

COURTS, CADRES, AND COMPLIANCE: THE POLITICS OF ENVIRONMENTAL ENFORCEMENT IN INDIA AND CHINA

Jasmine Sharma, Abhishek Chatterjee

Practising Advocates at West Bengal District and High Court

Abstract: Environmental harm in the Global South has become increasingly severe, with India and China grappling with significant issues even though they possess comprehensive environmental legislation. This study presents a comparative examination of how these laws are enforced, concentrating on three key dimensions: judicial and administrative approaches, the function of regional and local institutions, and how governance frameworks influence adherence. India follows a participatory model rooted in rights-based principles, where courts and public interest litigation play a central role. This approach encourages civic involvement and legal activism, yet its effectiveness is often hindered by administrative slowdowns and inconsistent enforcement across states. On the other hand, China operates through a top-down, performance-focused framework aimed at swift implementation. While this system delivers quick results, it frequently falls short in terms of openness, citizen engagement, and long-term institutional responsibility. Based on case studies and a review of institutional practices, this research finds that neither country consistently enforces its environmental laws effectively. India demonstrates a vibrant legal culture but struggles with practical enforcement, whereas China achieves measurable outcomes but with minimal democratic checks.

The study suggests a hybrid model that merges India's participatory legal system with China's streamlined administrative efficiency. It recommends strengthening local institutions, improving transparency, and fostering deeper international cooperation. In the end, this paper contends that the success of environmental regulation hinges not so much on legal provisions or available resources, but on the credibility of institutions, the mechanisms ensuring accountability, and the ability to respond flexibly to dynamic and multifaceted environmental issues.

IndexTerms: India-China, PIL, Judicial Environmentalism, Environmental Governance, Comparative law, Enforcement, Governance.

1. INTRODUCTION

India and China both struggle to reconcile their fast-paced economic development with escalating environmental degradation. While both nations have robust legal frameworks in place, enforcement tends to be uneven, influenced by political priorities and regional differences. India's model emphasizes legal rights and civic engagement, with bodies like the National Green Tribunal playing a prominent role. Though this encourages public participation, it often suffers from procedural delays. China, by contrast, relies on a hierarchical, centrally controlled system that delivers quicker results but lacks openness and citizen involvement. Each model has its advantages and drawbacks, underscoring that legal strength alone is insufficient real progress depends on effective governance, institutional accountability, and the ability to adapt to changing environmental realities. While this approach looks good on paper and sets high standards, it's often bogged down by slow-moving bureaucracy, poor coordination, and weak enforcement at the local level.

China, on the other hand, runs a tight ship. Its top-down, performance-driven model ties environmental goals directly to how local officials are judged by the central government. That means protecting the environment becomes part of climbing the political ladder. This has led to some real gains more treatment plants, fewer dirty factories but it's also created perverse incentives. Officials sometimes fudge the numbers or focus more on looking good than making lasting change.

This study investigates these contrasting models of environmental enforcement through three interrelated research questions:

- 1. To what extent do judicial remedies, such as Public Interest Litigations in India, contribute to compliance with environmental standards compared to China's cadre evaluation-driven enforcement model?
- 2. How do pollution control boards in India and environmental agencies in China differ in their inspection frequency, transparency, and sanctioning effectiveness at the subnational level?
- 3. What role does political decentralisation in India and bureaucratic centralisation in China play in shaping the success or failure of environmental enforcement at the local level?

By engaging with these questions, the paper seeks to assess whether India's judicialised, participatory enforcement system delivers better compliance outcomes than China's administrative, target-driven model, or vice versa. It also examines how political structure federal in India, unitary in China impacts the local translation of national environmental mandates.

Methodologically, the study adopts a comparative doctrinal and empirical approach. It draws from statutory frameworks, court decisions (particularly NGT rulings), official policy documents (such as China's Five-Year Plans), and field-level data from regulatory institutions like the Punjab Pollution Control Board. It also engages with normative and institutional scholarship on rule of law, regulatory capacity, and environmental federalism. In so doing, the paper contributes to the literature on comparative environmental governance by identifying both structural constraints and transferable innovations in law enforcement.

