

THE SHRIMP, THE JUDGE AND THE AMENDMENT COURTS' CONTRIBUTION TO AQUACULTURE REGULATION IN INDIA

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Abstract: In India, the Coastal Aquaculture Authority, established at the behest of the Supreme Court to protect the coastal environment from an unregulated shrimp industry, has evolved into a bureaucratic apparatus that promotes business interests. The recent reform of this agency underscores the conflicting dialogue between the Government and the judiciary on environmental issues, highlighting the complexities of a law-making process that prioritises economic growth over ecological concerns.

Keywords: Indian aquaculture regulation, public interest litigation, Coastal Aquaculture Authority, separation of powers

INTRODUCTION

Although India has enacted several sectoral statutes and established a comprehensive legal framework to protect the environment since the early 1970s, the development of Indian environmental law is often attributed to an activist judiciary drawing on constitutional resources.¹ Key concepts and principles of this branch of law have indeed been shaped through high-profile legal cases² in which the Supreme Court has wielded its remedial powers, often to compensate for weak executive structures and inadequate enforcement practices. This environmental jurisprudence, an illustration of the so-called 'judicialisation of politics,'³ is hailed by many as a necessity but it faces strong headwinds.⁴

The courts' environmental case law has sometimes been criticised for allegedly breaching the separation of powers by encroaching on the legislature's domain. While this criticism appears to beg the question—since it is well-established that dispute resolution inherently involves judges in rule-making across all jurisdictions—the courts' failure to enforce their broad directives is a more pressing issue. The implementation of judicial remedies in environmental law is rarely straightforward, particularly in India, where judges are sometimes considered to be ill-equipped to define, monitor and

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¹ Shyam Divan, 'The Environment, the Constitution, and the Legal Framework at the National Level' in Philippe Cullet, Lovleen Bhullar and Sujith Koonan (eds) *The Oxford Handbook of Environmental and Natural Resources Law in India* (OUP 2024) 85.

² Lovleen Bhullar, 'The Judiciary and the Right to Environment in India: Past, Present and Future' in Shibani Ghosh (ed.) *Indian Environmental Law: Key Concepts and Principles* (Orient Black Swan 2019) 21.

³ Ran Hirschl, 'The Judicialization of Politics' in Gregory A. Caldeira, R. Daniel Kelemen & Keith E. Whittington (eds), *The Oxford Handbook of Law and Politics* (OUP 2008) 119.

⁴ For an overview, see Geetanjoy Sahu, *Environmental Jurisprudence and the Supreme Court: Litigation, Interpretation, Implementation* (Orient BlackSwan 2014).

supervise complex environmental policies. Is this role better suited to the legislative and the executive branches of government? This question calls for an empirical, rather than doctrinal, answer, and only specific case studies can provide insight into this issue. In this respect, the recent reform of coastal aquaculture regulation provides an interesting example through which to evaluate the contribution of courts to key aspects of environmental governance.

On August 12, 2023, the President of India gave assent to the Coastal Aquaculture Authority (Amendment) Act. The stated purpose of this piece of legislation was to streamline the powers and the operational procedures of an agency established 18 years earlier⁵ by the legislature — at the Supreme Court's request — to protect Indian coastline from intensive aquaculture. Beyond the technical updates of the Coastal Aquaculture Authority, which reflect the ongoing consolidation of India's regulatory state, the reform instantiates the conflicting dialogue between the government and the judiciary on environmental issues. It also offers insight into a recurring law-making process which subordinates ecological concerns to economic growth.

To understand how an environmental policy designed by the judiciary was sidelined and upended 'for ease of doing business'⁶ by the legislator, it is necessary to consider the context of aquaculture in India.⁷ In the last four decades, the ancestral tradition of shrimp farming has evolved into a profitable business driven by the growing global demand of crustaceans. Since the 1970s, India has steadily positioned itself as one of the main exporters on this flourishing market, achieving record export figures in 2023.⁸ While the Union government created a conducive environment for this industry,⁹ it initially fell short of regulating it. Indeed, according to the Indian Constitution, the authority to legislate on fisheries (and by analogy on aquaculture) rests with the states, not the Union.¹⁰

