
BETWEEN DEVELOPMENT AND ECOLOGY: THE LEGAL FRAMEWORK FOR WETLAND PROTECTION IN INDIA

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ABSTRACT

Wetlands are among the most ecologically productive ecosystems on Earth, yet they remain among the most legally vulnerable in India. Despite hosting nearly 20% of the world's Ramsar-designated sites, India continues to lose its natural wetlands at an alarming rate due to urbanization, infrastructure development, and agricultural conversion. This paper critically examines the legal framework governing wetland protection in India, tracing its evolution from the Environment Protection Act, 1986, through the Wetlands (Conservation and Management) Rules, 2010 and 2017, to the landmark Supreme Court judgment in *M.K. Ranjitsinh & Ors. v. Union of India* (2024). The paper argues that while India's wetland jurisprudence has advanced significantly — particularly through judicial activism — a persistent implementation gap, ambiguous statutory definitions, and conflicting land-use classifications undermine conservation efforts. Through an analysis of key judgments and select case studies, this paper identifies critical legal and institutional deficiencies and offers recommendations for a more coherent, enforceable, and ecologically sound wetland protection regime in India.

Keywords: Wetland Protection in India, Environmental Law, Wetlands, Judicial Activism, Implementation Gap, Sustainable Development.

1. INTRODUCTION

1.1 Background: The Ecological and Legal Context of Wetlands

Often referred to as the "kidneys of the landscape" and "biological supermarkets," wetlands are among the most productive and complex ecosystems on Earth. Ecologically, they act as natural sponges that absorb rainfall, mitigate flood risks, recharge groundwater aquifers, and purify water by filtering out pollutants. Furthermore, they are vital carbon sinks and host a rich diversity of endemic flora and fauna.

Internationally, the recognition of wetlands' ecological significance culminated in the Ramsar Convention on Wetlands in 1971, to which India is a signatory. The Convention defines wetlands broadly to include marshes, fens, peatlands, or water, whether natural or artificial, permanent or temporary. In the Indian context, wetlands support millions of livelihoods, particularly in agriculture, fishing, and forestry, making them economically indispensable. However, translating this ecological and economic importance into a robust legal definition has historically been a challenge in Indian environmental jurisprudence, leaving these fragile ecosystems legally vulnerable.

1.2 The Problem: Between Development and Ecology

Despite their undeniable value, India is currently facing a severe wetland crisis. Estimates suggest that India has lost nearly 30% of its natural wetlands over the last few decades. The rapid pace of urbanization, industrialization, and infrastructure expansion has positioned economic development in direct conflict with ecological conservation.

The core of the legal problem lies in land-use classification. In many state revenue records, wetlands are historically categorized as "wastelands." This colonial-era classification treats wetlands as unproductive terrain, actively encouraging their reclamation for real estate, agriculture, and municipal waste dumping. While the Constitution of India mandates environmental protection under Article 48A (Directive Principles of State Policy) and Article 51A(g) (Fundamental Duties of citizens), the statutory framework specifically governing wetlands has been reactive and fragmented.

Before 2010, wetlands were indirectly protected under umbrella legislations like the Environment (Protection) Act, 1986, and the Water (Prevention and Control of Pollution) Act,

1974. Although the introduction of the Wetlands (Conservation and Management) Rules in 2010, and their subsequent amendment in 2017, marked a shift toward dedicated wetland governance, a significant "implementation gap" persists. State Wetland Authorities often lack the capacity, political will, or accurate wetland inventories required to enforce these rules. Consequently, the burden of protecting wetlands has frequently fallen upon the Indian judiciary through Public Interest Litigations (PILs).

1.3 Research Questions

To systematically explore the legal landscape of wetland protection in India, this paper seeks to answer the following central research questions:

1. What legal instruments currently govern wetland protection in India, and how do they interact with broader environmental and developmental laws?
2. Has the transition from the Wetlands Rules 2010 to the decentralized Wetlands Rules 2017 strengthened or weakened on-ground conservation outcomes?
3. Why are wetlands frequently classified as "wastelands" in government records, and what are the legal and ecological consequences of this classification?
4. How has the Indian judiciary, particularly through recent landmark judgments like *M.K. Ranjitsinh v. Union of India*, stepped in to bridge the statutory gaps in wetland protection?

