



PURC Journal of Law,
Vol. 1, Issue 2, July-December, 2025, pp. 61- 77

The Frothy Tale of Chhath and Inland River Pollution

Simran Chaudhary

Delhi Metropolitan Education,

Noida affiliated to Guru Gobind Singh Indraprastha University, New Delhi

Mugdha Chaturvedi

Delhi Metropolitan Education,

Noida affiliated to Guru Gobind Singh Indraprastha University, New Delhi

“The unconscionable industrialization, the unpardonable deforestation and inhuman extermination, of living species betray an exploitative brutality and anti-social appetite for profit and pleasure which is incompatible with humanism and conservationism. Today a bath in the Yamuna and Ganga is a sin against bodily health, not a salvation for the soul, so polluted and noxious are these holy waters now.”

— Justice V.R. Krishna Iyer

One of the fundamental resources required for humanity to survive on Earth is water. It is abundant, covering approximately 70% of the Earth's surface, but a vast majority of it, about 97%, is in the form of oceans and seas, and the other 3% is freshwater, two-thirds of which are found in glaciers in a solid form and the rest in ground and surface water.² The primary water sources used by people for beneficial purposes are freshwater resources such rivers, lakes, streams, ponds, and groundwater.

Water that is clean and of high quality has been valued since antiquity. The development of civilisation has been centred around rivers. They have also contributed significantly to the growth of contemporary society. Because a relatively big amount of water is needed for both residential and industrial reasons, the majority of industries and commercial districts are situated near water sources in

every nation, typically near rivers, the ocean, etc. Rivers, which were originally the most significant supply of freshwater, became conveyors of effluent as cities grew and have paid the price for fast economic and technical growth, as pollution and damming show. In addition to the low water flow, vast majority of rivers are suffering from severe contamination due to the presence of toxic and hazardous pollutants, including both organic and inorganic compounds, as well as harmful microorganisms that jeopardize the well-being of both human beings and the natural surroundings.

An immediate contributing factor to surging water pollution has been found as increased wastewater discharge into rivers.³ In developing nations, roughly 80% of wastewater is discharged without being treated, which eventually contaminates freshwater sources such as rivers, lakes, and ponds. Only 38% of India's urban sewage gets treated.⁵ In India, a large number of rivers are subjected to being treated as open drains. This means that individuals and businesses frequently discharge untreated or poorly treated wastewater, effluent, and plastic into the water. As a result, these rivers become heavily polluted and environmentally hazardous.

Despite being regarded as goddesses by Hindus, India's two most beloved rivers, the Ganga and the Yamuna are not an exception.^{6 7} The Ganga was ranked among the top 10 "rivers at risk" in the world in both 2007⁸ and 2017⁹. The river Yamuna is one of the Ganga's tributaries that is most heavily contaminated. Researchers claim that the Yamuna is 'going to die' as a result of the pollution in this river. About 76% of the Yamuna's entire pollution load originates in Delhi NCR, converting the river into a "sewage drain" as a result. About 66% of the sewage produced by Delhi NCR is treated, whereas the remaining 26% often finds its way to rivers or other sources of surface water.

The Frothy Yamuna River during Chhath Puja is also an issue of growing concern among environmentalists and health experts. Chhath Puja is a Hindu festival that is celebrated twice a year in India and is characterized by its unique rituals and traditions, including offerings made to the Sun God in river bodies such as the Yamuna. During this festival, the Yamuna River, which is one of the largest tributaries of the Ganga, is inundated with devotees who flock to the river to perform their rituals and offer prayers.

However, the heavy foot traffic during Chhath Puja and frothy Yamuna River poses a threat to the health and well-being of the people who are exposed to the contaminated water. According to experts, Surfactants and phosphates, found in commonly used detergents for household and commercial purposes, are discharged into the Yamuna River throughout the year, with most of the untreated waste still containing toxic elements. During the winter season, when the water flow in the river decreases, this untreated waste contributes to the formation of foam on the river's surface. This implies that instead of being diluted, the contaminants end up producing a thick, poisonous foam.

