
JUDICIAL INTERPRETATION OF COASTAL AQUACULTURE: ANALYSING THE CASE OF S. JAGANNATH V. UNION OF INDIA (1997)

Sanskriti Yadav, National Law School of India University, Bangalore

ABSTRACT

India's expansion of coastal shrimp farming since the 1990s brought big economic wins, but also real ecological and social costs, like mangrove loss, soil salinisation and the pushing out of long-standing fishing communities. Since the regulatory enforcement was weak in practice, the Supreme Court in *S. Jagannath v. Union of India* (1997) stepped in and held that environmental harm counts as a violation of the constitutional right to life under Article 21, and highlighted both the Precautionary and Polluter Pays Principles to stop intensive shrimp farming in ecologically sensitive coastal zones. This paper analyses whether the prevention focused rights-based setup that was ruled by the Supreme Court has lasted the later legal changes. The paper argues that the Coastal Aquaculture Authority Act, 2005, and then the 2023 Amendment have slowly watered down the Court's original idea, turning a ban into a licensing arrangement, and shifting from criminal liability to civil penalties that are more negotiable, thereby giving retrospective backing to earlier violations. Although the Precautionary and Polluter Pays Principles are still recognised by law but their underlying logic has been reversed and environmental harm is now treated as a manageable cost rather than a constitutional wrong that must be stopped. The paper draws the conclusion that this change isn't exactly a direct doctrinal rejection of those principles, but more like a structural change that has hollowed out their preventive and deterrent power, and as a result coastal communities end up carrying most of the ecological and social costs.

INTRODUCTION

India's 'Blue Revolution' has made coastal aquaculture, especially shrimp farming, the main export-oriented growth driver, and the 1990s witnessed a rapid transition from traditional, less damaging shrimp farming methods to intensive commercial practices, which brought in foreign exchange and created jobs in rural areas.¹ Yet, the destructive growth was accompanied by high ecological and social costs, as one of the major ecological impacts was not only the destruction of mangroves, and the consequent increase of salinity in the soil and the underground water, but also the exclusive use of coastal lands for non-fishing purposes caused the traditional fishing communities to suffer most.² These situations led to the establishment of contradictions between the economic and the environmental agendas.

In the absence of effective executive enforcement of environmental laws such as the Environment (Protection) Act, 1986, and the Coastal Regulation Zone (CRZ) Notification, the Supreme Court stepped in through the *S. Jagannath v. Union of India* (1997) case.³ The Court recognised environmental degradation as a constitutional injury under Article 21, and through the application of the Precautionary Principle and the Polluter Pays Principle, the Court ordered the ban of intensive shrimp farming in ecologically sensitive coastal regions.

This paper analyses whether the strong preventive environmental framework conceptualised in *S. Jagannath* has been sustained in the later legal developments, as it argues that the subsequent legislative measures, mainly the Coastal Aquaculture Authority Act, 2005, and its 2023 Amendment, have brought about the changes in legal conditions that have made the application of the environmental principles less effective. Although these principles are still officially acknowledged in the law, their power to deter and prevent has been weakened, thereby causing a drift away from the judicial vision of environmental protection.

S. JAGANNATH AND THE JUDICIAL PARADIGM SHIFT

This landmark judgment of *S. Jagannath v. Union of India* marked a significant shift in India's environmental regulatory framework, signalling a move away from a reactive, statute-driven model towards a proactive, rights-based constitutional approach. Shrimp farming was not

¹ *S. Jagannath v. Union of India*, (1997) 2 S.C.C. 87, ¶ 1 (India).

² *Id.* ¶ 11.

³ *Id.* ¶ 41.

merely a routine administrative issue in the eyes of the Court, but rather it was considered a comprehensive environmental governance concept grounded in fundamental rights and international environmental principles.

