International Journal of Law and Public Policy
Vol. 2, Issue. 3, Sep 2026, pp. 1~13
ISSN: 3107-6017, DOI: 10.32595/ijlpp/v2i3.2026.37

Rural Industrialisation and Environmental Sustainability in Puducherry

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Article Info

Article History:

Received Jun 23, 2026
Revised Jul 27, 2026
Accepted Aug 22, 2026

Keywords:

Green industrialisation,
Rural India,
Environmental governance,
Enforcement deficit,
Environmental justice,
Puducherry

ABSTRACT

India's villages are no longer only agrarian spaces. Small and medium industrial units, many of them chemical, food-processing and engineering enterprises, increasingly settle in rural clusters where land is cheaper, labour is available and regulatory attention is thin. This article asks why, in a country with one of the most elaborate environmental legal frameworks in the developing world, rural industrialisation still leaves contaminated water, ill-health and a sense of abandonment among the communities that host it. It argues that the difficulty lies less in an absence of law than in the failure of law to reach the village, and identifies three interlocking deficits: of regulatory presence, of participation and of remedy. The article maps the constitutional, statutory and judicial architecture of environmental governance and then examines the regulatory turn of 2023 to 2026, namely decriminalisation under the Jan Vishwas Act, 2023, the Water Amendment Act, 2024, the penalty rules of 2024, the 2025 re-categorisation of industries, the Environment Audit Rules, 2025 and the shifting judicial position on ex post facto environmental clearance. It suggests that these reforms are calibrated for large, visible, documented units and may not reach dispersed rural ones. A qualitative pilot study in Sedarapet, Manapet and Thirubhuvanai in Puducherry, based on interviews and direct observation, tests the framework against lived experience: residents' accounts of contaminated drinking water, respiratory and skin ailments, exclusion from employment and unanswered complaints are read against specific statutory duties. The article concludes by proposing a community-anchored model of green rural industrialisation that combines Panchayat-linked consent, cluster-level infrastructure, open pollution data, health surveillance, ring-fenced use of penalties and accessible forums for redress.

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1. INTRODUCTION

India's ambition to become a developed economy will not be decided in its metropolitan centres alone. It will be decided, to a large extent, in the villages, where more than half of the country's unincorporated non-agricultural enterprises operate and where the rural labour force is growing faster than agriculture can absorb it. Rural industrialisation is therefore an economic necessity. A unit that gives a landless household a wage and adds value to local produce is a public good. Yet the same unit, if it discharges untreated effluent into a village tank or burns waste in the

open, destroys what rural life rests upon: clean water, healthy livestock, productive soil and breathable air. The popular picture of growth and the environment as "two sides of a coin" hides this point. In a village, the environment is not a luxury that growth may buy later; it is the productive base of the local economy, and an industrial model that degrades it is self-defeating even in narrow economic terms.

On paper, India is well equipped to meet the challenge. The Constitution places a duty on the State and on every citizen to protect the environment, the Supreme Court has read a right to a healthy environment into the right to life, pollution-control statutes have been in force for decades, and a specialised National Green Tribunal has existed since 2010. Environmental governance, in the sense of the laws, institutions and decision-making processes through which a society manages its relationship with nature, is formally dense [1]. Yet the experience of communities living beside rural factories suggests that degradation continues largely unchecked. This article asks why. Its central argument is that the difficulty lies less in an absence of law than in the failure of law to arrive in the village, and that this failure takes three forms: a deficit of regulatory presence, because regulators and monitoring systems are designed around large and urban units; a deficit of participation, because those most exposed to pollution have almost no formal role in the decisions that create it; and a deficit of remedy, because the forums and funds that exist are distant, slow and costly for a rural complainant.

A second argument concerns direction. Between 2023 and 2026 Indian environmental law has moved towards administrative penalties instead of prosecution, third-party audits, re-categorisation of industry and a shifting judicial stance on clearance after the fact. These changes are defended as modernisation, and this article does not reject that view. It suggests, however, that the reforms assume a regulated entity that is visible, documented and close to the regulator, which the rural unit often is not.