1.4 Research Methodology

This research primarily relies on doctrinal legal research.

Primary Sources: The paper critically analyzes constitutional provisions, statutory laws (such as the Environment Protection Act, 1986), subordinate legislation (Wetlands Rules 2010 and 2017), and international conventions (Ramsar Convention). Furthermore, it relies heavily on judicial pronouncements from the Supreme Court of India and the National Green Tribunal (NGT).

Secondary Sources: The research is supplemented by peer-reviewed academic journals, reports from the Ministry of Environment, Forest and Climate Change (MoEFCC), and data

from prominent environmental organizations to provide empirical context to the legal analysis.

1.5 Scope and Limitations

The scope of this paper is confined to the legal and institutional framework governing inland wetlands in India, with a specific focus on developments post-2010. While coastal and marine wetlands (such as mangroves and coral reefs) are ecologically vital, they are primarily governed by the Coastal Regulation Zone (CRZ) Notifications and are excluded from detailed analysis in this paper unless they overlap with the Wetlands Rules. A limitation of this study is the reliance on state-reported data regarding wetland inventories, which is often incomplete or outdated.

2. THE LEGAL FRAMEWORK FOR WETLAND CONSERVATION IN INDIA

The legal protection of wetlands in India has evolved from an indirect, sectoral approach to a more targeted, albeit still inconsistent, framework. For decades, wetlands were not explicitly defined or protected under a dedicated law. Instead, their conservation relied on overlapping provisions within broader environmental legislation.

2.1 Pre-2010 Legal Regime: Umbrella Protections and Gaps

Before 2010, wetlands in India lacked dedicated legal protection. Instead, they were indirectly governed by broader environmental laws, often leading to fragmented and inconsistent conservation efforts. Few Key Legislations (Pre-2010):

- Environment (Protection) Act, 1986 (EPA): Empowered the Central Government to issue notifications for protecting ecologically sensitive areas. Wetlands were not explicitly mentioned, but the EPA provided a legal basis for regulatory action. Limitation: No specific guidelines for wetland conservation, leading to ad-hoc protection.
- Water (Prevention and Control of Pollution) Act, 1974: Focused on preventing water pollution but did not address wetland degradation due to land-use changes.

Limitation: Failed to recognize wetlands as distinct ecosystems requiring specialized protection.

- Wildlife (Protection) Act, 1972: Protected wetlands located within wildlife sanctuaries and national parks but excluded most inland wetlands.

Limitation: Only a fraction of wetlands fell under this protection.

- Forest (Conservation) Act, 1980: Applied to wetlands classified as "forests" but excluded those labeled as "wastelands" in revenue records.

Limitation: Most wetlands were not legally recognized as forests, leaving them vulnerable.

- Judicial Interventions (Pre-2010): Courts occasionally stepped in to protect wetlands under Article 21 (Right to Life) and Article 48A (Protection of Environment) of the Constitution.

Example: Indian Council for Enviro-Legal Action v. Union of India (1996) – SC directed the government to take action against wetland pollution.

Problem: Judicial orders were reactive and lacked a structured legal framework for enforcement.

2.2 Wetlands (Conservation and Management) Rules, 2010: The First Dedicated Regulation

The Wetlands (Conservation and Management) Rules, 2010, notified under the EPA, marked India's first attempt to create a dedicated legal framework for wetland protection. Few key provisions are here:

- **Definition of Wetlands:**
 - Included natural and man-made wetlands (lakes, ponds, marshes, peatlands, etc.).
 - **Exclusion:** Paddy fields, salt pans, and human-made water bodies not linked to natural wetlands were excluded.
- **Central Wetlands Regulatory Authority (CWRA):**
 - Established to oversee wetland conservation at the national level.

- **Power to notify wetlands** for protection and regulate activities within them.
- **Prohibited Activities:**
 - Reclamation of wetlands.
 - Discharge of untreated waste.
 - Solid waste dumping.
 - Construction of impermeable surfaces.
- **Permissible Activities (with prior approval):**
 - Harvesting of natural resources.
 - Dredging and fishing (with restrictions).
- **Strengths of the 2010 Rules**
 - First dedicated legal framework for wetlands.
 - Centralized oversight through CWRA.
 - Clear prohibitions on harmful activities.
- **Weaknesses of the 2010 Rules**
 - **Narrow scope:** Only notified wetlands were protected, leaving many unregulated.
 - **Implementation delays:** States were slow to identify and notify wetlands.
 - **Lack of public participation:** No mechanism for local communities to report violations.
 - **Weak penalties:** Violations were punished under the EPA, which had low deterrence value.

