them into a knowledge graph, and recalls them when needed. Balakrishnan describes it as an "invaluable" research assistant and admits, "I don't dare switch it off."

Diplomacy has always rested on two pillars: Institutional memory — the accumulated record of who said what, when, and why in the engagement between governments — and individual craft, honed through years of negotiation abroad and persuasion at home. A self-learning AI system does not replace either; it reorganises and amplifies them. It makes institutional memory instantly searchable and aids the diplomat's ability to assess the relevant context in real time.

Balakrishnan's experiment is part of a wider trend. Foreign ministries across the world are beginning to embed AI tools into their workflows. The old machinery of diplomatic craft — slow, paper-bound, and hierarchical — struggles to keep pace with the velocity of contemporary diplomacy and the growing weight of the cognitive load on its practitioners. AI tools will inevitably emerge as a force multiplier in modern diplomacy. A well-tuned AI system can draft communiqués in minutes and cross-check decades of treaties for consistency. It could generate alternative formulations calibrated to different audiences and improve the choices for the political decision-makers.

In the past, diplomatic advantage often flowed from sheer manpower. Major powers could overwhelm smaller delegations by deploying large teams of experts. AI changes that equation. A five-person delegation equipped with a sovereign AI stack could possibly match the analytical and drafting capacity of a 50-person mission. This technological levelling empowers middle powers and small states to shape agendas rather than merely respond to them.

The deeper transformation lies elsewhere — in what AI removes. Much of diplomatic work is procedural drudgery — drafting, summarising, cross-referencing, and record-keeping. AI eliminates this "documentary friction", freeing diplomats to focus on the irreducible human dimensions of their craft: Deeper awareness of other societies, political judgment and relationship-building.

> As AI systems begin to simulate negotiation outcomes, generate policy options, and model crisis responses, the temptation to let them decide will grow

Balakrishnan himself has drawn a clear line between AI augmentation and AI automation in diplomatic work. Speaking at the UN Security Council last September, he warned that diplomacy has long assumed that one is negotiating with another human intelligence — "one with a brain and a heart", each shaped by unique cultural, political, and economic characteristics.

If diplomatic decision-making is outsourced to machines, that assumption comes under stress. The danger is not hypothetical. As AI systems begin to simulate negotiation outcomes, generate policy options, and model crisis responses, the temptation to let them decide will grow. While AI can scan vast archives and detect patterns, it can also make serious errors in interpreting history or assessing present circumstances. Assistants like NanoClaw, used by Balakrishnan, are getting better at contextual understanding, but they remain far from replicating the human ability to read political nuance, weigh competing interests, and judge the mood of a counterpart.

AI's impact on diplomacy is not the first technological disruption of the profession. The telegraph in the 19th century collapsed physical distance, allowed capitals to instruct envoys in real time, and reduced the autonomy of "plenipotentiaries".

The rise of mass communication and radio brought public opinion into foreign policy, forcing diplomats to operate under constant scrutiny. The internet revolution extended this transparency to every corner of global politics, accelerating information flows and constraining older systems of assessment. AI differs from these earlier technologies because it introduces a new kind of agency.

AI tools do not merely relay information, they interpret, predict, and simulate. They can act as an intellectual sparring partner — capable of parsing complex treaty language, forecasting crises, and identifying creative compromises that human negotiators might miss. But in the end, it cannot replace the essence of diplomacy: Empathy, trust-building, and persuasion in pursuit of national interest.

As AI "second-brain" tools spread through foreign ministries, the asymmetry between prepared and unprepared diplomatic corps will widen. And as media, academia, and civil society gain access to similar tools, the foreign policy discourse will broaden. This may democratise debate, but it also increases the cognitive load on foreign officers, which must now respond to a more technologically empowered audience — both friendly and hostile.

Like in so many other domains, AI is beginning to envelop one of the most conservative professions — diplomacy and statecraft. Balakrishnan's AI assistant is only one of several new tools that will emerge in the coming years. Foreign offices are among the most conservative, given the implications of their work. But they have no choice but to adapt to the AI revolution. The battle between the inertia of the national-security bureaucracy and the speed of AI-driven technological change will be an absorbing one to watch in Delhi.