Ultimately, the paper argues that neither a litigation-heavy model (India) nor a metrics-driven bureaucratic model (China) is sufficient in isolation. India's system often produces strong judgments with limited execution, while China's system enforces numerical targets without adequate participatory legitimacy. A hybrid enforcement approach, judicial oversight with performance-based incentives, and backing it up with strong local institutions, could be the smarter way forward for improving environmental compliance and building more sustainable governance in both countries.

2. LEGAL AND CONSTITUTIONAL FRAMEWORK

Although both India and China have comprehensive environmental legislation, how these laws are enforced is shaped by their differing political systems. India, as a liberal democracy, leans heavily on judicial intervention through mechanisms like public interest litigation and the National Green Tribunal. Yet, its federal nature often results in inconsistent implementation across various states. In contrast, China's centralized governance links environmental enforcement to national priorities and evaluates local officials based on performance benchmarks. These foundational differences significantly affect how each country ensures accountability and delivers results in environmental governance.

2.1 India: Constitutionalism and Judicialization of Environmental Law

Since the 1970s, India's environmental legal framework has undergone major transformation, influenced by growing ecological awareness and an assertive judiciary. A pivotal development came with the 42nd Constitutional Amendment in 1976, which introduced Articles 48-A and 51A(g), embedding environmental responsibility into the Constitution. Article 48-A encouraged the State to enhance and preserve the environment, while Article 51A(g) urged citizens to actively protect nature. Although these provisions fall under the non-enforceable Directive Principles and Fundamental Duties, they gained legal force when the Supreme Court interpreted them in conjunction with Article 21 the right to life effectively elevating environmental protection to an enforceable constitutional right.

In Subhash Kumar v State of Bihar (1991), the Court held that the right to clean water and air is part of the right to life under Article 21. In the iconic M.C. Mehta cases ranging from the Oleum gas leak to Ganga pollution the Court pushed the boundaries of environmental law, creating doctrines like the "polluter pays" and "precautionary principle."

To institutionalise this judicial momentum, Parliament established the National Green Tribunal (NGT) in 2010. With a mix of legal and technical experts, the NGT has since become the frontline institution for handling environmental disputes. As of 2023, the NGT has delivered over 4,000 judgments, dealing with issues ranging from illegal sand mining and deforestation to industrial pollution and waste management. It provides a faster, more specialised forum, helping ordinary citizens and environmental groups hold polluters and sometimes the State accountable.

The strength of India's constitutional framework lies in its normative clarity and accessibility to citizens. However, the enforcement of judicial decisions remains inconsistent. As Verma rightly notes, "India suffers not from the absence of law but from the failure of enforcement." The judiciary can mandate action, but execution often depends on the fragmented capacities of state-level Pollution Control Boards (PCBs), plagued by political interference and limited resources.

2.2 China: Legal Instrumentalism and Bureaucratic Enforcement

China's environmental legal framework is expansive, but rooted in a distinct constitutional philosophy. Unlike India, China's Constitution does not guarantee a justiciable right to a clean environment. The Environmental Protection Law of 1989 serves as the foundation of its regulatory regime, reinforced by statutes such as the Air Pollution Prevention and Control Law (amended in 2018) and the Water Pollution Prevention and Control Law (revised in 2017). Despite their presence, these bodies primarily serve administrative roles and offer few channels for public redress. In China, enforcement relies less on judicial processes and more on bureaucratic structures, particularly the Cadre Evaluation System, which assesses local officials using set performance benchmarks, including environmental criteria. During the 11th Five-Year Plan (2006–2010), binding targets were set to reduce sulphur dioxide emissions by 10% and improve energy efficiency by 20%, directly linking environmental outcomes to the political advancement of provincial leaders.