The frothing of Yamuna River during Chhath Puja is a stark reminder of the rampant pollution that has plagued India's inland rivers. The high levels of toxic effluents discharged into the river pose a serious threat to the aquatic life, ecosystem as well as health and well-being of millions of people who depend on the river for their daily needs. While efforts have been made to curb pollution, much more needs to be done to ensure that our rivers are clean and healthy. It is crucial that the government, civil society, and citizens work together to address this pressing issue and protect our invaluable water resources.

When Devotion Meets Pollution: Unveiling the Mysteries of Yamuna River Frothing During Chhath Puja

Chhath puja is celebrated to thank the god sun and offer him gratitude. This festival lasts for four days where people abstain from consuming food and they don't even drink water before worshipping the sun. This festival is predominantly observed in Bihar, some parts of Uttar Pradesh, West Bengal and Jharkhand. The scientific significance of this festival is that it is the best way to detoxify our body as taking dips in water and exposing the body in the sun increases the functionality of the human body. It also helps in preparing for the upcoming winter season. This festival is crafted in a way which involves optimum absorption of vitamins as well as calcium in the body which are very beneficial factors for the people. The celebration of this festival also helps the devotees by calming their mind, reducing the negative energy like hatred, anger, etc.

Health Hazards

Celebrating the Chhath Puja festival in Yamuna River is very dangerous as Yamuna River is highly polluted and covered with a dense layer of harmful foam. The presence of industrial pollutants is contributing to the high levels of ammonia that are causing the formation of the toxic foam, not only industrial pollutants but also high amounts of phosphate content is also available in water and their main source is the waste water from the household. Experts say that the problem of frothing will continue unless sewage treatment plants in Delhi are upgraded to meet new standards. So, bathing in River toxic foam can cause severe eczema, it can also lead to skin allergies, if the water got swallowed accidentally with these chemicals it will lead to damage of lungs as well as gastrointestinal problem as well as hormonal imbalance, neurological balance.

Causes of Frothing

The main reason behind frothing is untreated waste which is discharged from the household as well as industries. A thick layer of foam is formed on the surface of Yamuna River which mainly consist of ammonia as well as phosphate. The foam made from organic matter in River lasts for a long time. However, the amount of

foam visible in Yamuna in the present day cannot be explained by natural phenomena. As the foam bubble is lighter in water so they float on the surface of the river and it gradually accumulates as a thin film. The phosphates which are found in the river are generally found in household laundry or industrial laundry. The phosphate leads to the process by which a water body becomes enriched with minerals and nutrients causing the algae growth that in turn cuts off oxygen from reaching with the water and sunlight from reaching the depth of the water body. The lower content of oxygen killing off marine life that is essential to maintain the quality of water drainage of these waste has turned the river into a public outlet. A report which was given to the Central Pollution Control Board said that the foam formation in the Yamuna River takes place in two locations firstly from downstream of the ITO and secondly Okhla barrages. The water that falls from the Okhla barrage stir the foaming agents present in the water, not only Delhi should be blamed for frothing but also some untreated wastes are disposed of from Kalindi Kunj as said by the officials. These causes make the river unfit for bathing, as it would have less than 5 mg per litre of oxygen dissolved in water and has the pH of 6.5-8.5, had faecal coliform which is less than 2500 mpm per 100 ml. The concentration of phosphates which is found in Yamuna River varies from place to place like at Okhla it is 6.9 mg per litre and in Khajoori Paltan it is found about 13.42 mg per litre. Last year a heavy toxic foam was found just ahead of Chhath Puja, which was treated by the Delhi Jal board by spraying the chemicals which could dissolve the foam. Recently, according to a report a pink foam was also found in Yamuna River. The reason behind the foam was also phosphates from detergents and anaerobic bacteria in the water that falls from Okhla barrage.