The study combines doctrinal and empirical methods. The doctrinal part analyses the constitutional provisions, statutes, rules and decisions governing industrial pollution, with particular attention to developments after 2023. The empirical part draws on a qualitative pilot study conducted by the author in three villages of the Union Territory of Puducherry, namely Sedarapet, Manapet and Thirubhuvanai, through interviews with residents and direct observation of nearby industrial premises. The pilot study is exploratory; its findings are residents' accounts and the researcher's observations, not the outcome of laboratory testing. Part II explains what rural industrialisation is and why it poses a distinct regulatory problem. Part III maps the legal architecture and Part IV examines the regulatory turn. Part V develops the three-deficit framework, Part VI reports the field study, Part VII proposes a community-anchored model of reform and Part VIII concludes.

2. RURAL INDUSTRIALISATION: MEANING, SCALE AND ENVIRONMENTAL STAKES

Rural industries are enterprises that use local resources, traditional skills and indigenous technology to create work close to where people live. Their guiding idea has always been production by the masses, in contrast to the mass production of large factories. The Planning Commission adopted the term "rural industries" in 1962 when it recommended a Rural Industries Projects Programme, and in 1988 defined the category to include khadi, handlooms, handicrafts, sericulture, coir and small service industries located in villages [2]. Official thinking has since

widened it to take in small factories, agro-processing units and ancillary engineering works that are not artisanal in any traditional sense.

The standard study material groups rural industry into four classes: traditional village industries such as khadi, leather, handloom and coir; a heavier class including biomass-based fertiliser, biological pesticide and mini-steel units; a medium group of mini-cement and small paper mills; and a light group covering animal feed, building materials and farm implements [3]. The classification is useful because it shows how wide the range of environmental risk is. A handloom cluster and a mini-steel plant do not pollute alike, and a regime that treats them alike will be too heavy for the first and too light for the second. The Constitution adds a further layer. Following the Seventy-third Amendment, the Eleventh Schedule lists small-scale industries, khadi, village and cottage industries, drinking water, health and sanitation and the maintenance of community assets among the subjects that may be devolved on Panchayats [4]. The village is thus constitutionally imagined as an economic and ecological unit that governs itself, yet, as Part V shows, the pollution-control statutes give it no corresponding role.

3. LEGISLATIVE APPROACH ON ENVIRONMENTAL LAW

Before 1972 India had no comprehensive environmental legislation, though it had fragments. The Wild Birds and Animals Protection Act of 1912 was an early conservation measure [5], but the main legal tools against pollution came from the law of nuisance, in particular the Penal Code's provisions on public nuisance and a magistrate's power to order removal of a nuisance under the Code of Criminal Procedure. The latter was given a social-justice reading in *Municipal Council, Ratlam v. Vardhichand*, where the Supreme Court held that a local authority could not plead lack of funds to excuse its failure to provide drains [6].

The turning point was the United Nations Conference on the Human Environment at Stockholm in 1972, whose Declaration treated environmental protection as a matter of international concern [7]. India's response was institutional and constitutional. A National Committee for Environmental Planning and Coordination was constituted in 1972, and the Forty-second Amendment of 1976 inserted Article 48A, directing the State to protect and improve the environment and safeguard forests and wildlife, and Article 51A(g), making it a fundamental duty of every citizen to protect the natural environment [8]. These provisions are not directly enforceable, but the courts have used them to interpret other rights, above all Article 21. In *Subhash Kumar v. State of Bihar* the Supreme Court recognised that the right to life includes the right to pollution-free water and air [9], in *Consumer Education and Research Centre v. Union of India* it linked the right to health with human dignity [10], and in *M.K. Ranjitsinh v. Union of India* it recognised a right to be free from the adverse effects of climate change under Articles 14 and 21 [11].

The Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 establish a system of consent: no industry may set up or operate a polluting outlet or plant without the prior consent of the State Pollution Control Board, which may attach conditions [12]. The Environment (Protection) Act, 1986 is an umbrella law giving the Central Government wide powers to protect the environment, including the power to restrict industries in particular areas and to issue binding directions [13]. The Forest (Conservation) Act, 1980, the Wild Life (Protection) Act, 1972 and the Biological Diversity Act, 2002 protect forests, fauna and biological resources, and the Public Liability Insurance Act, 1991 provides no-fault relief to victims of accidents involving hazardous substances [14].

Institutionally, the Ministry of Environment, Forest and Climate Change makes policy and rules; the Central Pollution Control Board sets standards and coordinates; and State Boards grant consents, inspect and enforce. In Puducherry these functions under the Water and Air Acts are discharged by the Puducherry Pollution Control Committee [15]. Disputes go to the National Green Tribunal, created by the National Green Tribunal Act, 2010, which may award compensation and restitution, must apply the principles of sustainable development, precaution and polluter pays, and is not bound by the Code of Civil Procedure [16]. Its regional benches, including the Southern Zone Bench at Chennai, are meant to bring justice closer to litigants.

The judiciary has been the most inventive actor in Indian environmental law. In *M.C. Mehta v. Union of India*, arising from an oleum gas leak in Delhi, the Supreme Court departed from the English rule in *Rylands v. Fletcher* and held that an enterprise engaged in a hazardous activity owes an absolute and non-delegable duty to the community [17]. In *Indian Council for Enviro-Legal Action v. Union of India*, concerning toxic sludge left by chemical units in a Rajasthan village, the Court held that the burden of proving harmlessness lies on the person who engages in the activity and that the polluter must bear the cost of restoration [18]. *Vellore Citizens' Welfare Forum v. Union of India*, concerning tanneries in Tamil Nadu, made the precautionary and polluter-pays principles part of Indian law [19]. The public trust doctrine, adopted in *M.C. Mehta v. Kamal Nath*, treats the State as trustee of natural resources for the public [20], *Sterlite Industries (India) Ltd. v. Union of India* showed that heavy compensation could be imposed on a major polluter even without closure [21], and *Mantri Techzone Pvt. Ltd. v. Forward Foundation* confirmed that the Tribunal may assess environmental compensation on a proportionate basis [22].

This jurisprudence is rich in principle, but its benefits have reached rural communities unevenly. Several leading cases were brought by civic organisations and not by the affected residents; *Bichhri*, for instance, was initiated by an environmental action group on behalf of a village. Scholars have noted that public interest litigation works best when a committed organisation with legal resources takes up the cause, and much less well when access depends on the affected persons themselves [23]. The doctrines have been developed at the apex of the system, while the bottom, where rural complaints are first made, remains under-resourced. The next Part shows that recent legislative change has not corrected this imbalance.

4. THE REGULATORY TURN OF 2023 TO 2026: FACILITATION OR DILUTION?

The most significant recent legislative change is the replacement of criminal sanctions by monetary penalties. The Jan Vishwas (Amendment of Provisions) Act, 2023 amended, among other laws, the Environment (Protection) Act, 1986, the Air Act, 1981 and the Public Liability Insurance Act, 1991, sharply reducing monetary punishment and introducing adjudication by officers in place of prosecution in court [24]. The Water (Prevention and Control of Pollution) Amendment Act, 2024 extended the approach to the Water Act. Imprisonment is removed for discharging polluting matter and for tampering with monitoring devices; penalties of ten thousand to fifteen lakh rupees are imposed by adjudicating officers, whose orders are appealable to the National Green Tribunal on deposit of ten per cent of the penalty; imprisonment is retained for operating without consent. The Act also lets the Central Government exempt categories of industrial plants from the consent requirement. It applies in the first instance to Himachal Pradesh, Rajasthan and the Union Territories, so Puducherry is directly governed by it [25].