2.3 Wetlands (Conservation and Management) Rules, 2017: Decentralization and New Challenges

The 2017 Rules replaced the 2010 framework, introducing major structural changes—some progressive, others controversial.

Aspect	2010 Rules	2017 Rules
• Regulatory Authority	Central Wetlands Regulatory Authority (CWRA)	State Wetlands Authorities (SWAs) – Decentralized control
• Wetland Identification	Central government notified wetlands	States responsible for identification and notification
• Definition of Wetlands	Broad, included natural and some man-made wetlands	Narrower definition – Excluded many small and seasonal wetlands
• Prohibited Activities	Strict restrictions on reclamation, waste dumping	More exemptions for "public interest" projects
• Public Participation	Limited	No improvement – Still no clear mechanism for citizen reporting
• Penalties	Under EPA (weak enforcement)	No change – Still reliant on EPA penalties

➤ Controversies and Criticisms

1. Dilution of Central Oversight:

- The shift from CWRA to State Wetlands Authorities (SWAs) led to inconsistent enforcement across states.
- Some states (e.g., Maharashtra, Kerala) were proactive, while others (e.g., Haryana, Punjab) lagged in notifications.

2. Narrower Definition of Wetlands:

- Many small, seasonal, and urban wetlands were excluded, making them vulnerable to encroachment.
- Example: Urban lakes in Bengaluru and Delhi were often left unprotected.

3. Exemptions for "Public Interest" Projects:

- The rules allowed exemptions for infrastructure, housing, and industrial projects if deemed in "public interest."
- Problem: This clause was misused to justify wetland destruction for development.

4. No Stronger Penalties:

- Violations still fell under the EPA, 1986, which had weak deterrence (fines as low as ₹1 lakh, rarely enforced).

2.4 International Obligations: The Ramsar Convention

India is a signatory to the Ramsar Convention (1971), which requires:

- i. Designation of Wetlands of International Importance (Ramsar Sites).
- ii. Wise use of all wetlands in the territory.
- iii. National Wetland Policies for conservation.

India's Ramsar Sites (As of 2026: 84 Sites)

- i. Oldest: Chilika Lake (Odisha), Keoladeo National Park (Rajasthan).
- ii. New Additions (2020-2026): Lonar Lake (Maharashtra), Tso Kar (Ladakh), Haiderpur Wetland (UP).
- iii. Threats: Even Ramsar sites like Loktak Lake (Manipur) and Deepor Beel (Assam) face encroachment and pollution.

Gaps in Compliance

- i. No national wetland policy (despite Ramsar obligations).
- ii. Ramsar sites not automatically protected under domestic law—must be notified under Wetlands Rules.
- iii. Weak reporting to the Ramsar Secretariat on conservation status.

3. JUDICIAL ACTIVISM AND INTERVENTIONS

Given the statutory ambiguities and the persistent implementation gaps under the 2010 and 2017 Wetlands Rules, the Indian judiciary has consistently been forced to intervene. Relying on an expanded interpretation of Article 21 (Right to Life) and Article 48A (Directive Principles of State Policy), constitutional courts and the National Green Tribunal (NGT) have established a robust jurisprudence to bridge the legislative divide between economic development and ecology.

3.1 The Role of the National Green Tribunal (NGT)

The NGT has been instrumental in addressing the lethargy of State Wetlands Authorities (SWAs) and enforcing executive accountability:

- i. **Protection of Unnotified Wetlands:** The NGT has repeatedly ruled that a water body does not need to be formally "notified" under the 2017 Rules to deserve protection. If a geographic feature meets the scientific and ecological criteria of a wetland, it is legally entitled to protection against reclamation and encroachment.
- ii. **Urban Wetlands and the 'Polluter Pays' Principle:** In cases involving severely degraded urban lakes—most notably Bellandur Lake in Bengaluru and the East Kolkata Wetlands—the NGT has imposed heavy environmental compensation on state governments for failing to prevent the discharge of untreated industrial effluents and municipal sewage.