The court expanded on Article 21 of the Constitution and reaffirmed its previous stance on environmental jurisprudence that the right to life is not just limited to the basic existence of animals but rather includes the right to live in a clean and healthy environment with dignity.⁴ To this meaning, the Court read Article 21 with the Directive Principles of State Policy and Fundamental Duties, specifically Articles 47, 48A, and 51A(g), thus incorporating environmental protection into the constitutional framework.⁵ The environmental degradation, therefore, was no longer viewed as a statutory violation but rather as a constitutional wrong. By bringing environmental damage up to this level, the Court turned down the industry's 'dollar-based argument' that the incoming foreign exchange could balance out the negative impacts on the environment, and stated that the essential right to a livable environment cannot be trumped by economic utility.⁶

The use of the Precautionary Principle by the Court changed the entire perspective of environmental risk assessments. The Court, following its previous ruling in the *Vellore Citizens' Welfare Forum* case, stated that in situations where there is a possibility of serious or irreversible environmental damage, the lack of scientific evidence cannot be a reason for delaying the implementation of preventive measures.⁷ This principle places the burden of proof on the proponent of the potentially harmful activity.⁸

In the case of coastal aquaculture, the Court considered both intensive and semi-intensive shrimp farming as activities that would produce negative effects by nature. The Court, relying on expert reports like the National Environmental Engineering Research Institute (NEERI), came to the conclusion that these practices were in fact a serious danger to the coastal ecosystems.⁹ The Court took an *ex ante* approach in its ruling, and instead of letting the environment be harmed first and then stepping in with a case-by-case conclusive proof of harm

⁴ *Id.* ¶ 43.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ Aruna B. Venkat, Precautionary Principle as an Effective Judicial Tool in the Prevention and Control of Water Pollution in India, 2 NLR 161, 168 (2004–05).

⁹ S. Jagannath, 2 S.C.C. at ¶ 36.

as a regulatory step, the Court said that every shrimp farm in the coastal areas will have to go through a 'strict environmental test' before being permitted.¹⁰ That meant in the absence of proof of environmental safety, the prohibition was justified. This use of the precautionary measure by the court was not merely advisory, as it also prohibited non-traditional aquaculture within the CRZ, effectively prioritising prevention over post-hoc regulation.¹¹ By this, the Court embedded precaution in the law as a decisive governing standard rather than a flexible policy guideline.

Alongside precaution, the Court interpreted the Polluter Pays Principle in the broader sense of environmental liability and not merely as a cost-recovery tool. Under this framework, polluters were held responsible for two separate categories of harm: the first was compensation to affected individuals for loss of livelihood and health, and the second was the cost of restoring the ecosystems that were damaged.¹² The insistence of the Court on ecological restoration was a big jump from the traditional compensation models, as environmental damage was not just to be monetised and forgotten, but rather it had to be actively cured. By directing the creation of an 'Environment Protection Fund,'¹³ which would be financed by the polluters, the Court wanted to pressure shrimp farming to bear its externalised costs. From an economic viewpoint, this method made pollution very costly, thus indirectly fostering the practice of environmentally friendly behaviour as a byproduct of rational economic conduct.¹⁴

The Court also acknowledged the institutional failure and observed that the existing authorities had been 'utterly negligent' in implementing the environmental laws, and thus ordered the establishment of a high-powered authority under Section 3(3) of the Environment (Protection) Act, 1986.¹⁵ This authority was to be led by a retired High Court judge and would have a team of experts in aquaculture and pollution control, thus guaranteeing both independence and technical Proficiency.¹⁶ The Court's vision was quite clear as the main responsibility of the authority was to protect the environment, not to promote the industry, and it was empowered to issue binding orders under the EPA and was explicitly tasked with implementing the

¹⁰ *Id.* ¶ 44.

¹¹ *Id.* ¶ 46.

¹² Venkat, *supra* note 8, at 169.

¹³ S. Jagannath, 2 S.C.C. at ¶ 46.

¹⁴ Barbara Luppi, Francesco Parisi & Shruti Rajagopalan, The Rise and Fall of the Polluter-Pays Principle in Developing Countries, 32 Int'l Rev. L. & Econ. 135 (2012).