The centralized approach has yielded significant outcomes for instance, urban wastewater treatment expanded from just over half in 2005 to more than 95% by 2020. However, this system also creates incentives for superficial compliance, with instances where local authorities have manipulated data or protected major polluters to appear as though targets are being met. Legal avenues for challenging such practices remain limited. Environmental litigation faces high procedural barriers, and courts operate under constrained independence, limiting public access to justice. For example, residents in Hebei province home to some of China's worst air quality rarely pursue legal action, relying instead on closed-door negotiations led by local officials.

Ultimately, enforcement remains state-driven, shaped by China's centralized governance model, with limited space for civil society engagement or grassroots accountability.

2.3 Federalism and Centralisation: Structural Implications for Enforcement

The structural design of India's federalism and China's unitary governance has profound implications for environmental enforcement at the subnational level. India's Constitution demarcates environmental regulation as a subject in the Concurrent List, allowing both the Centre and States to legislate. This leads to jurisdictional overlaps and policy fragmentation, particularly in the functioning of State Pollution Control Boards. The effectiveness of enforcement varies significantly across states, with wealthier or more politically committed states (e.g., Tamil Nadu, Maharashtra) showing higher compliance rates compared to others.

By contrast, China's centralised structure enables the national government to issue uniform targets, but local implementation often deviates due to economic interests and political patronage. Despite the CES, local protectionism and resistance remain common, as local officials are simultaneously tasked with achieving economic growth. This dual mandate often results in weak enforcement of environmental laws when they conflict with industrial interests.

Thus, while India grapples with decentralised enforcement plagued by uneven capacity and coordination, China faces the challenge of centralised planning undermined by local sabotage.

3. INSTITUTIONAL ARCHITECTURE AND ENFORCEMENT MECHANISMS

Institutions are the proving grounds where laws are either effectively implemented or rendered meaningless. In the realm of environmental governance, enforcement is rarely direct it is influenced by political priorities, institutional structures, legal culture, and the motivations of those in charge. India and China offer two contrasting models: India emphasizes judicial scrutiny and civic participation, while China adopts a hierarchical, performance-driven approach. This section delves into how each country's institutional setup shapes the actual enforcement of environmental regulations. It looks at the relationship between courts and administrative bodies, how enforcement operates at the local level, and how broader systems of governance affect compliance, responsibility, and public confidence.

3.1 India: Decentralised Institutions, Centralised Judiciary

Environmental enforcement in India operates within a federal framework, heavily supported by judicial intervention. Although regulatory responsibilities lie primarily with the Central and State Pollution Control Boards, these agencies often face resource constraints and tend to respond to issues rather than prevent them. In many cases, the judiciary particularly the Supreme Court and the National Green Tribunal steps in to compensate by directing clean-up efforts and imposing sanctions. Still, implementation remains inconsistent, as state-level bodies often lack the authority or capacity to enforce decisions independently.

3.2 China: Centralised Bureaucracy, Performance-Driven Compliance

The Ministry of Ecology and Environment (MEE) sets the rules at the national level, and local officials are expected to deliver results based on performance targets laid out in the Five-Year Plans. These targets covering things like emissions control and waste management are tied directly to promotions and career growth through the Cadre Evaluation System (CES). This model has led to visible progress, especially in building infrastructure like wastewater treatment plants and expanding clean energy capacity. But researchers have pointed out some serious concerns. Local officials, under pressure to meet targets, sometimes manipulate data, focus on quick wins over long-term impact, or merely go through the motions to appear compliant. On top of that, China's courts play only a minimal role in enforcing environmental rules, and opportunities for citizen involvement are heavily restricted, keeping the public largely out of the enforcement process.