In the absence of legal intervention, shrimp farming transformed into a highly intensive industry, causing significant damage to coastal ecosystems¹¹ and threatening the livelihood of some local communities.¹² It took a high-profile ruling from the Supreme Court in 1996 to trigger Union government action in the name of environmental protection—a subject-matter over which the Union and the states share concurrent powers. However, the Coastal Aquaculture Authority established by the legislator in the wake of the ruling to promote sustainable shrimp farming, failed to live up to the environmental standards envisaged by the Supreme Court. More recently, the Southern Bench of the National Green Tribunal reaffirmed the need for effective coastal protection. This act of judicial resistance eventually

⁵ The Gazette of India, Part II — Section 1, June 23, 2005.

⁶ Ministry of Fisheries, Animal Husbandry & Dairying, 'Coastal Aquaculture Authority (Amendment) Bill, 2023 clear by both Houses of Parliament of India', Press release 09/08/2023, available at: <<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1947213>> accessed 15 April 2024.

⁷ Mahesh Salunke et al., 'A Review on Shrimp Aquaculture in India: Historical Perspective, Constraints, Status and Future Implications for Impacts on Aquatic Ecosystem and Biodiversity' (2020) 28 *Reviews in Fisheries Science & Aquaculture* 283.

⁸ MPEDA, Annual Report 2022-2023 at 45, available at <https://mpeda.gov.in/?page_id=2365> accessed 19 April 2024.

⁹ Dolagobinda Pradhan & Mark Flaherty, 'National Initiatives, Local Effects: Trade Liberalization, Shrimp Aquaculture, and Coastal Communities in Orissa, India' (2007) 21 *Society & Natural Resources*, 63, 65-66.

¹⁰ Constitution of India, Art. 246 and Seventh schedule, List II: State List.

¹¹ See Mukul, 'Aquaculture Boom: Who Pays?' (1994) 29 *Economic & Political Weekly* 3075.

¹² Although aquaculture projects have sometimes benefited poor coastal communities, they have also often led to 'coastal grab' whereby short-term profit-driven operators took up large-scale aquaculture in customary fishing area. On this, see Maarten Bavinck et al., 'The impact of coastal grabbing on community conservation: a global reconnaissance' (2017) 16 *Maritime Studies*.

prompted a statutory backlash: the Coastal Aquaculture Authority (Amendment) Act cunningly undermined the judges' effort to keep in check the uncontrolled expansion of the shrimp industry, exposing the limits of judicial activism when confronted with legislative countermeasures.

This analysis traces the evolution of aquaculture regulation in India through pivotal legal and policy developments. Section 2 examines the origin and the significance of the 1997 Shrimp Culture case, which placed aquaculture firmly onto the environmental agenda and catalysed the enactment of the Coastal Aquaculture Authority Act, 2005. Section 3 explores the gap between this landmark ruling and its implementation, exposing the regulatory failure of the Coastal Aquaculture Authority. Section 4 analyses the renewed judicial efforts made in 2022 by the National Green Tribunal to reinforce coastal protections. Section 5 delves into the Coastal Aquaculture (Amendment) Act, 2023, which marks a significant shift towards reducing regulatory constraints to prioritise business interests. Finally, the conclusion raises critical questions about the respective roles of the judiciary, legislature, and executive in shaping and implementing Indian environmental policy

PUTTING AQUACULTURE ON THE ENVIRONMENTAL AGENDA: THE 1997 SHRIMP CULTURE CASE AND THE COASTAL AQUACULTURE AUTHORITY ACT 2005

The judicial response to the development of shrimp farming is a telling example of the central position that India's higher judiciary has come to play in shaping the country's environmental policy. Since the 1980s, procedural innovations aimed at facilitating access to the courts and integrating scientific expertise allowed the development of public interest litigation (PIL) in India.¹³ Also known as 'social action litigation', PIL is characterised by a relaxation on the rules on *locus standi*, case filing procedures, the adversarial process, and judicial remedies. It was initially established 'to secure observance of the constitutional or legal rights, benefits and privileges conferred upon the vulnerable sections of the community and to reach social justice to them'.¹⁴ From the 90s onwards, PIL was also used in the field of environmental law to breathe life into sterile statutes often ignored by an ineffectual bureaucracy, to lay down new principles and to create new institutions.¹⁵ *S Jagannath v Union of India*, familiarly known as the shrimp culture case,¹⁶ is a landmark example of this trend. In this case, the Supreme Court intervened decisively, pressuring the government to take action to protect the environment.