Measures taken for the Frothing

Corrective measure taken by the Delhi government to stop the frothing is establishment of the sewage treatment plant to minimise the disposal of untreated waste in the Yamuna River. The government has planned to make the largest sewage dams in Najafgarh. The water waste flowing in the drain is being trapped and diverted to the sewage treatment plant. The plant purifies the untreated waste and generates gases to run themselves, which is to be considered to be an effective way it will not only reduce the pollution the river and no extra fuel should be used or not any type of other resource is used which would create some other type of waste. As well as the government should spread the awareness among the people about the current condition of the Yamuna River so that people could get the knowledge about how much harmful it could be if they step inside the Yamuna River currently, and it should also tell the people about how corrective actions are taken by the government to make the situation under control.

Frothing of other Rivers in India

Not only Yamuna River in India but also Ganga River which originates from Gangotri glacier, which passes from more than five states from India and is considered as the lifeline of millions of people has suffered from an extreme level of frothing which is not only caused by the industries but by the millions of people who live along side of river Ganga. Here the river not only consist of industrial as well as household waste from various cities but also religious offering which are usually wrapped in the non-biodegradable plastic, not only these many cremation ceremonies which happens alongside of ganga Rivers mainly in Varanasi ghats the ashes are disposed in the ganga River only, many uncremated bodies of the people who died due to some diseases are found floating in the river which can lead to the spreading of the disease in the water. This led to changing the water colour of the Yamuna River into black. Many people who are poor did their day-to-day activity in the Ganga River like cleaning dishes, washing clothes, disposing of various waste etc.

Analytical Review of Environmental Statutes in India

The legal system serves as a pivotal factor in advancing the progress and welfare of communities and the environment by providing a set of rules and regulations that guide the actions of individuals, organizations, and governments. The basic objective of any law is to protect certain moral standards while advancing social justice and overall wellbeing. In order to conserve the environment, which is a common resource, it is crucial to adhere to the laws. This is the foundation of environmental protection law.

Ancient Indian Jurisprudence

It is well-documented that the reverence for nature and the preservation of the environment existed even before the establishment of civilization. This fact is evident from the artifacts and practices of the inhabitants of Harappa and Mohenjo-Daro. These ancient civilizations are known to have held a deep respect for the natural world and worshipped it accordingly. Manu inscribes in, "The laws of Manu", *"And from light as it transforms itself come the waters, which are traditionally known to have the quality of taste; and from the waters comes earth, with the quality of smell. This is the creation in the beginning."*¹⁰ Various regulations existed to prevent water pollution, including laws that prohibited activities such as urinating in bodies of water or disposing of human waste and other bodily fluids into rivers. Years later, in his treatise, the *Arthashastra*, he spoke extensively about protecting the environment. In his writing, he highlighted the obligation of the government to uphold the protection of forests, conservation of water resources, and preservation of wildlife. The usage and protection of natural resources are also governed by many Ashokan edicts.

Common Law Remedy during British Era

The origin of India's laws pertaining to water pollution management can be linked to the British common law systems that were introduced in the courts of Calcutta, Madras, and Bombay during colonial times. These legal resources, which were imposed during the British colonial period, served as the foundation for the legal framework governing water pollution in India. There were three types of Common Law remedies:

● *Liability for Escape of Noxious Object:*

The landmark ruling in *Rylands v. Fletcher*¹¹, made by justice Blackburn, established strict liability on an individual for harm brought on by the escape of a hazardous or poisonous object.

He observed, "*We think that true rule of law is that the person, who for his own purposes, brings on to his lands, and collects and keeps there, anything likely to do mischief if it escapes, must keep it there at his own peril and if he does not do so he is prima facie answerable for all the damage which is the natural consequence of its escape.*"

● *Negligent Usage of Hazardous Substances:*

The negligent use of a poisonous substance or pollutant may give rise to a nuisance claim as well as a negligence claim.

● *Violation of Property Rights related to Water:*

Every landowner who has a stream flowing through their property has a fundamental entitlement to the water that passes through it, including its amount and condition. This natural right is recognized for each riparian landowner. The Easement Act specifies that all landowners possess an inherent right to guarantee that any water that flows, passes, or seeps through their property remains uncontaminated by third parties before doing so within their boundaries. This natural right is recognized for each property owner. Some have argued that this Act confers upon users and landowners the privilege to contaminate without consequence. Yet, the word "reasonable" when read in the context of the Act's other clauses gave the clearest indication yet that pollution was to be outlawed to the fullest degree possible.