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ASPECT	INDIA	CHINA
Governance Model	Federal (decentralised)	Unitary (centralised)
Primary Enforcers	SPCBs, CPCB, Judiciary (NGT)	Ministry of Ecology & Environment (MEE), local officials
Judicial Role	Strong (PILs, NGT rulings)	Weak (limited access to courts)
Inspection & Monitoring	Low-frequency, resource- constrained	Target-based, incentive-driven
Incentives	Weak or absent for regulators	Performance-linked promotions for officials
Public Participation	High (NGOs, PILs, media)	Low (limited space for civil society)
Typical Weaknesses	Fragmentation, poor execution	Data manipulation, lack of

often

Ganga clean-up delays despite

Supreme Court orders

Conflictual.

influenced

Table 1: Comparative Examination of Law Enforcement Agencies – India and China

Local-State

Examples of Failure

Dynamics

politically

Subordination with covert resistance

Factories reopened after symbolic

shutdowns

Illustrative Strength	Vibrant litigation culture driving	Bureaucratic speed and uniformity in
	reform	action

3.3 Key Insights from the Comparative Framework, Table 1.

- Judicial vs. Administrative Enforcement: In India, the courts play a key role in environmental governance, stepping in when regulators fall short. China, lacking a strong legal culture, relies on administrative methods like setting targets and penalties. However, both countries struggle with enforcement India has issues with execution, while China often sees only surface-level compliance.
- Subnational Effectiveness: In India, the performance of State Pollution Control Boards (SPCBs) varies widely between states, showing differences in their capabilities. In China, local governments must follow central rules, but their compliance can vary based on economic and political factors.
- Governance Framework: India's federal setup encourages citizen involvement and legal scrutiny, which can drive reform but often slows down decisive enforcement. On the other hand, China's centralized model enables uniform policy execution and rapid infrastructure growth, though it frequently sacrifices openness and excludes meaningful input from local communities.

India's enforcement approach, shaped by public participation and judicial activism, helps open the system to democratic inputs but frequently falls short in terms of effective execution. In contrast, China's centralized, goal-oriented strategy delivers swift progress but is prone to data manipulation and superficial compliance. These contrasting models highlight the shortcomings of their respective enforcement logics, pointing to the need for deeper institutional reforms that focus not just on structural design but also on aligning incentives, ensuring autonomy, and strengthening accountability.

4. COMPLIANCE OUTCOMES AND EFFECTIVENESS

The true measure of enforcement lies in the results it delivers. Environmental compliance emerges from the intersection sometimes the conflict of legal provisions, institutional capacity, and political commitment. This section evaluates how effectively environmental laws are enforced in India and China by looking at patterns of compliance, how institutions respond in practice, and the disconnect that often exists between legal standards and on-the-ground environmental conditions.

4.1 India: Litigation-Driven Compliance and Its Limits

India's compliance landscape resembles a paradoxical nature. On the one hand, the country has witnessed an extraordinary proliferation of environmental litigation. Landmark judgments by the Supreme Court and the National Green Tribunal (NGT) have led to factory closures, fines, environmental impact assessments (EIAs), and the appointment of expert monitoring committees. The role of Public Interest Litigations (PILs) has expanded citizen access and visibility into environmental governance. However, while these judicial interventions often produce de jure compliance (laws, rules, orders), they frequently fail to secure de facto outcomes (clean rivers, breathable air).

Empirical evidence from Punjab highlights this enforcement gap. A study of 117 large water-polluting plants and 109 air-polluting plants found that inspections by the Punjab Pollution Control Board (PPCB) increased the likelihood of compliance, but only marginally. Plants in politically influential industries or with high profits were less likely to be sanctioned, suggesting selective enforcement based on economic clout. Moreover, high abatement costs and lack of technical capacity were major deterrents to sustained compliance, particularly among small and medium enterprises (SMEs).

4.2 China: Performance Targets and Symbolic Compliance

China's compliance narrative is shaped by the logic of political performance rather than legal obligation. Environmental indicators such as sulphur dioxide (SO₂) emissions and water treatment rates are embedded in the Cadre Evaluation System (CES), meaning that local officials' career advancement depends on meeting these targets. This has incentivised dramatic administrative actions, such as factory shutdowns, power rationing, and large-scale investment in wastewater treatment facilities.

