7th GNLU Essay Competition on Law and Economics

INDIAN COUNCIL FOR ENVIRO-LEGAL ACTION V. UNION OF INDIA AND THE POLLUTER PAYS PRINCIPLE: AN ECONOMIC ANALYSIS

Author: Manasa I.

Student of B.S.W. LL.B, Gujarat National Law University

Email: manasa.iyer7@gmail.com

Contact: 7016733256

INDEX

Indian Council for Enviro-Legal Action v. Union of India (1996 AIR SC 1446)

ABSTRACT

In this paper, the 1996 judgement of **Indian Council for Enviro-Legal Action v. Union of India**[1] has been analysed using economic tools. This case was chosen specifically due to the nature of the product involved- an acid that was used only for export purposes- and the timing of the decision, being in the same year as when the Precautionary Principle became judicially known. There was an unreasonable delay of 15 years after the judgement was declared in enforcing it, with the unfortunate reality of supposed environmental compensation not being enough for the affected residents. This is a case that has been incredibly influential in environmental law and yet, has failed to provide justice in every aspect except the academic.

By using economic tools such as a cost-benefit analysis, the concept of internalising negative externalities, along with principles of balance of trade to explain the position the respondent factories in this case served in contrast to the government, the effectiveness of the Polluter Pays Principle has been analysed, especially in context of the present case. These ideas have then been applied in an effort to improve upon the gaps this judgement left. The conclusion points towards a combination of environmental measures being the most effective, with why the Polluter Pays Principle on its own is less impactful being examined.

Keywords: Polluter Pays Principle, Economic Analysis, Environmental Law, Export Ecology, Externalities.

[1] Indian Council for Enviro-Legal Action and Others v. Union of India and Others, (1996) SCC 3 212.

1. INTRODUCTION AND BACKGROUND

The idea of valuing the environment and ecosystem in monetary terms is a controversial one. Often it is argued that there can be no cost put upon one's life, or the damage caused to it by any form of pollution or ecological damage.[2] This is in contrast to the entire idea of economics, which postulates that every aspect- each input and output- must be accounted for. In the case of the environment this also refers to unintended consequences. A scientific analysis of ecology requires that there be values assigned to the damage caused by industrial activities so that those damages may be remedied in certain ways. However, how does one calculate the damages? Who should be responsible for the damage? Should the damage be considered a cost of the process of production?

A society cannot be an abstract entity that takes on the blame of its standout stars. The responsibility to negate the effects of one's actions has been unfairly assigned to the victims of the same for an unreasonable amount of time. The motive that legally binds companies to shareholders has largely not only left out, but harmed important stakeholders, in pursuit of endless profit. Upon this foundation lies the case of **Indian Council for Enviro-Legal Action and Others v. Union of India.**

In this case the Polluter Pays Principle was defined for the first time in Indian jurisprudence. While **M.C. Mehta v. Union of India**[3] had applied the very same doctrine in its ratio, it was done in an implicit manner. This case is therefore important as it explicitly utilises the Polluter Pays Principle. The present case is not the first instance of this set of circumstances, nor were all those responsible held accountable. The court utilised a strict interpretation of the principle and therefore it remains to be analysed whether such an application was correct especially under an economics frame.

The idea behind the principle is that there must be someone responsible for the harm caused. Environmental harm in particular does not occur inherently, and has to be attributed to an external force acting upon natural resources. What it propounds is basic- there should be a return to the mean, to what was 'before'. Liability must be allocated, must be placed upon

[2] Erik Gómez-Baggethun et al., *The history of ecosystem services in economic theory and practice: From early notions to markets and payment schemes,* 69 ECOLOGICAL ECONOMICS, 1209–1218, doi:10.1016/j.ecolecon.2009.11.007 (2010).
[3] M.C. Mehta v. Union of India, 1987 AIR SC 1086.

someone’s shoulders, and the easiest way of ensuring the same is drawing a straight line between the cause and effect.

2. THE CASE

2.1 Context

There is a specific acid- 1-Amino, 8-Naphtol, 3-6 Disulphonic acid, also referred to as 'H-Acid', the manufacturing of which was banned by countries in the 'West'- according to the judgement. In consequence of the 'West's requirements for the acid India manufactured and exclusively exported 'H' (as per the judgement) as the production could be dangerous and high-income countries were unwilling to endanger their own citizens when they can export the risk and liability to a country with lesser means and greater needs. This acid was largely produced in Gujarat and Maharashtra, production continuing to this day. The present case however is concerned with the residents of Bicchri, Rajasthan, who were affected by the activities of Hindustan Agro Chemicals Limited (HACL).

The petitioners referred to an earlier case in the Gujarat High Court, that of Pravinbhai Patel v. State of Gujarat[4] wherein the manufacture of 20 metric tonnes of H caused the production of at least 2400 metric tonnes of highly toxic iron and gypsum-based sludge in Kheda. This penetrated the earth and soil, polluting aquifers and groundwater. Farmers could not cultivate their lands, feed their animals or even themselves as the water became unfit for human consumption. Villagers resisted against this, leading to an imposition of Section 144 of the Code of Criminal Procedure[5] by the District Magistrate against them, with an eventual shutdown of the manufacturers. The effects of pollution were still being felt at the time of the petition, despite the shutdown, which hastened the need for a solution.