Constitution of India

In India's Constitution, there is no specific reference to water pollution. The Indian Supreme Court has given its interpretation of Article 21 of the Constitution as an intrinsic "right to life" that encompasses the entitlement to an unpolluted water environment, as demonstrated in the case of *Subash Kumar v. State of Bihar & Others*¹². Furthermore, in the case of *Virendra Gaur & Others v. State of Haryana*

& Others¹³, the Court ruled that the right to a sanitary environment is also covered under this constitutional provision

Articles 47 and Article 48 A of the Directive Principles of State Policy, in the Constitution”, mandate the State to strive towards enhancing public health and preserving and enhancing the environment, respectively. Moreover, Article 51A(g) of the Constitution” emphasizes that it is the “fundamental duty” of every individual to safeguard and promote a healthy and sustainable environment, which encompasses water bodies such as lakes and rivers.

According to the “Seventh Schedule of the Constitution”, the responsibility for water, sanitation, and public health falls under “List II, which is the State List”. Consequently, the respective state governments have jurisdiction over these matters, and not the central government. In 1992, Parts IX and X of the Constitution were added *via* the 73rd and 74th Constitutional Amendment Acts to establish local-level governing bodies such as “Panchayati Raj Institutions (Gram Sabhas or panchayats)” in rural regions and municipal authorities in urban areas. These amendments provide for the delegation of various responsibilities, including those pertaining to water, sanitation, and public health, to local authorities by the government.

The Indian Penal Code, 1860

Chapter XIV of the Indian Criminal Code, 1860 covers offenses related to public health, safety, convenience, decency, and morals, and addresses the issue of pollution to some extent.

Public Nuisance is defined in section 268 and can be used to prosecute individuals or entities responsible for water pollution that causes harm to public health or safety

Deliberate contamination of water in any public spring or reservoir is considered an offense under the Indian Penal Code, 1860. in a way that renders it unsuitable for the regular use that it is put to. But private wells and river pollutants are exempt from this clause. Furthermore, the prescribed penalty of a maximum fine of Rs. 500 and/or a maximum jail term of three months is not considered sufficient to effectively deter such offenses.

Code of Criminal Procedure, 1973

In accordance with Section 133 of the 1973 Code of Criminal Procedure, a prompt and concise remedy is provided where “any unlawful obstacle or nuisance should be removed from any public place or from any way, river, or channel which is or may be lawfully utilised by the public.” However, a restraining order issued by the SPCB pursuant to the Water Act may not be affected by injunctive relief under Section 133 (if any).

Water (Prevention and Control of Pollution) Act, 1974

The authority over water has been entrusted to the state governments or Union Territory administrations as per the Constitution, which includes water pollution. The Central Government has exercised the authority conferred upon it by Article 252 of the Constitution to enforce the “Water (Prevention and Control of Pollution) Act, 1974 (the Water Act)”, based on the resolutions adopted by two or more State Legislatures.

The Water Act’s two main goals are to:

- (a) prevent and manage water pollution and
- (b) maintain or restore the water’s wholesomeness.

The Act covers wells as well as streams, which are defined as rivers, flowing or dry watercourses, naturally occurring or constructed inland waterways, subterranean waters, and sea or tidal waters. It covers businesses, activities, and treatment and disposal systems, as well as “all persons,” which includes people, businesses, and municipal authorities. It also covers both trade and sewage effluents. The Act typically only applies to certain “water pollution, prevention and control” areas, although the State Government has the ability to do otherwise. Any such measure must be supported by the State Pollution Control Board’s recommendation or prior consultation.

To attain its objectives, the Water Act establishes the “Central Pollution Control Board (CPCB)” at the national level, as well as the “State Pollution Control Board (SPCB)” or Pollution Control Committee at the State or Union Territory level.