For instance, during the 11th Five-Year Plan (2006–2010), China surpassed its national SO₂ reduction target of 10% on paper. In practice, scholars found that some reductions were achieved through data manipulation, over-reporting of treatment capacity, and temporary shutdowns to coincide with inspections. Erin Ryan describes this as the "elaborate paper tiger" problem: laws and compliance mechanisms exist, but are orchestrated more for political theatre than ecological restoration.

Despite this, China's enforcement regime has delivered infrastructural compliance. The build-up of pollution control facilities, cleaner production technologies, and low-emission transport policies is undeniable. Yet these successes are often uneven. Cities with higher political visibility or strategic importance perform better than remote or economically weaker regions. Furthermore, citizens have little scope to challenge non-compliance through legal channels, limiting bottom-up accountability.

COMPLIANCE INDICATOR	INDIA	CHINA
Nature of Compliance	Legalistic, court-mandated	Administrative, target-based
Inspection-to-Compliance Link	Weak but positive correlation	Stronger correlation, but with data manipulation risks
Public Oversight Mechanisms	PILs, NGT, media	Limited, state-controlled
Industry Response	Reactive, litigation-prone	Strategic, aligned with cadre incentives
Sustainability of Compliance	Episodic, varies by state and sector	High infrastructural investment but low legalisation
Citizen Role	High engagement	Low engagement
Risk of Symbolic Compliance	Moderate (due to judicial review)	High (due to bureaucratic opacity)

4.3 Key Findings: Compliance as a Mirror of Governance, Table 2.

India's compliance outcomes are heavily judicialized. Courts push regulators into action, but compliance often ends at the level of form, not function. Orders are issued but left unexecuted. Transparency is high, but coordination is weak. This suggests that compliance requires more than legal clarity it needs administrative muscle and political will. China's compliance outcomes are highly structured and target-driven, which leads to visible but sometimes illusory improvements. While certain targets are met quickly, they are not always durable or verifiable. The absence of public oversight and legal options for addressing issues lets superficial compliance thrive.

In both countries, how well rules are followed depends not only on the law but also on incentives, the political landscape, and how governance is structured. If enforcement strategies overlook these factors, they may end up being just for show.

5. RULE OF LAW AND PUBLIC PARTICIPATION

Effective environmental enforcement depends heavily on how much power citizens have to hold legal and regulatory bodies accountable. Whether in a democracy or an authoritarian state, strong rule of law and meaningful public participation often decide whether environmental laws are actually enforced or just look good on paper.

India and China take very different routes. In India, a constitutional democracy, environmental protection is linked to fundamental rights and strengthened by public interest litigation. In China, a one-party system drives enforcement through top-down administrative controls, with minimal space for court access or civil society involvement.

5.1 India: The Participatory Promise of Green Justice

Since the 1980s, the Supreme Court has expanded Article 21 of the Constitution the right to life to include the right to a clean and healthy environment. In the *M.C. Mehta* series of cases alone (over 30 filed between 1985–2020), the Court addressed critical issues like air pollution, water contamination, and industrial hazards, laying the groundwork for environmental jurisprudence in India. Public Interest Litigation (PIL) has emerged as a powerful enforcement tool. Between 1985 and 2018, over 3,000 environment-related PILs were filed in Indian courts, allowing individuals, NGOs, and legal activists to push for state accountability and corporate compliance.

The National Green Tribunal (NGT), established under the 2010 NGT Act, has adjudicated more than 4,000 cases as of 2023, with a disposal rate of nearly 90%. Its relaxed standing rules (no locus standi requirement) and technical bench composition have improved access to environmental justice, particularly for marginalised communities. NGT orders have led to the suspension of high-profile infrastructure projects, closure of polluting industries, and imposition of fines exceeding ₹800 crore (approx. USD 100 million) in environmental damages and penalties.

Furthermore, India's Environmental Impact Assessment (EIA) framework mandates public hearings for major projects. Although imperfect in practice often marred by procedural lapses or tokenism such hearings offer a platform for local knowledge, dissent, and resistance. Environmental NGOs and investigative media frequently act as watchdogs, amplifying citizen voices and exposing regulatory capture.