This situation in Kheda exactly mirrors the one in Bicchri, with enormous damage against cattle, water supplies, plants and the general region being proven photographically after in 1987, O.P. Agarwal decided to set up a chain of chemical factories in the village in Rajasthan.

2.2 Respondents' Arguments

The governments of India and Rajasthan, as well as the Rajasthan Pollution Control Board (RPCB) in turn argued with regards to the 5 manufacturers of H in question, the actions taken for each were as follows:

[4] Pravinbhai Jashbhai Patel v. State of Gujarat, (1995) 2 GLR 1210.
[5] The Code of Criminal Procedure, 1973, § 144, No. 2, Acts of Parliament, 1974 (India).

1. HACL- The company changed its product without obtaining any clearance from the Board, following which consent was revoked in 1987 and directions were issued to close down the unit.
2. Silver Chemicals- This unit was commissioned without obtaining the Board's permission. While the government took no action against them at the time of investigation it was found shut down.
3. Rajasthan Multi Fertilisers- Once again installed without permission, however the unit had been closed for three years at the time of institution of this petition, with electricity being shut off since 1988.
4. Phosphates India- No permission had been obtained and the government had issued notices against the same, in reply of which it was stated that the unit had been closed for a long time.
5. Jyoti Chemicals: While a No Objection Certificate had been issued, its directions were not complied with and the certificate had been consequently revoked. The board had been keeping tabs on this unit to ensure it remains closed and on the date of inspection it was found to be so.

The Rajasthan Government also stated that they had been unaware of the pollution and upon learning of the same they had instituted measures against it through the Pollution Control Board. The court found this surprising, in consideration of the fact that Archaeological Department of the Government of Rajasthan had issued the environmental clearance for Hindustan Zinc Limited (HZL)- a unit of HACL.

The respondents had agreed to undertake the task of dewatering the affected wells in Bicchri. However when the matter was taken up on the next date it was found that dewatering had not been possible and the toxic sludge had not be removed or moved anywhere safe. Monsoon set in. The respondents all blamed one another for the lack of progress shown. The hazard did not abate in the years that passed.

In 1992, the Supreme Court passed an order stating that the respondent companies were responsible for irresponsible disposal of 2268 metric tonnes of gypsum sludge and 189 metric tonnes of iron sludge, a disturbing amount of the same having become mixed with the soil of the village. The most important issue to be discussed was the remedial action to be taken. In 1993 the court passed an order to shut down the electricity in the HACL plant, with the company claiming that this direction was mala fide and intended to cause loss to the industry.

From 1992 to 1994, the National Environmental Engineering Research Institute (NEERI) had constructed their report on the matter, the final version of which the apex court relied upon to pass judgement. While the technicalities of the report are imperative to understand the extent of the damage the offending corporations have caused to the people of Bicchri, the most important aspect is the addition that:

"*The industry management in the past (during 1988-89) has shown scant respect for Pollution Control and Environment Protection Acts. Not only this, the management continues industrial activity producing obnoxious waste waters and dumping the same without any treatment, contaminating land and groundwater without any concern for ecology and public health*."

The report suggests the usage of the 'Polluter Pays' principle, with the total cost of restoration and compensation being calculated at 37.3 crore Rupees, with specific reference to the implied application of the same principle in the Oleum gas leak case.[6]

The respondents claim that the state pollution control board had been hostile to them and they had not been provided any opportunity to present their objections which meant that any contradictory material or statements could not be produced.

The RPCB shirked responsibility stating that until recently, they had had no power to shut down any industry for violation of environmental laws, and upon gaining those powers they immediately passed closure orders. This was said to prove there was no mala fide behaviour on their part.

The court also disagreed with the respondents' claim with the clarification it was not convinced of any hostile behaviour or actions in ill-faith being committed by the RPCB, and that there was no concrete proof towards the same.

The companies other than HACL claimed that long before they started manufacturing in the area, Hindustan Zinc Limited had been in existence close to Bicchri and discharging untreated toxic waste into the water supply- a fact which could be proven in reports from prior to the institution of this case. This was claimed to remove liability and responsibility from the shoulders of the other corporations accused presently. The respondents also claimed that the law applied in the Oleum gas leak case is at odds with the law in other Commonwealth countries and therefore must not be followed.

[6] M.C Mehta and Another v. Union of India and Others, 1987 AIR SC 1086.

Hindustan Zinc Limited was absolved of all legal obligations in the present petition by the court as the matter was solely concerned with Bicchri and not any other villages, even if nearby. The corporation was considered irrelevant for the proceedings in this case, with the caveat that any necessary action to be taken against their polluting activities may be the subject-matter of a separate petition.

The respondents further claimed that the Supreme Court was not the appropriate forum to hear this petition due to the technical nature of the matter as well as advised the setting up of proper environmental courts in the country. It was suggested so due to the petition being under Article 32 of the Constitution, wherein at the time of this case writ petitions could only be instituted against a 'state', which the corporations involved presently were decidedly not.

The court disagreed with this argument by stating that it was a social action litigation, which infringed upon the fundamental rights of the citizens of Bicchri under Article 21 and in a case wherein orders and directions of lawful authorities are being flouted, the Supreme Court may take up jurisdiction.

The court made special mention of how the toxic sludge is only the visible effluence of H-Acid production and that another aspect of the discharge- what they referred to as 'mother liquor' had permeated the earth and could not be seen, though its effects could be felt.