The new regime did not begin smoothly. In 2024, in the long-running air pollution litigation, the Supreme Court observed that the absence of rules for appointing adjudicating officers

under the amended Environment (Protection) Act had left the penal provision unworkable [26]. The Central Government then notified the Environment Protection (Manner of Holding Inquiry and Imposition of Penalty) Rules, 2024. Complaints may be initiated by the central and State pollution control authorities, the adjudicating officer must take up the inquiry within thirty days, and penalties are to reflect the location and size of the project, the nature of the violation, the effect on health, any financial gain from non-compliance and repeat offending. Penalties are credited to an Environment Protection Fund [27].

There is a respectable case for these reforms. A system in which every violation is a crime invites selective prosecution and long trials, and a swift civil penalty may deter better than a prosecution that never concludes. The reference to financial gain from non-compliance is a sound feature. From the standpoint of rural enforcement, however, three concerns arise. First, the ceiling of fifteen lakh rupees must be compared with the cost a unit avoids by not running an effluent treatment plant, a comparison that may favour non-compliance for mid-sized processing units. Second, the complaint route still runs largely through regulators who are already stretched, so a village without a vigilant officer may have no effective trigger. Third, administrative adjudication by senior officials is distant from a villager, and a deposit before appeal weighs most heavily on the least wealthy. These are arguments not against decriminalisation but against decriminalisation without a corresponding strengthening of detection and access, which shifts the balance of risk to the polluter.

A second strand concerns the timing of environmental clearance. In May 2025 a two-judge bench in *Vanashakti v. Union of India* held that ex post facto environmental clearance was contrary to the scheme of the 2006 Notification. In November 2025 a differently constituted bench, by two to one, recalled that judgment, reasoning that it had overlooked earlier decisions allowing post facto clearance in exceptional cases and that demolishing projects only to reconsider them would not serve the public interest; Justice Bhuyan dissented, observing that a violator cannot rely on his own illegality [28]. A further decision in 2026, as reported, reaffirmed that prior clearance is mandatory, accepted that a time-bound regularisation scheme may validly be introduced by statutory notification, and set aside the later executive memorandum prospectively [29].

The relevance to rural industry is indirect but real. When the consequence of building first and seeking permission later is uncertain, the incentive to comply in advance weakens, and small rural entrepreneurs, least likely to understand the regime, risk closure without a chance to regularise. At the same time, communities near an unauthorised plant are not heard in a regularisation process conducted between the proponent and the regulator.

Three further instruments deserve brief notice. The first is the Central Pollution Control Board's 2025 harmonised classification of industrial sectors, which retains the Red, Orange, Green and White categories and adds a Blue category for essential environmental services such as sewage treatment, covering over four hundred sectors [30]. The White category, comprising practically non-polluting activities, is excused from consent. Classification by sector is administratively convenient, but cannot capture cumulative impacts or a village's vulnerability: a Green unit in a village that relies on one shallow aquifer has a different significance from the same unit on a large estate with piped supply.

The second is the Environment Audit Rules, 2025, in force from August 2025, which create Registered Environment Auditors certified by a designated agency. The scheme rests on self-compliance reports by proponents, verified by independent auditors assigned on a randomised basis and bound by conflict-of-interest rules; where an auditor's report conflicts with a government officer's findings, the officer's findings prevail [31]. The Rules could bring professional scrutiny to

units no inspector visits, but their reach depends on who is brought within the obligation and who pays, a legitimate concern for the cost-sensitive rural entrepreneur. The third is the Green Credit Programme, notified in 2023, which rewards voluntary environment-positive action with tradable credits [32]. Such incentives can assist the entrepreneur who wishes to comply but cannot afford to, provided they are accessible to small units and are not used to offset harm done locally against benefits claimed elsewhere.