¹⁵ S. Jagannath, 2 S.C.C. at ¶ 46.

¹⁶ *Id.*

Precautionary and Polluter Pays Principles.

Such an institutional arrangement shows that *S. Jagannath* was not just about prohibiting shrimp farming but also integrating the concept of environmental priority into the very governance structure.

LEGAL DEVELOPMENTS POST-JAGANNATH

Even though the Supreme Court was quite clear in its mandate, the post-*Jagannath* legislative development shows a gradual retreat from prohibition to a more regulatory accommodation. The enactment of the Coastal Aquaculture Authority Act, 2005, and its amendment in 2023 have practically legitimised shrimp farming as a routine economic activity by the state.

The Coastal Aquaculture Authority Act, 2005, introduced a fundamental shift in the regulatory approach because, instead of tightening the enforcement of the Supreme Court's ban, Parliament set up a system that allowed coastal aquaculture in a legal way through licensing.¹⁷ So the Act exempted aquaculture from the CRZ restrictions and replaced the court-imposed closure with administrative registration and monitoring. The move reversed the Court's de facto position because under *S. Jagannath*, the intensive shrimp farming was considered to be a harmful and, therefore, banned activity unless its safety was proved, but the 2005 Act regarded aquaculture as presumptively permissible, provided that the licensing conditions were adhered to. The changeover of shrimp farming from a constitutionally questionable activity to a regulated entitlement was the means by which the industry was effectively insulated from the Court's rigorous environmental scrutiny.

The institutional shift further weakened the environmental priorities because while the Court had envisaged an authority functioning within the environmental protection framework, the Coastal Aquaculture Authority was put under the administrative control of the fisheries departments.¹⁸ This placement was not just bureaucratic, but it rather signified a larger change in the regulatory mindset. This is because a regulator that is in sync with the fisheries management and governance would naturally give priority to the sectors of production, exports, and the whole fisheries industry development, and the protection of the environment becomes

¹⁷ Renaud Colson, Arunkumar A.S., Marine Al Dahdah & Prabhakar Jayaprakash, *The Shrimp, the Judge and the Amendment: Courts' Contribution to Aquaculture Regulation in India*, 37 J. Env'tl. L. 151 (2025), <https://doi.org/10.1093/jel/eqaf001>.

¹⁸ *Id.* at 154.

just one of the many factors to be considered, instead of being the guiding principle.¹⁹ This change was also reflected in practice as the audit reports later disclosed that the Authority failed to conduct thorough coastal surveys, lacked effective pollution testing mechanisms, and did not establish accessible grievance redressal systems.²⁰ Thus, regulation became procedural rather than protective.

The dilution of environmental accountability reached its peak with the enactment of the Coastal Aquaculture Authority (Amendment) Act, 2023. The amendment, which was justified under the 'ease of doing businesses and regulatory efficiency, removed imprisonment violations and replaced the criminal sanctions with civil penalties.²¹ Therefore, now evading the law on the environment was reclassified as a civil transgression and no longer a criminal act.

The amendment also explicitly granted aquaculture-related activities within the CRZ, including certain operations in No Development Zones, and retrospectively validated past actions.²² This retroactive regularisation undermined recent efforts by environmental tribunals to enforce *S. Jagannath*, signalling that violations would ultimately be accommodated rather than penalised. Environmental harm was no longer treated as a constitutional wrong, but rather as a compliance issue to be managed through fines.

EFFECT OF LEGISLATIVE CHANGES ON ENVIRONMENTAL PRINCIPLES

The shift from *S. Jagannath* to the legislative framework of 2023 is not just an administrative reform, but it is a conceptual regression as well. While the Precautionary and Polluter Pays Principles remain formally recognised, the regulatory structure surrounding them now defeats their core logic.