Jagannath, the 82-year-old Gandhian leader of Tamil Nadu Gram Swaraj Movement,¹⁷ filed a writ petition which alleged that unregulated shrimp farming was adversely affecting the environment and the well-being of coastal populations. According to the plaintiff, this activity violated the Coastal Regulation Zone (CRZ) Notification 1991, a directive which prohibits industrial activities within 500 meters from the high-tide line, but had remained unenforced until then. Relying on extensive scientific expertise, the Court acknowledged the socio-economic losses and ecological degradation caused

¹³ Shyam Divam, 'Public Interest Litigation' in Sujit Choudhry, Madhav Khosla & Pratap Bhanu Mehta (eds), *The Oxford Handbook of the Indian Constitution* (OUP 2016) 662.

¹⁴ *People's Union for Democratic Rights v Union of India* (1982) 3 SCC 235 [2].

¹⁵ Shyam Divan & Armin Rosencranz, *Environmental Law and Policy in India: Cases and Materials* (2nd ed., OUP 2022) 4. See also Lavanya Rajamani, 'Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability' (2007) 19 JEL 293–321.

¹⁶ *S. Jagannath v Union of India* [(1997) 2 SCC 87] (*Jagannath*)

¹⁷ Gram Swaraj, an expression coined by Mahatma Gandhi to describe village self-rule, emphasises the creation of autonomous self-sustainable communities.

by the shrimp industry. It rejected the ‘Dollar-based argument’ —the claim that aquaculture contributed significantly to India’s foreign exchange— by emphasising that the damage far outweighed the economic benefits. Eventually, the Supreme Court ruled that shrimp aquaculture was an industry subject to the prohibitions imposed by the CRZ Notification. It held that such activity could not be conducted within the coastal regulation zone as defined by the notification. All shrimp farms operating in CRZ were to be ‘demolished and removed’. Exemplary of the extensive nature of remedies available under the PIL jurisdiction, the Court, in its legislative avatar, further directed the government to establish an authority ‘to protect the ecologically fragile coastal areas’ and ‘to deal with the situation created by the shrimp culture industry’ in accordance with the precautionary principle and the polluter-pays principle.

Hailed by environmentalists as a victory, the ruling dangerously jeopardised the development of the shrimp industry. Under the threat of contempt proceedings, the Union Government had no choice but to constitute the Aquaculture Authority, which it did by way of notification.¹⁸ The new body established in 1997 was entrusted with the powers necessary to protect coastal areas from the shrimp industries but was placed under the Ministry of Agriculture rather than the Ministry of Environment. This was one sign among others that ecological concerns were to be sidelined in favor of economic priorities.¹⁹ To blunt further the Supreme Court’s decision, the Indian Parliament passed the Coastal Aquaculture Authority Act in 2005. This legislation provided the Aquaculture Authority with appropriate statutory backing and new regulatory powers to inspect, register and where required demolish aquaculture farms in the coastal areas. It stated that ‘no coastal aquaculture shall be carried on within two hundred meters from High Tide Lines’ and ‘in creeks, rivers and backwaters’.²⁰ However, the Act specified that shrimp farming was not prohibited under the Coastal Regulation Zone notification.²¹ In doing so the Parliament effectively shielded the shrimp industry from the judiciary’s stringent directives and enabled its continued development despite environmental concerns.

ENVIRONMENTAL ‘LAW IN BOOKS’ VS ENVIRONMENTAL ‘LAW IN ACTION: NON-ENFORCEMENT OF THE JAGANNATH CASE AND REGULATORY FAILURE OF THE COASTAL AQUACULTURE AUTHORITY

Shortly after the Supreme Court ordered the removal of aquaculture industries operating within the coastal regulation zone, review petitions were filed by farm owners and aquaculture associations, the Ministry of agriculture, affected State Governments and the Marine Products Export Development Authority. The matter was referred to a different bench of the Court which stayed the demolition orders, leaving the case unfinished for a decade. In 2007, the review petitions were finally disposed of and declared infructuous, once the Coastal Aquaculture Authority Act had formally allowed the shrimp industry to start again.²² The regulatory model set by the government in response to the Supreme Court’s order stealthily deviated from the terms of the judgement. Secondary legislation

¹⁸ Ministry of Environment & Forests, Aquaculture Authority Notification, 1997 SO88(E), The Gazette of India, PART II—Section 3—Sub-section (ii), February 6, 1997.