Read together, the developments of 2023 to 2026 reflect a coherent philosophy: lighter on formal punishment and entry barriers, heavier on self-reporting, certification and financial consequences. With capable regulators and informed communities, this could work. The reforms nevertheless share an unstated premise, that the regulated entity is findable, documented and near the authority. For the large urban unit this holds. For the small rural unit, above all one operating without proper consent, it often does not. The question for the next decade is therefore not whether the law is stringent enough in the abstract but whether it can reach the places where harm occurs.

5. WHY ENFORCEMENT FAILS IN THE VILLAGE: THREE DEFICITS

The first deficit is physical and institutional. Rural enforcement is impeded by shortages of inspectors, laboratories and funds, by distance and poor roads, and by weak communication networks that delay detection [33]. A single body, in Puducherry a committee that must administer the Water and Air Acts for a territory of four non-contiguous regions, cannot maintain continuous presence in every cluster. Regulation becomes reactive: it responds to the complaint that reaches the office, not to the discharge that goes unreported. The unit that complies is then not rewarded, because no one is checking, and the unit that does not is seldom punished, because no one is looking. Where local pressures favour employment over environmental discipline, or corruption allows scrutiny to be avoided, incentives turn further against compliance.

Technology can partly bridge the distance. Remote sensing, drones and online monitoring have real potential, but they do not substitute for presence. Online continuous monitoring has been directed principally at large, highly polluting units, and satellite imagery detects land-use change better than a night-time discharge into a drain. Technology should direct scarce inspections to where they are needed, not replace them.

The second deficit concerns who takes part in decisions. The Rio Declaration of 1992 stated that environmental issues are best handled with the participation of all concerned citizens and with access to information [34]. Indian law gives effect to this in the public hearing under the impact assessment process and in the Right to Information Act, 2005, but neither reaches the typical rural unit: the first applies only to projects within the assessment scheme, and the second depends on a villager knowing what to ask and of whom. The Constitution offers a ready vehicle in the Gram Sabha and the Panchayat, yet the consent provisions of the Water and Air Acts do not require a Panchayat to be told when a unit seeks to establish or operate in its area.

In Puducherry the problem is compounded by the absence of elected local bodies. In August 2026 the Madras High Court disposed of a petition on the failure to hold local body elections by directing the Government to hold them at the earliest, after recording its submission that it needed twenty-four months to settle the reservation framework; the last such elections were held over fourteen years ago [35]. Without an elected Panchayat there is no body in whose name a village can seek information, demand a hearing or monitor a nearby unit. In *Orissa Mining Corporation Ltd. v. Ministry of Environment and Forest* the Supreme Court gave Gram Sabhas a decisive role in deciding whether a mining project could proceed on land of religious and cultural

importance to forest-dwelling communities [36], showing that when the law gives the village a voice the result can be transformative. The deficit of participation is thus a question of design, not capacity.

Awareness is a related difficulty, since many residents do not know the regulations or the forums available, and outreach is under-funded. But awareness is not a precondition of participation. The villagers in the pilot study knew very well that their water was spoiled and that they had complained. What they lacked was a channel through which the complaint would bring a result.

The third deficit is that of remedy. The National Green Tribunal was meant to be an expert, speedy and accessible forum. Yet the statute prescribes strict limitation: an application raising a dispute must be made within six months of the cause of action first arising, extendable by sixty days, and one for relief or compensation within five years [37]. The shorter period is easily missed by a village that learns of a consent order late, and both sit awkwardly with pollution that is continuous and whose effects, such as chronic disease, appear gradually. The Tribunal sits at a few centres, so a villager in Puducherry must reach Chennai, engage an advocate and sustain a case against a corporate respondent. Scholars have observed that access to the Tribunal remains uneven and often depends on organised groups [38], and the Law Commission of India earlier stressed the need for environmental courts that are expert, accessible and able to give effective relief [39].

Remedy also has a financial side. Compensation arrangements exist for victims of hazardous accidents, including an Environmental Relief Fund under the Public Liability Insurance Act, but chronic exposure of the kind villagers describe is not an accident and falls outside them. Penalties imposed on polluters, now credited to a central Environment Protection Fund, are not by law linked to the restoration of the community harmed. A polluter may pay and the village may still go without clean water.