The CPCB’s primary duty is to promote stream and cleanliness throughout the States, and in cooperation with State Governments, it has the authority to establish criteria for them. In addition, the CPCB acts as an advisory body to the Central Government, oversees and coordinates the efforts of the SPCBs, resolves conflicts that may arise between them, and provides them with technical assistance and guidance, among other responsibilities.

The Water (Prevention and Control of Pollution) Cess Act, 1977 imposes a cess on those who use water in particular businesses and local governments in order to increase the CPCB and SPCBs’ financial resources. Those who install a sewage treatment plant or trade effluent treatment plant can receive a 25% reimbursement, whether they are individuals or local governments. Most of the time, the SPCB either does not assess and levy the water cess amount, or if it is, the consumers do not pay it and/or the SPCB does not attempt to collect it.

Procedural Shortcomings

- (a) The State Pollution Control Board must file a case in the trial court for

further legal action against a polluting unit in accordance with the law's provision for penal action against polluters, and the Board has the "onus of proof." Because the Boards were unable to fully satisfy the "onus of proof," the polluters were granted the benefit of the doubt in a significant number of situations when decisions were made.

- (b) The Pollution Control Boards are also subject to a legislative gap regarding the punishment of public employees. The rules of Section 197 of the Criminal Procedure Code provide that in order to prosecute such individuals, the Government must grant permission, which frequently makes it challenging for the Boards to pursue legal action against them.
- (c) The State Pollution Control Boards are obligated to comply with the binding directives issued by the Central Pollution Control Board. However, the Water Act also mandates the Boards to adhere to the guidelines and instructions of the respective State Governments. In certain instances, the directives of these two entities may not align or even be in direct conflict with each other.¹⁴

Limitations of the Institutional Framework

- (a) The Pollution Control Boards are often inadequately equipped to manage these arduous responsibilities due to the scarcity of resources provided to them. The fundamental criteria for the efficient operation of the pollution control machinery are qualified personnel and laboratory facilities for pollution monitoring.
- (b) The inadequacies of our regulatory framework are apparent when juxtaposed with those of other countries. The Environment Protection Agency (EPA) in the United States, for instance, has over 10,000 staff members, while the Central Pollution Control Board (CPCB) in India is forced to manage with less than 500 personnel.
- (c) Although it was envisaged that the Pollution Control Boards would operate as independent legal entities, in practice, they face numerous obstacles that prevent them from functioning as such. A significant factor is their heavy dependence on the government for their very existence. To ensure effective functioning, the Pollution Control Boards must be granted complete autonomy and absolute authority to enforce the law.
- (d) The government exchequer is expected to provide financial support to the Pollution Control Boards for both their planned and unforeseen expenditures. The "grants-in-aid" to the Boards, however, have been reduced or even completely withdrawn by a number of state governments.

Environment (Protection) Act, 1986

India enacted the Environmental (Protection) Act in 1986, as a response to the Stockholm Conference, which aimed to address global environmental issues. The Central Government is given broad authority under this Act to “prevent, control, and abate environmental pollution.” As the Act encompasses water resources, its provisions are applicable to bodies of water such as streams, lakes, rivers, and so on, and any individual may avail themselves of the EP Act’s mechanism.

The Act strictly prohibits the discharge or emission of water contaminants beyond the defined limits by any business operator. As per the legislation, the person responsible for the discharge and the location where it occurs or is expected to occur should take necessary measures to prevent or minimize water pollution. Moreover, they are mandated to report any such occurrence or suspicion to the relevant authority without delay. This also holds true if a discharge of a water pollutant exceeds the permitted criteria and happens (or is discovered) as a result of an accident or another unanticipated act or occurrence. The specified authority must also take the necessary corrective actions as soon as is reasonably possible.