India's model demonstrates how rule of law and participatory rights can serve as instruments of environmental enforcement when supported by institutional responsiveness.

5.2 China: Bureaucratic Legality Without Legalism

In China, the concept of the rule of law is subordinated to the supremacy of the Communist Party. While environmental protection has become a high-level political priority especially since the 11th Five-Year Plan legal and judicial avenues for public engagement remain severely restricted.

China's environmental laws, such as the 1989 Environmental Protection Law and its 2015 amendments, appear robust on paper. They articulate principles such as the polluter pays, green development, and ecological civilisation. However, as Erin Ryan argues, many of these provisions are aspirational rather than enforceable, reflecting the phenomenon of "rule by law" rather than "rule of law." Access to courts is tightly controlled. Environmental Public Interest Litigation (EPIL) is permitted

only through approved entities, such as government-linked organisations and select NGOs registered with the Ministry of Civil Affairs. Even where EPIL cases proceed, courts remain politically subordinate and lack independence. As a result, citizen-initiated legal action is rare, and judicial review is minimal.

The absence of judicial enforcement is compounded by limited transparency. Pollution data, environmental permits, and enforcement records are often withheld or manipulated. While the government has launched online disclosure systems (e.g., China's Pollution Information Transparency Index), these tools are selectively implemented and vulnerable to local interference.

The public's role in environmental governance is thus passive, confined largely to state-sanctioned channels. Protests over pollution such as those in Xiamen and Dalian have occurred, but they are often met with suppression rather than legal remedy. Without participatory mechanisms, compliance depends entirely on the state's internal incentives, such as cadre evaluations, which may not align with community interests.

DIMENSION INDIA CHINA Judicial Access for Broad (PILs, NGT) Narrow, party-controlled EPIL only Citizens NGO Role Active, often initiators of litigation Limited, regulated or suppressed in Enforcement Transparency Moderate, improving Low, often manipulated **Enforcement Data** Public Hearings (EIA) Mandatory for major projects Rare or cosmetic Judicial Independence High in theory, moderate Low, party-controlled judiciary practice Freedom to Protest Constitutional Limited, often criminalised right (though increasingly restricted) **Enforcement Legitimacy** Participatory, yet institutionally Authoritative, but lacking societal legitimacy

Table 3. Comparative Analysis: Participation, Transparency, and Legal Accountability

5.3 Rule of Law as Enforcement Legitimacy

This comparison shows that effective environmental enforcement needs more than state power it demands legal credibility and public involvement. India's model encourages participation and legal action but struggles with delays and fragmented governance. China enforces compliance top-down, enabling fast results but lacking transparency and civic oversight. India offers legal openness but political inconsistency. China brings central control but weak public accountability. A balanced model combining strong state support, legal checks, and civic voice could drive more lasting and just environmental outcomes.

6. CONCLUSION, DISCUSSION, AND SUGGESTIONS

This study reveals that the effectiveness of environmental law enforcement in India and China is not solely determined by the existence of legal frameworks, but significantly influenced by how these laws are enforced, prioritized politically, and integrated with public engagement. While both nations have established intricate regulatory systems and ambitious environmental goals, enforcement outcomes are often hampered by structural, institutional, and participatory shortcomings that prevent legal mandates from translating into tangible ecological improvements.

By exploring three critical areas judicial versus administrative enforcement, subnational institutional performance, and the influence of political structure this comparative analysis underscores that enforcement is shaped as much by governance philosophy as by environmental necessity.