¹⁹ Tony George Puthucherril, ‘Sustainable aquaculture in India: looking back to think ahead’ in Nigel Bankes, Irene Dahl & David L. VanderZwaag (eds), *Aquaculture Law and Policy: Global, Regional and National Perspectives* (Edgar Elgar 2016) 298.

²⁰ Sec. 13 (8) b, Coastal Aquaculture Authority Act 2005.

²¹ Sec. 27, Coastal Aquaculture Authority Act, 2005.

²² Divan and Rosencranz (n 15) 788.

was passed²³ in the form of rules and guidelines ‘to ensure that coastal aquaculture does not cause any detriment to the coastal environment’.²⁴ However, the Coastal Aquaculture Authority ultimately functioned as little more than a licensing body for shrimp farms. Not only was the judicial vision diluted before reaching the statute books, but the law was poorly implemented and largely ineffective.

In 2020, the Comptroller and Auditor General of India²⁵ issued its Compliance Audit Observations on the Coastal Aquaculture Authority.²⁶ The scathing report leaves no doubt as to the extent of the failure of the agency established 14 years earlier. According to India’s supreme audit institution, the whole regulatory mechanism proved ‘deficient’.²⁷ The CAA failed to enact adequate regulations for the construction and operation of the coastal aquaculture industry.²⁸ It neither surveyed the coastal area nor advised the government to formulate strategies for achieving sustainable aquaculture development as required by law.²⁹ It did not specify any standard operating procedure for testing the waste water from shrimp farms discharged in the environment.³⁰ Although Environmental Impact Assessments are required from all aquaculture farms exceeding 40 hectares, the CAA neither prescribed the procedure nor identified the competent authority to make such an assessment.³¹ The audit report also rebuked the agency for not developing a proper plan for the inspection and monitoring of shrimp farms³² and not establishing a redressal mechanism to address complaints relating to environmental issues of coastal aquaculture farms.³³ Unable to fulfill most of its legal assignments, the Authority claimed in its defense that it lacked the manpower and the funds to fulfil its ‘herculean task’,³⁴ an excuse deemed hardly acceptable by the audit report which recommended the adoption of an action plan to improve the situation.³⁵

The process of registration and licensing of shrimp farms, arguably the most fundamental function of the CAA as it underpins the implementation of all other measures, was also considered highly defective by the Auditor General.³⁶ Unsurprisingly, farms have continued to operate on a large scale without license. A recent study based on remote sensing techniques, corroborated by ground truth verification, revealed a significant discrepancy between the area under shrimp culture and the extent of licensed farms, suggesting the widespread presence of unauthorised units.³⁷ Another 2020 report by the Coastal Resource Centre has documented the range of violations in industry siting by aquaculture

²³ The Gazette of India, Part II — Section 3, December 22, 2005.

²⁴ Sec. 3, Coastal Aquaculture Authority Act 2005.

²⁵ Mandated by the Constitution, the Comptroller and Auditor General is the supreme audit institution in India. It promotes accountability, transparency and good governance through auditing and accounting.

²⁶ Comptroller & Auditor General of India, *Report No. 6 of 2020 - Compliance Audit Observations Union Government (Civil)*, September 23, 2020, available at < <https://cag.gov.in/en/audit-report/details/112156> > accessed 15 March 2024.