National Green Tribunal’s Role in Environmental Governance

The proactive involvement of the judiciary as the “*amicus* environment” in India has brought about a significant shift in the country’s environmental landscape. In this role, the judiciary has advanced and recognized the principles of sustainable development, precaution, and polluter pays as fundamental laws. This has led to a transformative impact on the protection and preservation of the environment in India.¹⁵

Establishment

In three significant rulings, the Supreme Court of India favoured the establishment of environmental tribunals. In the cases “*M.C. Mehta v. Union of India*”¹⁶, “*Indian Council for Enviro-Legal Action v. Union of India*”¹⁷, and “*A.P. Pollution Control Board v. Professor M.V. Nayudu*”¹⁸, The Supreme Court of India, recognizing the need for expediting the judicial process in matters related to environmental disputes, suggested the establishment of specialized environmental courts in different regions of the country. The court further recommended that the Law Commission of India examine this matter and formulate suitable measures to facilitate the establishment of such courts. The proposal was aimed at addressing the growing concern over the increasing number of environmental disputes and the need to ensure effective and timely resolution of such disputes.

In its 186th Report on the Proposal to Establish Environment Courts (2003), the Law Commission of India proposed the formation of environmental courts.

The recommendation was made after analysing the scientific and technical issues presented in court and the lack of judicial knowledge in environmental matters. The Commission believed that “environmental courts”, which would consider both scientific and legal evidence, would be better suited to make a fair decision in such cases. Such tribunals may be given additional powers to carry out on-site inspections and receive verbal testimony from environmental experts in the local region.¹⁹

The National Green Tribunal (NGT) was proposed as “one element of a reformist approach to environmental governance” during the 2009 debate over the Green Tribunal Bill in Parliament. For the new tribunal, the government proposed establishing a circuit system. With the enactment of the “National Green Tribunal Act” in June 2010, the establishment of the NGT was brought about to introduce the necessary reforms and improvements in the environmental sector.²⁰

Paryavaran Suraksha Samiti & Anrv. Union of India²¹

The National Green Tribunal in the mentioned case observed that the legal framework for avoiding water pollution has consistently failed, and scarcely any responsibility has been recognised for such grave mistakes. It has also said that, Ministry of Jal Shakti (MoJS) may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country. The said mechanism may be called “National River Rejuvenation Mechanism (NRRM)” or given any other suitable name. NRRM may also consider the observations with regard to setting up of National/State/District Environment Data Grid at appropriate levels as an effective monitoring strategy,”

The Tribunal ordered that the chief secretaries of all State and Union Territory to work in mission mode to strictly adhere to deadlines for undertaking new projects and concluding ongoing projects. Additional actions should be performed in the form of effective action plans to reduce pollution and revitalise rivers. The technique of river rejuvenation should not be limited to just 351 sections; it could be used to clean up all contaminated rivers, no matter how big or small, including those that have dried up.

Manoj Mishra v. Union of India²²

The primary focus of this case was on the inadequacy of government agencies in taking the necessary steps to prevent pollution in the river and the insufficient enforcement of pollution control laws and regulations.

The National Green Tribunal appointed the “Yamuna Monitoring Committee for the Rejuvenation the River Yamuna & Abatement of Pollution” to oversee the implementation of its orders and to report periodically to the tribunal. The committee was tasked with monitoring the quality of water in the river, ensuring

compliance with pollution control laws, and taking action against violators.

In compliance with the NGT's orders, the monitoring committee prepared a final report that contained a tabular statement which provided details of the progress made by the committee in implementing the NGT's order²³.

The NGT issued directives to numerous government agencies, including the "Delhi Development Authority (DDA)", "Delhi Jal Board (DJB)", "Delhi Pollution Control Committee (DPCC)", "Central Pollution Control Board (CPCB)", "Ministry of Environment and Forests (MoEF)", and "Municipal Corporation of Delhi (MCD)", to implement urgent and efficient measures to prevent untreated effluent discharge and restore the river to its former state. The agencies were also directed to comply with the various pollution control laws and regulations and to take appropriate action against the violators.

Benchmarks for a Better Tomorrow: Analyzing Indian Judiciary's Impact Through Case Laws

The Indian legal system continues to fail when it comes to enforcement, despite having a remarkable array of laws on the books. Bureaucratic inaction, politicians' lack of concern for environmental issues, erroneous industrial manufacture, and state inefficiency are only a few of the factors that led the court, and the Supreme Court in particular, to intervene and right the wrongs.