The respondents were held solely and completely responsible for the pollution in Bicchri, with the damages finally being calculated by the NEERI report as above 40 crores. It was decided it was the responsibility of the respondents to stop any further toxic sludge from polluting the village and to ensure it is disposed off in a proper manner. There was hesitation to declare the respondent corporations a 'state' for the purposes of Article 32 and hence the court also directed the Central Government to recover the cost of remedial measures against the respondents from the respondents themselves.

2.3 The Court's Decision

In the end the respondents were held absolutely liable, following the decision in the Oleum Gas Leak case and the law was applied as per Sections 3[7] and 5[8] of the Environment Act which allows the Government to take any necessary measures to protect and promote the

[7] The Environment (Protection) Act, 1986, § 3, No. 29, Acts of Parliament, 1986 (India).
[8] The Environment (Protection) Act, 1986, § 5, No. 29, Acts of Parliament, 1986 (India).

environment, including carrying out remedial measures. The factories of the respondents responsible for the pollution were ordered to be shut down. It was also directed to the Central Government that no distinction be made with respect to the size of the industry when it comes any to units in the chemical industry, and that all of them regardless of scale of operations be established only after considering the possible environmental, and be subject to close monitoring. It was recommended that the idea of environmental courts be looked into. This formed the base of another principle- the precautionary principle- which would be expanded upon by the Supreme Court in future cases. The heads of several units were also to be made personally liable for their negligent actions, and the government was advised to consider conduction of environmental audits. The respondent companies kept litigation alive well after the final judgement was passed in 1996 to avoid compliance with its orders.

From the institution of the case till the passing of the judgement was a period of 7 years. From the date of judgement till finality of the judgement was 15 years. The judgement never paid heed towards the plight of the villagers except for a remark that requested any of their grievances to be taken up in smaller courts. While the judicial development of such an important environmental principle was imperative, the court's idea of justice was flawed, at best.

3. DEVELOPMENT OF THE LEGAL DOCTRINE

In 1972, there was an agreement internationally by the members of the Organisation for Economic Cooperation and Development (OECD)[9] to base their environmental policies on the principle of Polluter Pays. This was seen as a measure to 'restore' the environment to a state it was at before the intervention or activity that caused the harm. India only became a 'key partner' to the OECD in 2007,[10] and is not a member to date.

The 1987 Brundtland Commission Report can be pointed to as responsible for forming the foundation of an international convention on climate change, outside the members of the OECD. While India was also not a part of this report, the concepts it propounded – such as sustainable development- became imperative to international environmental treaties. The Report defined the Polluter Pays Principle as "*An economic efficiency measure which is intended to encourage industries to internalize environmental costs and reflect them in the prices of products*."[11]

In the 1992 Rio Declaration on Environment and Development, it was stated: "*When there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation*." [12]

The principle of 'polluter pays' was developed explicitly for the first time in the Indian judicial context through this case. This is a doctrine of extreme import, especially considering a hundred years before the OECD took note of this principle for environmental purposes[13], the House of Lords in **Rylands v. Fletcher**[14] declared that when one causes harm to another, especially in situations known to be dangerous or likely to cause damage, they shall be liable for the same. Rylands v Fletcher was the English case that decided the doctrine of strict liability. This doctrine forms the base of the Polluter Pays Principle, and was referred to by the bench in the present case

---

[9] *Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies*, OECD LEGAL INSTRUMENTS, OECD/LEGAL/0102 (Dec 9, 2024, 2:35 PM), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0102.

[10] *India and the OECD*, OECD (Dec 11, 2024, 2:42 PM), https://www.oecd.org/en/countries/india.html#:~:text=India%20has%20been%20an%20OECD%20Key%20Partner%20since,2007%2C%20alongside%20Brazil%2C%20China%2C%20Indonesia%20and%20South%20Africa

[11] UN Secretary-General, *World Commission on Environment and Development, Report of the World Commission on Environment and Development :note by the Secretary-General (1987),* (Dec 9, 2024, 2:45 PM), https://digitallibrary.un.org/record/139811?v=pdf.

[12] The Rio Declaration 1992, Principle 15 https://unglobalcompact.org/what-is-gc/mission/principles/principle-7

[13] OECD LEGAL INSTRUMENTS, *supra* note 7, at 10.

[14] Rylands v. Fletcher, 1868 UKHL 1.

In **M.C. Mehta v. Union of India (Oleum Gas Leak)** this principle was finally utilised on a large scale, though under the umbrella of the absolute liability doctrine instead of the earlier, less stringent strict liability doctrine. After the current case however, this principle gained more importance in the legal field.

In M.C. Mehta's case the rule of strict liability was evolved into that of absolute liability. In the current case it was submitted by the respondents that the rule from Rylands v. Fletcher is the applicable one, and not absolute liability, due to a lack of international recognition of the latter. However the Supreme Court disagreed with this argument, stating that Rylands v. Fletcher was explicitly considered untenable by the apex court in the Oleum gas leak case. Further, it was stated that recently, the English judiciary themselves have declined to rely upon Rylands v. Fletcher due to its narrow requirement of there being a 'non-natural' use of land . Instead they saw **Ballard v. Tomlinson** [15]as holding greater precedential value which said that no person has the right to contaminate a common source in such a manner that their neighbour cannot fully enjoy their rights to it.