*The writer is a contributing editor on international affairs for The Indian Express and is associated with the Motwani Jadeja Institute of American Studies at Jindal Global University and the Council on Strategic and Defence Research, Delhi*

- **Key Terms and Explanations**
- **Sovereign AI Stack:** A country's independent set of AI technologies, data, and infrastructure. This ensures data privacy and strategic autonomy.
    - *Example:* India developing its own large language models (LLMs) to handle sensitive diplomatic cables rather than using foreign-owned platforms.
- **Knowledge Graph:** A programmatic way of modeling a network of real-world entities (people, places, events) and the relationships between them. In diplomacy, this helps map out how a previous treaty in 1990 might influence a negotiation in 2026.
- **Documentary Friction:** The time and labor-intensive process of manually sorting through paper archives, cross-referencing files, and summarizing reports. AI "removes" this friction by doing it instantly.
- **Asymmetry of Preparation:** A situation where one party enters a negotiation with vastly superior data processing and real-time analysis tools compared to the other, leading to an unfair advantage.
- **Plenipotentiaries:** Diplomats or envoys granted full power by their government to represent them and sign treaties.

- **Main Arguments and Substantive Parts**
- **The Core Thesis**
- The central argument is that AI is not just a "chatbot" but a "second brain" that reorganizes institutional memory and amplifies a diplomat's ability to process complex information. It is shifting diplomacy from a manpower-heavy profession to a technology-intensive one.
- **Key Points**
- **Cognitive Load Management:** Modern diplomacy involves an overwhelming volume of data. AI acts as a "force multiplier," allowing small teams to perform the work of large delegations.
- **Institutional Memory:** Unlike human diplomats who rotate out of posts every few years, AI retains a "structured memory" of every session and note, preventing the loss of historical context.
- **The "Human" Boundary:** While AI can draft, summarize, and predict outcomes, it lacks the "human dimension"—empathy, trust-building, and the ability to judge the "mood" of a counterpart.

- **Historical Evolution of the Issue**
- The evolution of diplomatic technology has consistently reduced the "autonomy" of the individual envoy while increasing the speed of communication:
- **Pre-19th Century:** Envoys traveled for months; they had massive autonomy because communication with the "home office" was impossible.
- **The Telegraph (19th Century):** Collapsed physical distance. For the first time, capitals could instruct envoys in real-time, reducing their independent decision-making power.
- **Radio and Mass Media (20th Century):** Introduced "public diplomacy." Foreign policy was no longer a secret conversation between elites but was subject to public opinion.
- **The Internet Revolution (Late 20th/Early 21st Century):** Created 24/7 transparency and instant information flows, but also led to information overload.
- **The AI Era (Present):** AI differs from previous tools because it doesn't just *relay* information; it *interprets* and *simulates* it.

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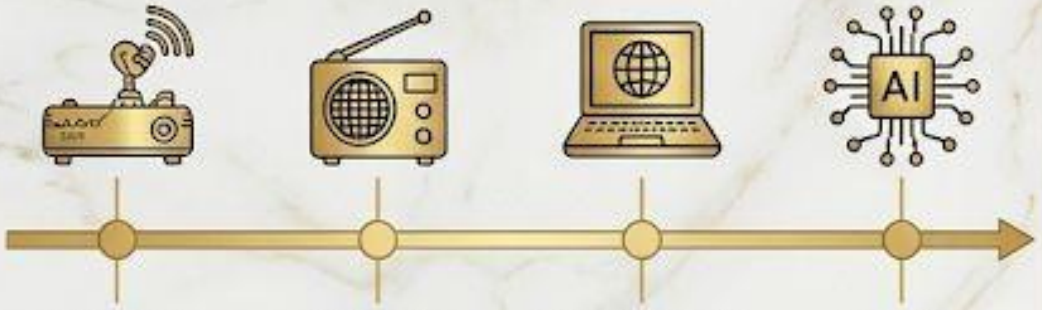
# AI & THE NEW DIPLOMACY:
## A Comprehensive Analysis for UPSC CSE