A fourth, subsidiary problem lies on the side of the regulated. Rural entrepreneurs often lack finance and technical knowledge, and individual treatment plants are uneconomic for very small units. The Supreme Court has recognised the importance of common effluent treatment plants and directed their establishment in industrial clusters [40], and common facilities are the obvious means by which small units can share the cost of compliance. Corporate social responsibility is sometimes suggested as a funding source, but the obligation under the Companies Act, 2013 applies only to companies above specified thresholds and lists environmental sustainability as only one of several permissible objects [41]. It cannot finance pollution control in villages whose industries are not large companies, and it cannot replace liability for harm a company causes.

6. GROUND REALITY: A PILOT STUDY IN THREE PUDUCHERRY VILLAGES

6.1. Design and Limits of the Study

To test the framework against lived experience, the author conducted a preliminary pilot study in the villages of Sedarapet, Manapet and Thirubhuvanai in Puducherry, combining direct fieldwork, interviews with residents and observation during visits to nearby industrial premises, particularly chemical factories. The study is qualitative and exploratory. Three limits should be stated plainly. The accounts below are residents' own and have not been verified by independent water or air testing; allegations against particular industries are reported as allegations; and the villages were chosen for their proximity to industry, so the findings cannot be generalised to all of rural Puducherry. The study nevertheless records, in the words of those affected, how the deficits

identified in Part V operate in practice. Each principal finding is read below against the legal duty to which it relates.

6.2. Water Pollution and the Loss of Safe Drinking Water

The most serious complaint concerned water. Residents reported that chemical units discharge untreated wastewater into the drainage system, which carries it to lakes, wells and other water bodies, and that villagers no longer have safe drinking water and must buy from private tankers, an expense they called both heavy and insufficient. They added that cows and goats fall ill after drinking the water, reducing milk yield and income. If accurate, discharge of untreated trade effluent would breach the consent conditions the Water Act requires, and the damage to wells and livestock would engage the polluter-pays principle in *Vellore Citizens' Welfare Forum*, under which the polluter must compensate those harmed and bear the cost of restoration [42]. The tanker expense is a measurable and unusually clear loss, which needs no technical expertise to establish: a household's record of purchases is itself evidence of damage.

6.3. Health Problems

Residents reported a marked increase since the industries began operating in respiratory illness, skin allergies, kidney stones and eye irritation. Women and elderly persons in particular complained of breathlessness and persistent cough, which they attribute to polluted air and chemical exposure, and said that neither the industries nor the Government had organised health camps. The residents' causal attribution cannot be accepted without epidemiological evidence, and the study does not claim to establish it. What the account reveals is an absence of health surveillance, a regulatory gap in itself. The right to health forms part of the right to life, as the Supreme Court has held in the context of industrial workers [43]. No legal mechanism lets a community living beside industry require a baseline health assessment, and in its absence neither the community nor the regulator can demonstrate causation. This evidentiary void protects the polluter, since a claimant who cannot prove causation cannot recover.

6.4. Exclusion from Employment

Industries were reportedly established with an assurance of local jobs. Residents claimed to have been systematically excluded, and several alleged that applications from local persons were rejected because they were known to have complained about pollution; young people consequently migrate or take up daily wage labour. The allegation could not be tested and would need verification against the units' employment records. Its legal significance is nonetheless worth noting. Indian law gives local residents no general right to employment in neighbouring industry, but it protects livelihood as part of Article 21 [44], and an industry that penalises complainants undermines the very mechanism by which compliance is secured. The grievance exposes a gap in the conditions on which industry settles in a village: allotment terms and consents rarely contain any binding undertaking on local employment or on non-retaliation against those who report violations.