²⁷ *ibid* [14]

²⁸ *ibid* [15]

²⁹ *ibid* [19]

³⁰ *ibid* [21]

³¹ *ibid* [17]

³² *ibid* [25]

³³ *ibid* [26]

³⁴ *ibid* [19]

³⁵ *ibid* [27]

³⁶ *ibid* [22]

³⁷ Marappan Jayanthi et al., ‘Impact of shrimp aquaculture development on important ecosystems in India’ (2018) 52 *Global Environmental Change* 10.

shrimp hatcheries in two districts on Tamil Nadu's coast:³⁸ of the 65 hatcheries located within the Coastal Regulation Zone, 62 were operating within 200 meters of the High Tide Line in violation of the provisions in the Coastal Aquaculture Authority Act of 2005. Additionally, none of them had been granted clearance under the CRZ Notification 2011. Confronted with these persistent regulatory lapses and the limits of its power to shape coastal aquaculture policy, the judiciary decided to intervene once more.

LAST-DITCH ATTEMPT TO JUDICIALISE AQUACULTURE REGULATION: THE 2022 NATIONAL GREEN TRIBUNAL DECISIONS

25 years after the Supreme Court issued mandatory injunctions to mitigate the damage caused by the shrimp industry, the National Green Tribunal (NGT) took another look on the matter. Established in 2010 to provide for 'the effective and expeditious disposal of cases relating to environmental protection',³⁹ this specialised tribunal has emerged as one of the most active green courts in the world. This is due to its unique composition—a mix of technical experts and lawyers—and its extensive jurisdiction, which includes the power to issue orders even in the absence of a petition filed by an aggrieved party.⁴⁰ Drawing on the jurisprudence of the Supreme Court, the tribunal has moved its focus beyond adjudicating individual disputes to proactively shaping environmental policy. Not only has the NGT addressed the ecological consequences of big infrastructure projects, but it has also striven for greater accountability of Indian regulatory authorities. This judicial activism met with resistance from the government in recent years⁴¹ but it did not deter the tribunal from taking a firm stance on shrimp farming in two cases issued in 2022.

In the first case,⁴² three applicants lodged a complaint against illegal prawn culture in coastal areas of Tamil Nadu. Initiated in 2016, the proceedings led to several interim directions intended to enforce environmental norms. However, reports from local authorities showed that illegal aquaculture farming activities were continuing. While the judges considered this to be a simple issue of law enforcement, the respondents claimed that it stemmed from conflicting norms and overlapping mandates of multiple authorities. Seeking to clarify the ambiguity, the NGT decided that shrimp farms registered under the CAA Act 2005 were not exempt from complying with other environmental norms. On the contrary, they were still governed by CRZ notifications, by the Water Act and by the Wildlife Act. Having observed that law enforcement on the subject was highly inadequate, the judges expressed the need for strict application of their statutory mandate by the concerned statutory authorities and stated, *obiter dicta*, that the CAA 'may remove and demolish all illegal coastal aquaculture activities in their jurisdiction'.

³⁸ Coastal Resource Centre, *Below the Radar: A Case Study of Coastal Aquaculture Hatcheries in Chengalpattu and Villupuram Districts*, Tamil Nadu, 2020, available at: <<https://coastalresourcecentre.wordpress.com/2020/12/19/report-coastal-aquaculture-hatcheries-escape-regulatory-eye-found-in-violation-of-key-norms/>> accessed 15 March 2024.

³⁹ Preamble, The National Green Tribunal Act 2010, The Gazette of India, Part II — Section 1, 2/06/2010.

⁴⁰ On the NGT, see Gitanjali Nain Gill, *Environmental Justice in India: The National Green Tribunal* (Routledge 2017).

⁴¹ Geetanjoy Sahu & Ritwick Dutta, 'The Green Tribunal in India After 10 Years: From Ascendancy to Crisis' (2021) 52 *Economic & Political Weekly* 60.

⁴² A. Paramasivan v. TNPCB, Chennai & Ors, Original Application n° 82/2016 & connected matters, 26/05/2022, available at: <<https://greentribunal.gov.in/caseDetails/CHENNAI/3305118005522016?page=order>> accessed 19 March 2024.