In other countries, such as Australia, the terms 'strict' and 'absolute liability' are used interchangeably.[16] In India however the meaning is quite different. The Supreme Court also considered the Australian High Court's recent approach, but ultimately came to the conclusion that weighing the English and Australian ideas together, the Indian rule of absolute liability was the most appropriate and evolved one. This principle was held to not be mere obiter, but have actual binding value in the present case.

In **Vellore Citizens Welfare Forum v. Union of India**[17] later in the same year as the present case, this doctrine was applied alongside that of the precautionary principle.

[15] Ballard v. Tomlinson, (1885) 29 Ch D 115.
[16] *Strict and Absolute Liability*, AUSTRALIAN LAW REFORM COMMISSION, (Dec 9, 2024, 2:51 PM), https://www.alrc.gov.au/wp-content/uploads/2019/08/fr_129ch_10._strict_or_absolute_liability.pdf
[17] Vellore Citizens Welfare Forum v. Union of India, (1996) 5 SCC 647.

4. AN ECONOMIC ANALYSIS OF THE JUDGEMENT

4.1 The Tragedy of the Commons

Neo-classical economics is based on the idea that the economy is a circular model wherein an aspect feeds into, and off of each other. This may be broken down into different variables such as households, firms, governments etc. The environment is often left out of such conversations. In order to combat this ecological economics was envisioned, originally based on the laws of thermodynamics- particularly the first and second laws to calculate the energy created as an output and the environmental cost of that energy being accounted for.

Pollution is a net negative. Just as heat is emitted by light bulbs, calculated as lost energy that is unable to be processed into the desired outcome, any pollution omitted may be considered the collateral damage of the manufacturing process. Negative Production Externalities refer to the indirect cost of the process of production. It is a form of market failure.

When utilising game theory, a Nash equilibrium is the state arrived at when the dominant strategy is the one with the outcome with the highest possible benefit (and lowest possible cost) individually and lowest possible benefit (and highest possible cost) collectively.[18]

This is also known as the Commonise Costs- Privatise Profits model.[19] The profit motive of any corporation as well as any capitalist government will dictate that this is the outcome that will be arrived at. With respect to the environment, this is the tragedy of the commons- another type of market failure, connected with the concept of externalities.

This theory assigns the cost of these externalities to society at large.[20] The 'tragedy' is that when provided access to a finite resource where the interest is to utilise or exploit it, short-term and selfish goals will outweigh long-term altruistic benefits and the resource will be completely depleted by the actions of those with the goals.

This nihilistic outlook also can be seen as forming the base of the Polluter Pays Principle -not in an effort to privatise costs, as those will have been felt by the time a case is instituted- but

[18] WILLIAM K. JAEGER, ENVIRONMENTAL ECONOMICS FOR TREE HUGGERS AND OTHER SKEPTICS 80-82 (Island Press 2005).
[19] Chapman and Hall, *Game Theory and the Law Introduction, Applied Game Theory and Strategic Behavior,* CRC, 191–214 (2016).
[20] Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE, 1243-1258 (1968).

to privatise damages. The tragedy of the commons must be seen as an inevitable outcome in order to introduce measures to remedy or rectify its effects. A popular way of avoiding this tragedy is to internalise negative externalities. [21]

4.2. Internalising Externalities

The Polluter Pays Principle assumes that the cost of externalities must be calculated within the cost of production. Regulatory models adopted by the government, such as the creation of a Pollution Control Board in the present case is a method of internalising the externalities created. However one must question the nature of these externalities and whether they truly are an unwanted output.

It must be considered that in the present case, it was not possible to internalise the external costs and bring it to an optimal stage. Dewatering was determined to not be possible, after claiming it would. This externality is not yet concluded. However in economics there should not be a situation where the money has disappeared, where it cannot be calculated. The cost has simply not yet been found. It can also be argued that even if the cost of this impossible dewatering is calculated, it must be considered with an interest, to make up for the social costs from the prolonged damage caused.

Stafford Beer's idea of systems led to the construction of the heuristic that a system cannot be what it ought to do, or what it fails to do but in turn what it is. Any unintended consequences must become a part of its process, because the purpose of a system is what it does.[22]

Utilising this systems theory, one can analyse negative externalities as having to be calculated for within the process of production itself. They may not be intentional but their existence makes them an aspect of the economy.

However there is a two-fold problem with utilising the model of externalities:

1. That the cost is calculated ex post. This means that it is more expensive for the polluters to take mitigation measures in the present than it will be in the future, once the action has ceased.

[21] Boris N. Mamlyuk, *Analyzing the Polluter Pays Principle through Law and Economics,* 18 SOUTHEASTERN ENVIRONMENTAL LAW JOURNAL (2009).
[22] Stafford Beer, *What Is Cybernetics?* 31 KYBERNETES (GORDON AND BREACH SCIENCE), 209-219 (2002).

2. That it is not possible to exactly quantify social cost, especially due to large lapses in time, such as the finality of the judgement being declared 15 years after it was declared in the present case. This also means that until the consequences of environmental pollution are felt, one cannot calculate the damages to be awarded or utilised in reparations. The social costs of externalities cannot be considered 'known' when the optimal level of pollution cannot be quantified. Social cost can be assigned, even legislatively but this would not reflect true externalities, merely a regulator's idea of what it should be. It can be satisfactory from a scientific point of view but it does not succeed from a social one. Here is where the concept of 'Precautionary Principle' has been offered as an alternative.