## HISTORICAL EVOLUTION




**19th C: TELEGRAPH**
Collapsed physical distance

**20th C: RADIO & MASS MEDIA**
Introduced public scrutiny

**Late 20th C: INTERNET REVOLUTION**
Instant, constant data flows

**21st C: THE AI ERA**
Interpreter, predictor, simulator

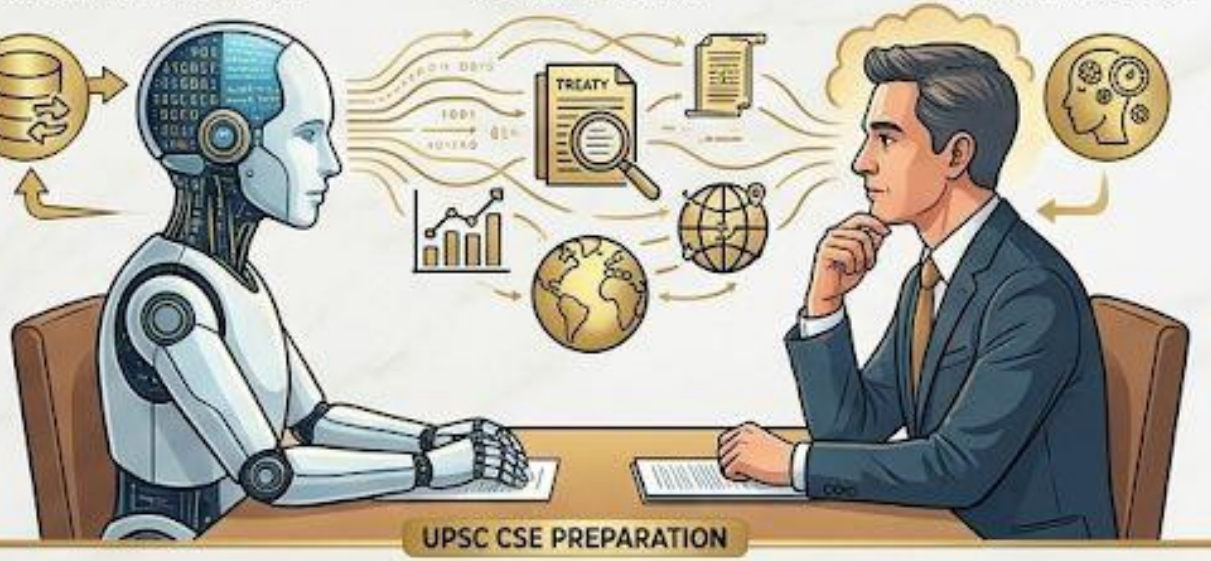
UPSC CSE PREPARATION

## AI AS A 'SECOND BRAIN'

**REORGANIZES INSTITUTIONAL MEMORY**

**AMPLIFIES INFORMATION PROCESSING**

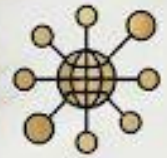
**COGNITIVE LOAD MANAGEMENT**




UPSC CSE PREPARATION

## KEY THEMES & CONCEPTS

**SOVEREIGN AI STACK**



**KNOWLEDGE GRAPH**

**ASIMMETRY OF PREPARATION**

UPSC CSE PREPARATION

## BENEFITS & CHALLENGES

| Opportunities | Challenges |
|---|---|
| Analytical Superiority | Institutional Inertia |
| Field Leveling for Middle Powers | Hallucinations & Errors |

## MULTIDIMENSIONAL IMPACT (GS Links)

STRONG LINKAGES

| Dimension | | | |
|---|---|---|---|
| SOCIAL Skill Shift | POLITICAL Deepfake risks | ETHICAL Human-in-the-Loop |
| ECONOMIC Infrastructure costs | LEGAL New Treaty framework | INTERNATIONAL Power shift |

GS PAPER LINKAGES

## THE WAY FORWARD

- Hybrid Centaur Diplomacy (Human + AI)
- Diplomatic Tech-Cadre
- Global AI Norms (UN)

GS PAPER LINKAGES

Website: axiaiasacademy.com Contact: +91 6002-417488

# Logical and philosophical base

## Logic of functional necessity

- Premise: The volume and speed of contemporary information flows make traditional bureaucratic processing inadequate.
- Therefore, AI is logically necessary as a tool to cope with complexity, speed up analysis, and improve situational awareness.