In the second case,⁴³ the NGT initiated suo motu proceedings based on a series of newspaper articles calling attention to the impact of illegal shrimp hatcheries on soil and groundwater. Several public stakeholders, representatives of various departments of the state government, environmental regulators and local officials, were summoned before the judges. The tribunal also appointed a joint committee to look into the allegations and submit factual reports. The Coastal Aquaculture Authority, once again in the line of fire, filed its own independent account on the case. In a self-justificatory statement supporting its administrative passiveness, the Authority asserted that ‘the hatchery activity (had) been excluded from the purview of the Coastal Aquaculture Authority Act 2005’.⁴⁴ This argument did not convince the NGT which deemed this contention unsustainable and contrary to law. Recalling the judgement of the Supreme Court in *S. Jagannath*, the Green Tribunal asserted the need for ‘a proper regulatory check over [...] hatcheries units’ and insisted that ‘only those which are legally permissible with valid permission should be allowed to set up and operate’. Accordingly, all aquaculture operators were to obtain clearance from environment regulators, including the Coastal Zone Management Authority. Eventually, the judges issued a series of directions to the Coastal Aquaculture Authority and the Tamil Nadu Pollution Control Board, seeking to ensure compliance with environmental law, including by requiring the removal of hatcheries working within the prohibited zone.

REDUCING THE REGULATORY BURDEN FOR THE SAKE OF BUSINESS: THE COASTAL AQUACULTURE (AMENDMENT) ACT 2023

While NGT decisions sought to subject aquaculture activities to stricter administrative scrutiny, the Ministry of Fisheries and Animal Husbandry and Dairying was simultaneously considering amending the CAA Act 2005 in order to cater to the economic needs of this flourishing industry. In a context where evolving technology of production served as an argument to relax the regulatory framework, the NGT decisions acted as a trigger for reform. Under pressure from the judiciary, which created ‘considerable uncertainty’⁴⁵ by declining to exempt coastal aquaculture from the CRZ Notification, and with the intent to ‘remove the prevailing ambiguities and [...] put to rest any misinterpretations of courts’,⁴⁶ the Ministry drew up the Coastal Aquaculture Authority (Amendment) Bill. The proposal was scrutinised and endorsed by a parliamentary standing committee, and with minimal debate, both chambers eventually passed the law with only marginal amendments, illustrating the executive dominance over parliamentary work in India.⁴⁷

The CAA (Amendment) Act 2023 weakens the NGT environment-friendly directions with the objective of ‘reduc[ing] the regulatory compliance burden’.⁴⁸ In addition to minor amendments designed

⁴³ National Green Tribunal Southern Zone v. The Chief Secretary to Govt. of Tamil Nadu Original Application No. 5/2021, 29/09/2022, available at: <<https://greentribunal.gov.in/caseDetails/CHENNAI/3305118007972021?page=order>> accessed 19 February 2024.

⁴⁴ Report by Coastal Aquaculture Authority in O.A.No. 05 & 09 of 2021 (Based on the Order Passed by the Hon'ble National Green Tribunal, Southern Zone, Chennai Bench on 16-07-2021) at 3, available at: <https://greentribunal.gov.in/sites/default/files/news_updates/921_0.pdf> accessed 19 March 2024.

⁴⁵ Standing Committee on Agriculture, Animal Husbandry and Food Processing (2022-2023), *Fifty-Seventh Report on 'The Coastal Aquaculture Authority (Amendment) Bill, 2023' pertaining to the Ministry of Fisheries Animal Husbandry and Dairying (Department of Fisheries)*, Lok Sabha Secretariat, July 2023 at 2, available at: <https://eparlib.nic.in/handle/123456789/2496240?view_type=search> accessed 17 March 2024.

⁴⁶ *ibid* [17]

⁴⁷ On this aspect, see Ashutosh Kumar, ‘Why is the Indian Parliament in a state of decline?’ in Ajay K. Mehra (ed.), *The Indian Parliament and Democratic Transformation* (Routledge 2017) 66s.