4.3. In Contrast with the Precautionary Principle

When there is an unknown scientific risk, the precautionary principle directs measures be taken to mitigate possible harm. This idea was echoed in a Supreme Court judgement from later in the same year- **Vellore Citizens Welfare Forum v. Union of India** [23] and popularised as early as 1975[24] but became well known in the 1980s on the international stage.[25] It is an ex-ante approach, unlike the Polluter Pays Principle and is often connected with undertaking a risk analysis before beginning any possibly harmful activity.

The question thus arises, what must be done in a situation such as the present- when the associated risks are very well known, but there has been no calculation of the externalities. The exact sequence of events that occurred in Bicchri occurred in Kheda prior to the institution of this petition, its circumstances even relied upon by the counsel. Who is the polluter here then? The precautionary principle places no blame and merely responsibility. When responsibility is not kept up, when No Objection Certificates are granted the application of the Polluter Pays Principle merely shifts liability, exculpating the responsible regulator.

Polluter Pays Principle is more effective on a cost-benefit analysis for both the government/regulator and the corporation/producer. The government is no longer liable to prevent any harm from being caused with the precautionary principle, and does not have to shoulder social costs and negative externalities as that will pass on to the assigned polluter. The corporation can speed up the process of production by avoiding red tape, or even complying

[23] Vellore Citizens Welfare Forum v. Union of India, (1996) 5 SCC 647.
[24] M. Iaccarino, *A cost/benefit analysis. About the precautionary principle*, EMBO REP, 454-456 (2000).
[25] Ozone, https://www.ozone.unep.org/treaties/montreal-protocol (last visited Dec. 11, 2024).

with it and then negating the same, and the cost of conducting a risk analysis and possibly not getting the green light for production is outweighed when using the Polluter Pays Principle. Act now, apologise later, profit.

4.4. Synthesis of the Two Principles

Clearly the precautionary principle is not in favour of either party who may be considered liable. It is however on all grounds the better strategy to prevent environmental harm[26] and objectively reduce possible damage to life. Therefore there must be intervention and regulation[27] to ensure the following, in the context of the present case:

a) In cases wherein the precautionary principle was failed to be applied, the regulator responsible (such as the Rajasthan Pollution Control Board) must be considered a 'polluter' for when the Polluter Pays Principle shall apply. This would ensure the government body has a duty it must not shy from in pursuit of shifting blame in the future, as this would be rendered impossible. A similar idea has been directed by the Supreme Court for example in the Bhopal Gas Tragedy case[28] wherein in case the settlement fund so negotiated was exhausted the Government of India should take up all remaining reparations claims. However this does not direct blame towards the regulator, merely acts as a fall- back solution.
b) Regulation must be mandated. While it is true that permits were required under the Air[29], Water[30] and Environment[31]Acts, they were not obtained before the manufacturing process begun. This was let go without any consequences, and an argument was put forth by the respondents with specific reference to Section 25 of the Water Act that there was no need to obtain prior consent as their units were established before the amendment in the Water Act[32] that required it came into force. Such a line of argument must not be permitted and it

[26] E. O'Neill, *The Precautionary Principle: A Preferred Approach for the Unknown,* 19 ETHICS, POLICY & ENVIRONMENT 153–156 (2016).

[27] Yang, Tseming, and Robert V. Percival, *The Emergence of Global Environmental Law,* 36 ECOLOGY LAW QUARTERLY 615–64 (2009).
[28] M.C Mehta and Another v. Union of India and Others, 1987 AIR SC 1086.
[29] The Air (Prevention and Control of Pollution) Act, 1981, No. 14, Acts of Parliament, 1981 (India).
[30] The Water (Prevention and Control of Pollution) Act, 1974, No. 6, Acts of Parliament, 1974 (India).
[31] The Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India).
[32] The Water (Prevention and Control of Pollution) Act, 1974, § 25, No. 6, Acts of Parliament, 1974 (India).

must be seen to that even existing establishments are subject to any new provisions or amendments in the aforementioned acts.

c) There must be constant and consistent checks to see if the consent of the regulator was obtained by the producer, and whether they are keeping up with all their statutory requirements. The Central Pollution Control Board has been undertaking this task[33], and the State Pollution Control Boards have been assigned the same but are unable to perform it satisfactorily due to a lack of resources[34]. This must be included in the precautionary principle and the cost of this aspect can be borne by the affected corporations as a form of environmental tax. However a Pigouvian tax to internalise externalities has a threshold in developing countries, beyond which their efficiency diminishes.[35] Therefore it must be envisioned in tandem with other environmental measures.

The Polluter Pays Principle must be used as a last resort, when all the above solutions have failed and been surpassed. To reiterate, the government must be considered a polluter if the failure has been from the regulatory side.

4.5 Coase Theorem

Polluting entities, such as the various manufacturers in the present case, believe that they have a right to utilise the property they own as they wish. Ronald Coase said that regardless of parties' conflicting rights to property, the most economically viable solution would be reached after negotiations, which must occur under ideal market conditions, with no cost assigned to bargaining.

According to this theorem, the polluting firms would either compensate the victims to continue their manufacturing and disposal, or the residents of the region would pay the polluters to stop manufacturing.[36]

---

[33] Ministry of Environment, Forest, and Climate Change, *Strategies to control the rising pollution in the country*, PRESS INFORMATION BUREAU (Dec. 12, 2024, 8:22 PM), https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1983680.