6.5. The Absence of an Effective Official Response

Residents said they had complained several times to the Pollution Control Board and other authorities without effective action, and described a lack of regular inspections, transparency and accountability and the absence of any workable grievance mechanism. Even allowing that a resident may be unaware of action taken, the pattern is consistent with the deficits of presence and remedy. Where the outcome of a complaint is not communicated to the complainant, the system has no feedback and cannot generate trust. The Water Act allows a person who has given the required

notice to approach the court himself [45], but this assumes legal knowledge and resources that villagers already buying their drinking water are unlikely to have.

6.6. Non-Compliance Observed at the Factories

During visits to chemical factories the author observed practices that appeared to violate environmental requirements. Hazardous waste was seen dumped in open spaces without treatment, contrary to the rules requiring storage, treatment and disposal through authorised facilities [46]. Several factories appeared to have no proper chimney or filtration, so that fumes entered the atmosphere directly. These observations are the author's own and were not accompanied by sampling; they indicate a need for inspection and are not proof of a specific violation. They are, however, consistent with the residents' reports, and the two sources reinforce one another.

6.7. Reading the Findings Together

Three points emerge. First, the villagers are not unaware of their problem or of complaint channels; they have used them. The gap is responsiveness, not information. Second, the harms described, contaminated water, untreated waste and uncontrolled emissions, are those the consent conditions of the Water and Air Acts and the hazardous waste rules exist to prevent. The law is not silent; it is unperformed. Third, harm in the rural setting is cumulative and shared. It is the product not of a single dramatic accident, for which the emergency provisions are designed, but of slow and diffuse contamination, which short limitation periods and individual proof of causation are poorly suited to address. These observations support the claim that the principal challenge is one of design and delivery.

7. TOWARDS A COMMUNITY-ANCHORED MODEL OF GREEN RURAL INDUSTRIALISATION

The usual strategies for sustainable rural industry, namely eco-friendly industrial policy, renewable energy, a circular economy, support for small enterprises and careful land-use planning that keeps industrial zones away from farmland and sensitive ecosystems, with buffer green belts, are sound but general. They will succeed only if attached to a delivery model that addresses the three deficits. The model proposed here has eight elements.

(i) Panchayat-linked consent. The consent procedure should require that the local body and Gram Sabha be informed in writing when an application is received, that a summary of conditions be displayed publicly in the local language, and that the local body may make representations. This costs the regulator little and creates a formal point of contact between village and consent system. Where, as in Puducherry, there is no elected body, an interim village environment committee of residents, women's groups and local officials should be notified until elections are held.

(ii) Cluster-based regulation. Because the cumulative effect of small units damages a village, regulation should be organised around the cluster as well as the unit. Estates should maintain common effluent treatment, shared hazardous waste storage and a cluster-level discharge limit, with the estate authority answerable for compliance. This also permits eco-industrial parks in which by-products are exchanged, and relieves very small units of the cost of their own plant.

(iii) Risk-based inspection with open data. Scarce inspections should be directed to the highest-risk units and clusters, identified through complaints, proximity to drinking water sources and remote sensing. Inspection results, consent conditions, sampling reports and action taken should be published on a public portal and, in summary, on a notice board at the unit's gate. Public

authorities already owe proactive disclosure under the Right to Information Act; extending it to pollution data would give the village what it must now seek by request.

(iv) Community-assisted monitoring. Trained local volunteers with simple testing kits and a mobile reporting application can document discharges and collect time-stamped samples under agreed protocols for confirmation by the regulator. This cannot replace official sampling, needed for legal proceedings, but supplies early warning and focuses limited resources.

(v) Baseline health surveillance and ring-fenced compensation. Where polluting units operate near habitation, consent conditions should require a baseline health survey and periodic follow-up, financed by the units and held by an independent public health authority. A defined share of penalties collected from a locality should be applied to its restoration, including safe water and medical support, and not merged into general revenue, so that polluter-pays operates at the level of the village.