## Philosophy of human agency and prudence

- Underneath, the argument relies on a classical conception of diplomacy as a human art – involving phronesis (practical wisdom), judgment, and prudence.
- AI can inform prudence but cannot substitute the responsible agent who bears moral and political accountability.

## Assumption of value-laden decision-making

- Diplomatic choices are not just technical optimisations; they involve values, national identity, historical memory, and ethical choices (war vs peace, sanctions vs engagement).
- Algorithms, being trained on data, cannot fully capture or legitimately decide value-laden issues without human steering.

## Philosophy of technology and power

- Technology is seen as neither neutral nor purely deterministic; its design and deployment reflect power relations.
- States that lead in AI gain a new strategic edge, influencing how international norms, negotiations, and even wars are conducted.

## Epistemological caution

- AI's knowledge is probabilistic, pattern-based, and heavily dependent on the quality and bias of its training data.
- The article's logic implies: epistemic authority cannot be blindly assigned to machines; humans must critically interrogate AI outputs.

## Democratic accountability vs technocracy

- There is an implicit warning against technocratic drift, where complex AI systems, understood by few, start guiding high-stakes decisions.
- Philosophically, this clashes with democratic ideals of transparency, accountability, and informed public debate.

- Multidimensional analysis
- a) Social dimension
- Changing skill-profile of civil services: Aspirants and serving officers alike will need stronger digital literacy, data ethics, and AI awareness.
- Impact on employment: Routine analytical roles may shrink, but new jobs in AI oversight, model evaluation, and cyber diplomacy will emerge.
- Citizen trust: Public trust in foreign policy may be tested if decisions appear too technocratic or machine-driven.
- b) Political dimension
- Centralisation of power: Leaders with direct access to powerful AI tools may side-line traditional bureaucratic layers, altering internal power balances.
- Party politics: Competing narratives may emerge – one glorifying “AI-enabled decisive leadership”, another warning about loss of democratic control.
- National prestige: AI capabilities in diplomacy can become a marker of “great power” status.
- c) Legal dimension
- Need for national legislation or guidelines on AI in security and foreign affairs – covering data use, accountability, and oversight.
- Interface with international law: questions around AI-guided sanctions, cyber operations, autonomous systems, and responsibility for wrongful acts.
- Privacy and surveillance law: diplomatic AI systems might be tempted to pull in data from citizens’ communications, social media, etc.
- d) Ethical dimension
- Just war ethics: Can AI be used ethically to reduce civilian casualties by better targeting, or does it normalise remote, detached killing?
- Fairness and bias: AI may reproduce global biases – e.g., treating some regions or communities as inherently more “risky”.
- Human dignity: Reducing relationships to data points risks de-humanising both adversaries and partners.
- e) International dimension
- Global governance of AI: potential for new regimes under UN or plurilateral formats on AI in security, similar to arms control treaties.
- Strategic stability: AI-driven early-warning systems might trigger rapid, automated responses, making crises more volatile.
- South-South cooperation: Developing countries may collaborate to build shared diplomatic AI tools, reducing dependency on big tech and big powers.
- f) Economic dimension
- Investment requirements: Secure data centres, AI talent, and infrastructure demand significant public spending.
- Defence and tech industry: New opportunities for domestic AI firms in defence analytics, language models for local languages, and secure communication tools.
- Cost-benefit: If designed well, AI can cut the time and cost of analysis, freeing resources for field engagement and capacity-building.

# Linkages with NCERTs

## Political Science – Class 11, “Introduction to Political Theory”

- Chapters on democracy, power, and rights help frame debates on accountability and technological power.
- The question of who should decide in a democracy – humans vs algorithms – directly resonates.

## Political Science – Class 12, “Contemporary World Politics”

- Chapters on globalisation, US hegemony, security in the contemporary world, and international organisations.
- AI-driven diplomacy links to changing nature of power, security, and global governance structures.

## Political Science – Class 12, “Politics in India since Independence”

- Chapters on India’s foreign policy, non-alignment, and changing relations with major powers.
- You can extend those discussions by asking: How will AI reshape India’s ability to pursue strategic autonomy?