[34] Shailee Basu, *Understaffed and overburdened: The state of pollution control boards in India,* BAR AND BENCH, (Dec. 12, 2024, 8:31 PM), https://www.barandbench.com/columns/understaffed-and-overburdened-the-state-of-pollution-control-boards.

[35] Alina Georgiana Manta et. al, *Does the implementation of a Pigouvian tax be considered an effective approach to address climate change mitigation?* 80 ECONOMIC ANALYSIS AND POLICY, 1719-1731 (2023).

[36] Tatyana Deryugina, Frances Moore, Richard S.J. Tol*, Environmental applications of the Coase Theorem*, 120 ENVIRONMENTAL SCIENCE & POLICY, 81-88 (2021).

Bargaining using Coase theorem has been upheld as a solution to externalities without government interference. This absence of regulator would however mean that: 1. Identifying harmful environmental effects would be made more difficult, or delayed and; 2. When regulators fail in their duties, due to the large imbalance of power all negotiations reached cannot be considered fair. This theorem is also inconsistent with the precautionary principle.

There have been instances where polluters have utilised the polluter pays principle without a legal enforcement of the same.[37] However, it can be said that compensation was only paid under the looming threat of litigation. In its absence as an enforcement mechanism, bargaining power is lost. Public policy should be such that bargaining is not a possible avenue when it comes to the environment. It also posits the polluter and victims of pollution as equal in power and responsibility, which is an unfair line of thought. Therefore, while Coase theorem may be utilised in the existing system, it would be quite rare to see its positive effects.

[37] Kolstad, C., *Intermediate environmental economics: International edition*, OUP CATALOGUE (2011).

5. THE EXPORT ECONOMY

In order to understand this case, the actions of the faulting corporation must be understood as not one existing in a vacuum, but the norm. Following a change in India's economic policy in 1991, the opening of the economy can be pointed to as a catalyst in worsening environmental conditions in the country[38]. However, even before the official change in policy India had begun pursuing liberalisation in the 1980s.[39]

It is a well-known fact that increased exports create a trade surplus, which is favourable especially for developing nations. This influx of stronger foreign currency incentivises countries such as India to keep up with export production.

Bastiat's Monetarist theory posits that a trade deficit is actually beneficial and a manifestation of profit.[40] However his theory is dependent on which countries are trading with each other. In his example, he used France and England[41] which is inapplicable to a case like the present. Applying his theory in a different framework, if India was exporting to a 'Western' country as the judgement states- to be considered any 'developed' nation- then it is actually a manifestation of loss for India.

Joan Martinez-Alier criticises the concept of externalities being a market failure. He claims that they cannot be internalised as they are inherent in the present economic system. In 'The Environmentalism of the Poor' he points to ecologically unequal trade on an international scale and touches upon the topic of 'ecological debt'. He hinges this idea on the export of products from poor countries being sold at unsustainable rates which do not include compensation for externalities; and the usage of 'environmental space' by rich countries with no heed towards recognition of the poor country's entitlement to the environment.[42]

---

[38] Shahbaz, Muhammad et al., *Does Globalization Impede Environmental Quality in India?* COMSATS INSTITUTE OF INFORMATION TECHNOLOGY, CENTRE FOR DEVELOPMENT STUDIES, NATIONAL INSTITUTE OF TECHNOLOGY, UNIVERSITI SULTAN ZAINAL ABIDIN (2015).
[39] Mohan, Rakesh, *India Transformed: 25 Years of Economic Reforms. Brookings Institution*, 68–71 (2018). ISBN 9780815736622
[40] Robert L. Formaini, *Frédéric Bastiat: World-Class Economic Educator,* 3 ECONOMIC INSIGHTS, 1, 2-3 (1998).
[41] Frédéric Bastiat, *Economic Sophisms,* 94 IRVINGTON-ON-HUDSON, N.Y.: FOUNDATION FOR ECONOMIC EDUCATION, (1964).
[42] Martinez-Alier, J., *The environmentalism of the poor,* GEOFORUM (Dec. 11, 2024, 7:44 PM), http://dx.doi.org/10.1016/ j.geoforum.2013.04.019

The basis of exports relies on it being beneficial to both parties in the short-term. The developed country gains a product for a cheaper rate than it would by domestic production due to the strength of its currency, while the developing country profits more for its production from the strength of the foreign currency than it would from its own production. However the further this system continues, the worse the economic state of the developing country in the long term. It has been studied than any trade- import or export- with high income countries worsens the economic distribution of developing countries.[43] One can therefore consider global wealth inequality as a negative externality of the requirements of high-income countries.

A cost-benefit analysis will always run subjective and may be manipulated.[44] A larger base issue with considering the risks associated with production processes such as presently is that the H-Acid being used only for export must be a greatly weighted benefit. Therefore the precautionary principle's coinciding with cost benefit analyses should be considered in the above context.

A Social Discount Rate (SDR) is used to assign a value presently to any costs or benefits that will occur at a later date. It suggests the propensity to prefer current income rather than future one. It is often theorised that intergenerational theories must be considered when talking of ecological economics. Environmental externalities extend across generations according to this line of thinking. It is also widely accepted that there is a need to use SDRs that decline over time, in order to give greater weightage to future generations. This may be seen as in line with Georgescu-Roegen's pessimistic outlook on the usage of natural resources and that when used in economic activity all such resources are degraded irreversibly.[45] He even described ecological market failure as the 'dictatorship of the present over the future'.[46]

In Toward a Political Economy of Cost-Benefit Analysis[47], the author claims that costs tend to be front-loaded and benefits back-loaded when it comes to environmental protection measures. This would lead to the costs in the first year not being subject to discounting while the benefits in the subsequent years are.