(vi) Graded and supportive enforcement. The response should distinguish the unit that cannot comply from the unit that will not. For the first it should be technical assistance, concessional finance and common facilities with enforceable timelines; for the second, the full range of penalties and, for repeat violation, closure. Subsidies and green credits should depend on a clean compliance record, and corporate social responsibility funds should be directed to common environmental infrastructure, on the footing that such expenditure does not discharge liability.

(vii) Local-benefit and non-retaliation conditions. Authorities that allot industrial plots should include a binding commitment on preferential engagement of qualified local residents and a prohibition on retaliation against persons who report violations, breach being a ground for review of the allotment. This converts the vague promise of local jobs into an enforceable term.

(viii) Accessible redress and safeguards against regression. Continuing pollution should be treated as a continuing cause of action for limitation purposes, hearings by video conference and circuit sittings should bring the Tribunal closer to the villages of Union Territories, and legal aid should be available for collective complaints. Finally, because reform now leans on administrative penalties, a principle of non-regression should be observed in practice: no relaxation should be introduced without a showing that the capacity to detect and punish violations is not diminished.

8. CONCLUSION

Rural industrialisation can do much for India's villages: it can create jobs where people live, add value to local resources and ease pressure on cities. It will do so only if the village's natural base is protected, and that depends on whether the law can reach the places where industry now settles. India has a rich body of environmental law and a creative judiciary, but its delivery to the village is hindered by deficits of regulatory presence, participation and remedy. The legislative changes of 2023 to 2026, which substitute administrative penalties for prosecution, introduce third-party audits and re-categorise industry, are not without merit, yet they are designed for visible and documented units and risk leaving the rural unit and the rural community behind.

The pilot study in Sedarapet, Manapet and Thirubhuvanai, limited though it is, shows what these deficits mean for those who live with them: polluted water bought back from tankers, illness with no one to record it, jobs closed to those who complain, and complaints that disappear into an unresponsive system. The residents' accounts have not been tested by laboratory analysis, and the next stage of research should supply that testing together with an examination of the regulator's inspection and consent records. The pattern they describe nevertheless points in one direction.

Green rural industrialisation requires clean technology, but it also requires that the village be informed, heard and compensated. The community-anchored model proposed here offers a practical way to give effect to that requirement. If India's journey to a developed economy is to include its villages, its environmental law must be judged not only by what it prescribes in the statute book but by what it delivers at the village tank.

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[12] The Water (Prevention and Control of Pollution) Act, 1974 (Act 6 of 1974), ss. 25-27; The Air (Prevention and Control of Pollution) Act, 1981 (Act 14 of 1981), s. 21.
[13] The Environment (Protection) Act, 1986 (Act 29 of 1986), ss. 3 and 5.
[14] The Forest (Conservation) Act, 1980 (Act 69 of 1980); The Wild Life (Protection) Act, 1972 (Act 53 of 1972); The Biological Diversity Act, 2002 (Act 18 of 2003); The Public Liability Insurance Act, 1991 (Act 6 of 1991), s. 3.
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[17] M.C. Mehta v. Union of India, (1987) 1 SCC 395.
[18] Indian Council for Enviro-Legal Action v. Union of India, (1996) 3 SCC 212.
[19] Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647.
[20] M.C. Mehta v. Kamal Nath, (1997) 1 SCC 388.
[21] Sterlite Industries (India) Ltd. v. Union of India, (2013) 4 SCC 575.
[22] Mantri Techzone Pvt. Ltd. v. Forward Foundation, (2019) 18 SCC 494.
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[41] The Companies Act, 2013 (Act 18 of 2013), s. 135 read with Schedule VII, item (iv).

[42] Vellore Citizens' Welfare Forum, supra note 24.

[43] Consumer Education and Research Centre, supra note 15.

[44] Olga Tellis v. Bombay Municipal Corporation, (1985) 3 SCC 545.

[45] The Water (Prevention and Control of Pollution) Act, 1974, s. 49(1)(c); see also The Environment (Protection) Act, 1986, s. 19(b).

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