However, given that practically every country in South-East Asia is still in its early phases of development, the issue is: Can the environment be safeguarded now? The main factor contributing to the state of the environment's decline is industrialization, which brings about development. A concept known as "Sustainable Development" was developed by the judiciary as a result of the need to strike a balance between economic development and the preservation of ecosystems in order to address the problem.

***Subhash Kumar v. State of Bihar*²⁴**

This case marks one of the initial landmarks where the Supreme Court recognized the importance of preserving and safeguarding the natural environment. The court gave a broad interpretation to Article 21 - the right to life - by incorporating the "right to wholesome environment," thereby expanding its scope. Furthermore, the court asserted that "The Right to Life encompasses the Right to the enjoyment of unpolluted air and water for a richer and more fulfilling life." This declaration underscored the criticality of environmental protection in the promotion of the citizens' welfare and recognized the interconnectivity of human life and the environment.

M.C. Mehta v. Union of India²⁵ (Kanpur Tanneries case)

The Ganga Pollution Cases have been pivotal in shaping water quality control jurisprudence, representing a significant turning point. In these cases, the court identified “urban liquid waste” and “industrial waste surface run-off” as the primary sources of pollution in the Ganga. The “*Kanpur Tanneries case*”, in particular, marked a milestone in the protection of the environment against hazardous industrial activities, paving the way for further advancements in this direction.

Justice ES Venkataramiah opined that, “*Under the law of the land, responsibility for treatment of the industrial effluents is that of the industry. While the concept of ‘strict liability’ should be adhered to in some cases, circumstances may require that plans for sewerage and treatment systems should consider industrial effluents as well*”²⁶

The court concluded that the financial resources of the polluter were irrelevant and ordered the tanneries to build up treatment plants.

Indian Council for Enviro-Legal Action v. Union of India²⁷

The landmark *Bichhri* case marked the end of Rajasthan’s chemical industry’s harmful practices of discharging hazardous effluents and untreated sludge into subsurface aquifers, leading to widespread pollution. The court took a unique approach to the respondent’s responsibility and validated the “Polluter Pays Principle” and “absolute liability” in this particular case, holding them accountable for the damage they caused to the environment. The judgment set a new precedent in the field of environmental law, emphasizing the importance of holding industries accountable for their actions and the resulting environmental degradation.

Justice delayed is justice denied, as demonstrated in this case. Remedial actions from the court were desperately needed by the inhabitants and those in the area. We can draw the conclusion that given the length of the case - 15 years and the severity of the harm done to the villagers, it should have been handled more harshly.

Vellore Citizens Welfare Forum v. Union of India²⁸

In the *Vellore Tanneries* case, the plaintiffs filed a PIL against the Tamil Nadu tanneries that were discharging a sizable amount of untreated sludge into river water. Arable areas, agricultural wells, and supplies of drinking water were thus impacted. The “Precautionary Principle” was acknowledged by the court in this case, and the tanneries were penalised in addition to reiterating the “Polluter Pays Principle”. In this instance, the “Public Trust” theory was applied for the first time.

M.C. Mehta v. Kamal Nath²⁹

The “Public Trust Doctrine” paradigm was made innovative in India because

of this case. The decision also appropriately applied two other significant environmental law concepts in addition to this notion. When the court ordered that the hotel pay the expenses of restoration, the “Polluter Pay Principle” was used. When the court awarded the hotel exemplary damages, the “Principle of Deterrence” was taken into consideration.

The Public Trust Doctrine provides the framework for improving the efficacy and effectiveness of Indian environmental law. It also commands the state to safeguard and conserve the natural resources that environment has provided for mankind. They need to be protected, preserved, and respected. As the right to a healthy environment is deemed to be a fundamental human right, it has become the responsibility of Indian citizens to safeguard their environment from any potential harm.

N.D Jayal v. Union of India³⁰

In the well-known case of *ND Jayal v. Union of India* (2003), a bench of Justices S. Rajendra Babu, D.M. Dharmadhikari, and G.P. Mathur rendered a decision on a writ petition submitted under Article 32 with regard to the legal activities related to the environmental concerns of Tehri Dam.