3.2 Landmark Supreme Court Pronouncements

3.2.1 M.K. Ranjitsinh & Ors. v. Union of India (2024): As highlighted in the evolution of India's environmental framework, this recent landmark judgment significantly broadened the scope of ecological protection. By explicitly recognizing the right against the adverse impacts of climate change as a fundamental right derived from Articles 14 and 21, the Supreme Court created a constitutional shield for fragile ecosystems. While the case primarily addressed the protection of the Great Indian Bustard against overhead powerlines, the underlying ratio decidendi enforces a strict obligation on the State to prioritize the conservation of critical habitats, including wetlands, over unchecked infrastructural development.

3.2.2 M.K. Balakrishnan & Ors. v. Union of India (2017): In a crucial intervention, the Supreme Court directed the Union Government to map and protect over 2 lakh wetlands across the country based on the National Wetland Atlas prepared by the Space Applications Centre (ISRO). The Court strictly prohibited any developmental or industrial activities on these identified water bodies, effectively acting as a nationwide safeguard against wetland encroachment.

4. CRITICAL LEGAL AND INSTITUTIONAL DEFICIENCIES

Despite proactive judicial measures and dedicated regulations, the on-ground reality of wetland conservation remains heavily compromised due to several systemic deficiencies:

4.1 The "Wasteland" Conundrum in Revenue Records

As identified earlier, the most critical legal bottleneck is the historical classification of wetlands as "wastelands" in state land revenue records. Because land is a State subject under the Indian Constitution, revenue departments actively promote the conversion of these "wastelands" into agricultural plots or real estate. This creates a direct legal conflict between revenue laws (which encourage reclamation) and environmental laws (which mandate conservation).

4.2 Capacity Constraints of State Wetlands Authorities (SWAs)

The decentralization introduced by the 2017 Rules placed the burden of wetland identification and management entirely on SWAs. However, most SWAs function as toothless advisory bodies. They suffer from severe underfunding, lack dedicated scientific personnel, and are often overseen by bureaucratic departments that prioritize urban development over ecological preservation.

4.3 Dilution of the Public Trust Doctrine

The State holds natural resources, including wetlands, in trust for the public. However, the frequent exemptions granted under the 2017 Rules for projects deemed to be in the "public interest" have heavily diluted this doctrine. "Public interest" is routinely interpreted as economic infrastructure, allowing the State to legally sanction the destruction of vital carbon sinks.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The journey of wetland protection in India from indirect umbrella legislations to dedicated rules demonstrates a growing legal awareness of their ecological importance. However, the legal framework remains deeply flawed, characterized by a narrow statutory definition, decentralized inefficiency, and conflicting land-use policies. The judiciary has effectively acted as a stopgap measure, but reactive judicial orders cannot replace the need for a cohesive, proactive, and enforceable statutory framework. To resolve the conflict between development and ecology, wetlands must be legally recognized not as obstacles to urbanization, but as indispensable assets for public health and climate resilience.

5.2 Recommendations

To achieve a more coherent and ecologically sound wetland protection regime, the following legal and institutional reforms are recommended:

- i. **Reclassification of Revenue Records:** State governments must urgently amend their land revenue frameworks to reclassify wetlands from "wastelands" to a protected ecological category, permanently shielding them from commercial allotment and agricultural conversion.
- ii. **Enactment of a National Wetland Policy:** India must fulfill its obligations under the Ramsar Convention by introducing a comprehensive National Wetland Policy. This policy should provide a uniform legal definition of wetlands, purposefully encompassing the seasonal and urban water bodies currently excluded by the 2017 Rules.
- iii. **Empowering State Authorities:** SWAs must be granted statutory independence and financial autonomy. They should be equipped with punitive powers to directly prosecute violators, rather than relying solely on the weak deterrents of the Environment (Protection) Act, 1986.
- iv. **Mandatory Public Participation:** The legal framework must institutionalize the role of local communities—particularly those whose livelihoods depend directly on

wetlands—by forming district-level wetland management committees to ensure inclusive, bottom-up conservation.

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