---

[43] Elena Meschi, Marco Vivarelli, *Trade and Income Inequality in Developing Countries*, 37 WORLD DEVELOPMENT, 287-302 (2009).
[44] Cole, Daniel H., *Toward a Political Economy of Cost-Benefit Analysis*, INDIANA LEGAL STUDIES RESEARCH Paper No. 1954892, (2011).
[45] NICHOLAS GEORGESCU-ROEGEN, THE ENTROPY LAW AND THE ECONOMIC PROCESS (Harvard University Press 1971).
[46] Nicholas Georgescu-Roegen (1975), *Energy and Economic Myths*, 41 SOUTHERN ECONOMIC JOURNAL 347-381 (1975).
[47] Cole, Daniel H., *Supra* note 41, at 18.

6. CONCLUSION

Despite the fact that litigation took 6 years and an extra 15 post the decision, justice has yet to be delivered to the people affected.[48] Today there is no drinkable water in Bicchri, annual monsoon water rushing over the sludge, seeping more toxic chemicals into aquifers. Lands that used to yield ten bags of rice yield only two now. Gases from those factories killed most of the trees. The court's remedy from the judgement can only ascertained to be more litigation, recommending petitions be filed by aggrieved villagers in small courts.

The Supreme Court's verdict was light on the perpetrators, one of which must be considered the pollution control boards. As of 2012 there were 17 H- Acid units functioning in Gujarat, and no action against regulatory bodies means that history is liable to repeat itself.

Wali Bai, an Adivasi woman in Bicchri said "I have a plot of land, but no water to grow anything on it. Grain is Rs 10 per kg in the fair-price shops. How can I afford to buy anything to feed my family?"

Lehri Devi said "We used to get 20 jute bags of wheat out of this farm. Now, it is reduced to just five jute bags. There are nine people in my family and four cattle. What do we eat?"[49]

People must also factor into the environmental equation. Villagers were not compensated as a consequence of the pronounced judgement. While money was taken from the polluter-offenders and utilised to direct reparations to the environment, none was given to the residents who relied upon their now unusable ecology.[50]

The court erred in its decision by overlooking the entire population of the village. Government liability has not been shirked merely because the court decided so, because corporations were ordered to pay.

While this analysis was one limited to India, different countries have different approaches to combat pollution, one of them being the most institutional approach- that of 'government pays'. While this ensures a smoother side to reparations, it may not be preferable to polluter pays

[48] Anju Sharma, Rajat Banerji, *The Blind Court*, DOWN TO EARTH (Dec. 13, 2024, 9:22 AM), https://www.downtoearth.org.in/environment/the-blind-court-25812.
[49] Sneha Richhariya, Tej Prakash Bhardwaj, 'A Village Contaminated by Industrial Waste Has Been Waiting For Justice For Over Three Decades', Mogabay (2023) https://india.mongabay.com/2023/09/a-village-contaminated-by-industrial-waste-has-been-waiting-for-justice-for-over-three-decades/
[50] Anju Sharma, Rajat Banerji, *Supra* note 45, at 20.

especially when export only or heavily exported industries are involved for developing countries. The cost cannot be shouldered fully by the government and instead a compromise is required to bring the government and responsible regulator under the umbrella of a 'polluter' in case of failure of checks and balances while adopting the precautionary principle as a first line of defence. The government has not lost any liability when it has failed in its duty to the residents of the village.

The cost of abatement measures means that environmental quality is not a norm, or natural that is free for all but rather a luxury to a few. Bicchri water runs brown to date.

7. REFERENCES

ARTICLES:

1) Alina Georgiana Manta et. al, *Does the implementation of a Pigouvian tax be considered an effective approach to address climate change mitigation*? 80 ECONOMIC ANALYSIS AND POLICY, 1719-1731 (2023).
2) Anju Sharma, Rajat Banerji, *The Blind Court*, DOWN TO EARTH (Dec. 13, 2024, 9:22 AM), https://www.downtoearth.org.in/environment/the-blind-court-25812.
3) Boris N. Mamlyuk, *Analyzing the Polluter Pays Principle through Law and Economics,* 18 SOUTHEASTERN ENVIRONMENTAL LAW JOURNAL (2009).
4) Chapman and Hall, *Game Theory and the Law Introduction, Applied Game Theory and Strategic Behavior*, CRC, 191–214 (2016).
5) Cole, Daniel H., *Toward a Political Economy of Cost-Benefit Analysis*, INDIANA LEGAL STUDIES RESEARCH Paper No. 1954892, (2011).
6) Druckman, Angela; et al., *Missing carbon reductions? Exploring rebound and backfire effects in UK households* 39 ENERGY POLICY, 3572-3581 (2011).
7) E. O'Neill, *The Precautionary Principle: A Preferred Approach for the Unknown*, 19 ETHICS, POLICY & ENVIRONMENT 153–156 (2016).
8) Elena Meschi, Marco Vivarelli, *Trade and Income Inequality in Developing Countri*es, 37 WORLD DEVELOPMENT, 287-302 (2009).
9) Erik Gómez-Baggethun et al., *The history of ecosystem services in economic theory and practice: From early notions to markets and payment schemes*, 69 ECOLOGICAL ECONOMICS, 1209–1218, doi:10.1016/j.ecolecon.2009.11.007 (2010).
10) Frédéric Bastiat, *Economic Sophisms*, 94 IRVINGTON-ON-HUDSON, N.Y.: FOUNDATION FOR ECONOMIC EDUCATION, (1964).
11) Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE, 1243-1258 (1968).
12) India and the OECD, OECD (Dec 11, 2024, 2:42 PM), https://www.oecd.org/en/countries/india.html#:~:text=India%20has%20been%20an%20OECD%20Key%20Partner%20since,2007%2C%20alongside%20Brazil%2C%20China%2C%20Indonesia%20and%20South%20Africa
13) M. Iaccarino, *A cost/benefit analysis. About the precautionary principle*, EMBO REP, 454-456 (2000).