The Polluter Pays Principal rests on the idea that pollution should never be cheaper than prevention.²³ The purpose is not only to compensate the victims but also to change the attitude by making the destruction of nature economically unviable.²⁴ This requires liability that is unpredictable, severe, and reflective of the true ecological and social cost of pollution. In *S.*

¹⁹ *Id.*

²⁰ *Id.* at 155.

²¹ *Id.* at 152.

²² Coastal Aquaculture Authority (Amendment) Act, 2023, § 10 (India).

²³ Environmental Law Institute, *Environmental Law Principles in India*, 3(3) ELR India Update (2012).

²⁴ Aditya M. Saran, *An Analysis of the Polluter Pays Principle in the Indian Framework*, 2 Legal Lock J. 81 (2023).

Jagannath, the Polluter Pays principle was a deterrent because the enterprise's very existence was under threat. The probability of 'closure, demolition, and restoration' processes ensured that the pollution had an existential impact. However, the post-2023 framework turns liability into standard civil penalties. So once the pollutant is subjected to capped and negotiable fines, it becomes a matter of costing, budgeting, and passing on as a production cost.

This development changes the ethical and economic reasoning of the Polluter Pays Principle as environmental harm is no longer treated as a wrongful act demanding prevention, but as a priced externality that can be absorbed. The principle moves from deterrence to commodification, allowing the polluters to buy the right to destroy the environment, and thus it limits the justification that the Polluter Pays Principle is a fundamental environmental principle recognized by law.

Similarly, the Precautionary Principle is nothing but a principle of risk distribution as it makes the risk-provoker carry the burden of doubt instead of the public or the environment.²⁵ In *S. Jagannath*, the court applied this principle through prohibition and strict environmental scrutiny, which ensured that the activities that might cause harm were curbed until they were cleared as safe. The present regulatory framework reverses this reasoning because the law takes for granted the existing state of affairs and relies on licensing and post-hoc penalties, and allows for environmental risk rather than preventing it. The retrospective approval of past violations under the 2023 Amendment further solidifies the 'pollute first, license later' practice.²⁶ Thus, when investments are made and operations are running, the regulators will have to face the pressure to support instead of shutting down harmful activities.

This changes the whole concept of precaution from a preventive rule to a managerial one, as risk is no longer on the polluter, it is redistributed to ecosystems and vulnerable communities. In this aspect, the law not only lessens the impact of precaution but it even makes the whole thing incomprehensible from a theoretical point of view.

Furthermore, the dilution of precaution and polluter pays also has implications for generations to come, as coastal ecosystems cannot be easily restored after they are damaged.²⁷ The present communities and future generations alike will have to bear the costs of salinised groundwater,

²⁵ Env'tl. L. Inst., *supra* note 23, at 1.

²⁶ Coastal Aquaculture Authority (Amendment) Act, 2023, § 17 (India).

²⁷ Venkat, *supra* note 8, at 173.

lost mangroves, and declining fish stocks, and the first people to be affected by these issues are traditional fishing communities, women, and small farmers, while the export-oriented aquaculture businesses will reap the benefits.²⁸ The new post-*Jagannath* regulatory framework enables this systematic externalisation of ecological and social costs, which is in direct contradiction to the distributive justice concerns that prompted the Court's intervention.

CONCLUSION

The case of *S. Jagannath v. Union of India* provided one of the most important environmental frameworks in Indian law, which was grounded in constitutional rights, precaution, and deterrent liability. However, the new legislation that followed has not formally rejected these principles but rather changed the regulatory connotation in such a way that they are rendered ineffective. The regression is not due to the doctrinal abandonment, but because of the structural transformation, because even though the environmental principles are still there in the legal language, they are not in practice, and restoring their meaning requires putting prevention, deterrence, and environmental primacy back to the forefront of coastal governance.

²⁸ Neena Elizabeth Koshy, A Case for a Human Rights-Based Approach to Indian Aquaculture Systems: A Literature Review (Int'l Collective in Support of Fishworkers 2021).