## Economics – Class 11 & 12 (Micro and Macro)

- Topics on technological change, productivity, structural transformation, and public goods.
- Helps in analysing AI as a general-purpose technology affecting state capacity.

## Sociology – Class 11 & 12

- Chapters on social change, globalisation, and the impact of technology on society.
- Useful for reflecting on how AI affects professions, elite groups, and power structures.

## Science and Technology – Themes in General Science NCERTs (Classes 8–10)

- Introductory sections on computers, information technology, and society.
- Provide a basic conceptual foundation to discuss AI as the next step.

- **Linkages with UPSC CSE syllabus**
- **GS Paper 1 (Society and History)**

- Impact of globalisation on Indian society – AI-driven diplomacy as part of globalisation of technology and power.
- Modern Indian history – evolution of India's foreign policy institutions and how they may adapt to new technologies.

- **GS Paper 2 (Polity, Governance, IR)**

- Structure, organisation and functioning of the Executive and the Ministries and Departments of the Government – especially MEA, NSCS, etc.
- Government policies and interventions for development in various sectors and issues arising out of their design and implementation – including digital governance and AI policy.
- India and its neighbourhood relations; bilateral, regional and global groupings – implications of AI for power balance and diplomacy.
- Important international institutions, agencies and fora – potential AI regulation at UN, WTO, etc.

- **GS Paper 3 (Science & Tech, Internal Security)**

- Science and technology developments and their applications and effects in everyday life – specifically AI.
- Awareness in the fields of IT, space, computers, robotics, nanotechnology, biotechnology and issues relating to intellectual property rights.
- Role of media and social networking sites in internal security challenges; basics of cyber security – AI-driven info-warfare and propaganda.
- Challenges to internal security through communication networks; role of external state and non-state actors.

- **GS Paper 4 (Ethics)**

- Ethics in public administration – issues of accountability, transparency, and technological decision-making.
- Moral thinkers and philosophers – for example, Kant (duty and autonomy), Aristotle (prudence), utilitarianism (cost-benefit of AI decisions).
- Information sharing and transparency in government; ethical issues in international relations and funding.

# Way forward

## Human-centric AI governance in diplomacy

- Clearly codify that AI is advisory, not decisive, in foreign policy matters.
- Mandate human review, multi-layered vetting, and dissent channels for AI-generated options.

## Capacity-building and training

- Introduce AI literacy modules in Foreign Service and civil services training academies.
- Promote interdisciplinary teams – diplomats, technologists, ethicists, and legal experts working together.

## Institutional reforms

- Create dedicated AI and Emerging Technologies divisions within foreign and defence ministries.
- Ensure secure, domestically controlled data infrastructure for sensitive diplomatic AI tools.

## Legal and ethical frameworks

- Develop national guidelines on AI use in national security, with parliamentary oversight and periodic review.
- Build internal ethics committees to evaluate high-risk AI deployments.

## International cooperation and norm-setting

- Advocate global or regional codes of conduct on AI use in warfare, cyber operations, and diplomatic signalling.
- Support confidence-building measures such as transparency on AI in early-warning and command systems.

## Public communication and trust-building

- Communicate to citizens that AI is being used to support, not replace, responsible decision-making.
- Encourage public debate on the acceptable limits of AI in national security.

- UPSC CSE – Prelims (Science & Tech / IR themes)
- Questions on artificial intelligence, machine learning, and their applications in governance, economy, and security.
- Questions on cyber security, use of social media in internal security threats, and emerging technologies.
- UPSC CSE – Mains GS 2
- Questions dealing with:
    - “Role of technology in enhancing transparency and accountability in governance.”
    - “India’s foreign policy in the era of globalisation and information technology.”
- UPSC CSE – Mains GS 3
- Questions on:
    - “Artificial intelligence – advantages and challenges.”
    - “Cyber security challenges and their management in India.”
    - “Science and technology in internal security, border management and terrorism.”
- UPSC CSE – Mains GS 4
- Questions exploring:
    - “Ethical issues in public administration due to information and communication technologies.”
    - “Role of technology in improving governance while preserving accountability and human dignity.”

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