6.1 Key Insights

- Strong Laws Don't Guarantee Strong Results- India has built a solid foundation of environmental rights through progressive court rulings. But on the ground, enforcement often falls short due to weak coordination between institutions. China, meanwhile, is quick to implement environmental targets through its top-down system but the pressure to hit numbers sometimes leads to surface-level compliance rather than real change.
- People Make a Difference- India's legal system allows citizens, NGOs, and activists to step in through Public Interest Litigations and forums like the National Green Tribunal. This creates room for accountability, even if government machinery is slow to act. In contrast, China limits public involvement, which keeps enforcement tightly controlled but also less transparent and harder to hold accountable.
- How a Country Governs Shapes How It Enforces- India's federal and democratic setup gives states flexibility and citizens
 access to justice, but this often leads to uneven enforcement. Some states do well, others lag behind. China's centralised
 model keeps things uniform and fast-moving at the national level but it also encourages local officials to tweak data or
 meet targets on paper rather than in practice.

6.2 Policy Recommendations for India, China, and Beyond

To make environmental law enforcement smarter, more legitimate, and outcome-driven, policymakers in both countries can adopt the following solutions. These proposals are rooted in institutional realities and offer a roadmap for reform that combines state capacity with civic accountability.

Table 4: Comparative Policy Recommendations for Strengthening Environmental Enforcement

ISSUE AREA	CHALLENGES IDENTIFIED	SUGGESTED SOLUTIONS
1. Enforcement Gap	 India: Weak coordination, poor follow-through on court orders China: Symbolic compliance, target obsession 	 India: Create digital enforcement dashboards; improve inter-agency coordination China: Introduce third-party audits for Cadre Evaluation System
2. Public Participation	India: Limited citizen engagement at grassrootsChina: Civil society largely excluded	- India: Legalise community-led monitoring; strengthen participatory EIA processes - China: Pilot public hearings and allow non- sensitive civil society roles
3. Local Institutional Capacity	 India: SPCBs underfunded and understaffed China: Local units act under political pressure 	 India: Provide performance-linked grants to SPCBs; increase staffing and training China: Decentralise with safeguards and technical support
4. Hybrid Enforcement Models	Divergent strengths: India = judicial activism, China = administrative efficiency	Combine India's judicial oversight with China's administrative implementation Use courts/tribunals for monitoring while local bodies execute with public feedback
5. Environmental Goals in Planning	Environmental law is treated as secondary to economic growth	- Embed environmental indicators in development planning and budgets - Set up joint India-China learning forums for data sharing and best practices
6. Transparency & Accountability	- India: Limited real-time data - China: Data manipulation risks	- Launch open-access portals for pollution & compliance data - Require annual third-party verified scorecards for industries and local governments

Additional Strategic Reforms

To supplement the above, the following reforms already included in your original structure are reinforced by the comparative analysis:

A. Rebuild Institutional Muscle at the Subnational Level

- India: Strengthen SPCBs with independent mandates, better funding, and professionalisation. Appoint key regulatory roles through independent commissions rather than political channels.
- China: Refine the Cadre Evaluation System to reward verified environmental performance, incorporating community feedback and independent audits.
- B. Legalise Transparency and Civic Accountability
 - India: Mandate third-party compliance audits in EIA follow-up and publish state-wise environmental performance indices.
 - China: Expand Environmental Public Interest Litigation (EPIL) access beyond state-recognised NGOs. Require public disclosure of real-time pollution data, validated by neutral institutions.

C. Co-Produce Compliance Through Cross-Learning and Partnerships

- Launch a Bilateral Environmental Enforcement Dialogue (BEED) under BRICS/SCO platforms.
- Invest in joint transboundary monitoring tools using satellite tech and AI, with UNEP oversight.
- Support policy innovation labs involving universities, civil society, and legal experts for decentralised, contextsensitive enforcement solutions.

6.3 Concluding Reflections

In both India and China, environmental enforcement has evolved beyond pollution control it now signals the state's legitimacy, the strength of institutions, and the promise of ecological justice in a climate-challenged world. India's model is rooted in constitutional ideals and civic engagement, but falters in execution. China's system delivers speed and scale through administrative command, yet struggles with transparency and public trust. Neither path is flawless but each offers lessons in what works, and what must change. Environmental law only matters if people trust the system behind it. As we near irreversible climate tipping points, enforcement is no longer a back-end task it is where justice, democracy, and the planet's future converge.

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