⁴⁸ Ministry of Fisheries (n 6)

to modify the composition and streamline the functioning of the CAA, the new law authorizes specific aquaculture activities in coastal areas which were previously off-limits and exempts them from the prohibitions of CRZ notifications. The Act also reduces multiagency oversight of the industry: the CAA is given full authority over aquaculture facilities to the exclusion of Pollution Control Boards and Coastal Zone Management Authorities. Another indicator of the pro-business inspiration of the reform is the decriminalisation of all violations under the principal Act. Whereas non-registration of aquaculture was previously an offence punishable with three-year imprisonment, the 2023 Act replace criminal sanctions with civil fines imposed by an adjudicating officer appointed by the Union Government. Last but not least, the new law includes retroactive provisions to safeguard the interest of aquaculture operators. It validates past action of registered coastal activities, shielding them from legal proceeding for ‘any action or anything done or omitted to be done in accordance with the said provisions’.⁴⁹

While the tone of the 2023 Act is undoubtedly business friendly, the text pays lip service to environmental protection by expanding the Authority’s mandate to promote ‘sustainable coastal aquaculture’.⁵⁰ However, even when pursuing environmental goals, the law’s underlying purpose remains economic. Thus, the CAA is now assigned with the duty to ‘certify, monitor, regulate or prohibit coastal aquaculture inputs, including probiotics, therapeutants [...] as may be prescribed, for the prevention, control and abatement of detriment to the coastal aquaculture or coastal environment’.⁵¹ Yet, parliamentary debates clearly show that the focus on biosecurity and antibiotic governance was, in this case, driven primarily by market considerations, as a way to avoid that export shipments are rejected due to the presence of banned drugs residues.⁵² Thus, despite its surface-level commitment to sustainability, the 2023 Amendment Act is ultimately designed to foster the growth of coastal aquaculture, with environmental concerns secondary to economic priorities.

CONCLUSION

Changes in aquaculture regulation provide a remarkable illustration of the evolution of Indian environmental policy. Since the start of ‘ecological modernisation’, an institutional legacy of Indira Gandhi in the 1970s, the judiciary has taken on a policy-making role.⁵³ The *Jagannath* case epitomises this ‘Public Interest Litigation era’, during which the courts expanded their environmental jurisdiction, became a forum to voice the grievances of the community, and issued quasi-legislative remedies. Yet, in *Jagannath*, the Court’s far-reaching orders and innovative jurisprudence were not enough to curb the unbridled development of intensive shrimp farming. The recent NGT decisions show that ecological activism remains inspirational for the judiciary, but the story hereby told demonstrates that it can be easily circumvented by the Government to protect industrial interests.

⁴⁹ Sec. 17, CAA (Amendment) Act, 2023.

⁵⁰ Sec. 7 *ibid.*

⁵¹ *ibid.*

⁵² See the debate on the Coastal Aquaculture Authority (Amendment) Bill at the Lok Sabha, on August 7th 2023, *Lok Sabha Debates (Original Version)*, 17th Series, Vol. XXVI n°13 at 902-903, available at: <https://eparlib.nic.in/handle/123456789/2505518?view_type=search> accessed 17 March 2024.

⁵³ Kanchi Kohli & Manju Menon, *Development of Environmental Laws in India* (CUP 2021) 3.

It might be tempting to conclude from the failure of this judicially-driven attempt to protect Indian coastline that courts lack the capacity and the authority to design and implement a fine-grained environmental policy. However, such a conclusion would be premature. The best mode of environmental governance cannot be determined simply by comparing actual judicial intervention, however inefficient, with hypothetical intervention by other branches of the Government, especially when it is the real-world failure of the Government that prompted the litigation. A rigorous evaluation of the courts' contribution to environmental governance requires attention to the broader constitutional context rather than reliance on preconceived models. In this regard, future assessment should focus on the overall impact of judicial activism on public welfare, using 'normative benchmarks' such as information availability, regulatory reform, and institutional accountability before and after courts' rulings.

The story of shrimp farming regulation underscores that environmental law is not the fruit of a rational legislator but a battleground where competing values are negotiated among conflicting constitutional actors. The Coastal Aquaculture Authority Act of 2005, along with the incremental changes introduced by its 2023 amendment, can be interpreted as an attempt by an elected Parliament to strike the right balance between environmental protection and economic development, rather than leaving the matter to appointed judges. However, shielding the shrimp industry from judicial intrusion does not guarantee its sustainable development in the absence of a functional Aquaculture Authority. Ultimately, as is often the case with Indian environmental law, the crux of the issue lies in the gap between the 'law in books' and the 'law in action', an abyss that legal scriveners must explore, even if they would prefer not to.