14) Martinez-Alier, J., *The environmentalism of the poor*, GEOFORUM (Dec. 11, 2024, 7:44 PM), http://dx.doi.org/10.1016/ j.geoforum.2013.04.019
15) Ministry of Environment, Forest, and Climate Change, *Strategies to control the rising pollution in the country,* PRESS INFORMATION BUREAU (Dec. 12, 2024, 8:22 PM), https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1983680.
16) Nicholas Georgescu-Roegen (1975), *Energy and Economic Myths*, 41 SOUTHERN ECONOMIC JOURNAL 347-381 (1975).
17) Ozone, https://www.ozone.unep.org/treaties/montreal-protocol (last visited Dec. 11, 2024).
18) *Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies,* OECD LEGAL INSTRUMENTS, OECD/LEGAL/0102 (Dec 9, 2024, 2:35 PM), https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0102.
19) Robert L. Formaini, Frédéric Bastiat: *World-Class Economic Educator*, 3 ECONOMIC INSIGHTS, 1, 2-3 (1998).
20) Shahbaz, Muhammad et al., *Does Globalization Impede Environmental Quality in India?* COMSATS INSTITUTE OF INFORMATION TECHNOLOGY, CENTRE FOR DEVELOPMENT STUDIES, NATIONAL INSTITUTE OF TECHNOLOGY, UNIVERSITI SULTAN ZAINAL ABIDIN (2015).
21) Shailee Basu, *Understaffed and overburdened: The state of pollution control boards in India,* BAR AND BENCH, (Dec. 12, 2024, 8:31 PM), https://www.barandbench.com/columns/understaffed-and-overburdened-the-state-of-pollution-control-boards.
22) Sneha Richhariya, Tej Prakash Bhardwaj, *A Village Contaminated by Industrial Waste Has Been Waiting For Justice For Over Three Decades,* MOGABAY (2023). https://india.mongabay.com/2023/09/a-village-contaminated-by-industrial-waste-has-been-waiting-for-justice-for-over-three-decades/
23) Stafford Beer, *What Is Cybernetics*? 31 KYBERNETES (GORDON AND BREACH SCIENCE), 209-219 (2002).
24) *Strict and Absolute Liability*, AUSTRALIAN LAW REFORM COMMISSION, (Dec 9, 2024, 2:51 PM), https://www.alrc.gov.au/wp-content/uploads/2019/08/fr_129ch_10._strict_or_absolute_liability.pdf
25) The Rio Declaration 1992, Principle 15 https://unglobalcompact.org/what-is-gc/mission/principles/principle-7

26) UN Secretary-General, *World Commission on Environment and Development, Report of the World Commission on Environment and Development :note by the Secretary-General* (1987), (Dec 9, 2024, 2:45 PM), https://digitallibrary.un.org/record/139811?v=pdf.
27) Yang, Tseming, and Robert V. Percival, *The Emergence of Global Environmental Law*, 36 ECOLOGY LAW QUARTERLY 615–64 (2009).

BOOKS:

1) MOHAN, RAKESH, INDIA TRANSFORMED: 25 YEARS OF ECONOMIC REFORMS., 68–71 (Brookings Institution 2018).
2) NICHOLAS GEORGESCU-ROEGEN, THE ENTROPY LAW AND THE ECONOMIC PROCESS (Harvard University Press 1971).
3) WILLIAM K. JAEGER, ENVIRONMENTAL ECONOMICS FOR TREE HUGGERS AND OTHER SKEPTICS 80-82 (Island Press 2005).

CASES:

28) Ballard v. Tomlinson, (1885) 29 Ch D 115.
29) Indian Council for Enviro-Legal Action and Others v. Union of India and Others, (1996) SCC 3 212.
30) M.C Mehta and Another v. Union of India and Others, 1987 AIR SC 1086.
31) Pravinbhai Jashbhai Patel v. State of Gujarat, (1995) 2 GLR 1210.
32) Rylands v. Fletcher, 1868 UKHL 1.
33) Vellore Citizens Welfare Forum v. Union of India, (1996) 5 SCC 647.

STATUTES:

1) The Air (Prevention and Control of Pollution) Act, 1981, No. 14, Acts of Parliament, 1981 (India).
2) The Code of Criminal Procedure, 1973, No. 2, Acts of Parliament, 1974 (India).
3) The Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India).
4) The Water (Prevention and Control of Pollution) Act, 1974, No. 6, Acts of Parliament, 1974 (India).