In line with the precautionary principle, the Indian Supreme Court held that in situations where there is ambiguity or uncertainty arising from inadequate information about the potential extent of harm that may occur, the industry that contributes to the pollution has the burden of proving that the balance will be maintained in order to preserve the ecological balance, the environment, and its resources. In another decision, the Court determined that the “Right to Development” encompasses more than merely economic security. Fundamental human rights were also guaranteed by the Right to Development.

Conclusion and Suggestions

The aforementioned part of the paper makes it quite evident that water contamination is changing in our nation. There are several reasons for this. The study attributed that the primary cause is the significant increase in population, which makes it nearly hard to address environmental issues effectively even while the desire to do so exists. Additionally, the planning is flawed. As a result, there is an ever-increasing demand on water resources as well because resource expansion is not keeping up with population increase and resources per capita are declining. This is leading to widespread water pollution, which is escalating quickly.

The industrialists, which has been constantly violating the water pollution control regulations, is the largest offender in achieving the intended outcomes of control of water pollution. For instance, only 16 out of the 63 polluting units in Delhi have Effluent Treatment Plants [ETPs] installed or under construction. The

survey found that Delhi has 28 industrial zones with approval and a total of 21,627 industrial units.

Over 50% of industrial units are identified as the main source of solid waste pollution, and unfortunately, no significant measures have been taken to address this pollution problem. Therefore, it is of utmost importance to strengthen the laws governing water pollution control and provide sufficient funding and trained personnel to the responsible organisations in these circumstances.

In order to reduce the frothing in the Yamuna River, the judiciary and the government have taken a number of actions, such as building sewage treatment facilities, enforcing tighter rules, and removing encroachments and solid waste dumps. The Yamuna Monitoring Committee has proposed that in order to clean up the river, a network of monitoring stations be established, eco-friendly products be promoted, and bioremediation methods be used. The Yamuna River and its surrounding ecosystem's long-term health and viability depend on these actions.

Establishing effective coordination between state and central agencies and fostering a strong commitment to the enforcement of laws and achievement of goals is of utmost importance. The sheer number of cases the Indian Supreme Court has decided makes it abundantly obvious that the court has played a praiseworthy role in reducing water pollution and promoting environmental preservation. In such scenarios, the intervention of the judiciary has proven to be an efficient measure in curbing water pollution and enhancing environmental conditions.

Suggestions

- A system of mandatory public hearings ought to exist.
- For the Act to be implemented more effectively, a specific provision for public participation is required.
- The Act should have provisions for setting quality requirements and pollution elimination targets.
- The organisations given the responsibility should add trained staff.
- The creation of an Environment Protection Authority at central level, which should be given significant jurisdiction and become a department of the Ministry of the Environment, is also crucial.
- To further strengthen the protection of the environment, it is necessary to set up a specialized court system that can handle pollution-related cases, promote greater media participation to raise awareness, and establish documentation centres for the dissemination of information at both the central and state levels. These measures will enhance the existing legal framework and enable citizens to take an active role in safeguarding the environment.

Most importantly, it is imperative to utilize the present scenario by enhancing environmental consciousness through the establishment of social groups that take action and by emphasizing the importance of public involvement in combating the escalating menace of water pollution in our country. It is ultimately up to us to choose whether to survive at the cost of the environment and the planet, or to protect them.

Notes

1. V.R. Krishna Iyer, *Environmental Pollution and Law* (Vedpal Law House, 1st edition, 1984).
2. Vivek V. Ranade and Vinay M. Bhandari, *Industrial Wastewater Treatment, Recycling and Reuse* 1-58 (Butterworth-Heinemann, 1st edition., 2014).
3. UNEP 2016, *A Snapshot of the World's Water Quality: Towards a global assessment*, United Nations Environment Programme, Nairobi, Kenya, available at: <https://www.unep.org/resources/publication/snapshot-report-worlds-water-quality> (last visited on March 14, 2023).
4. UNESCO World Water Assessment Programme (UNESCO WWAP): *Facts and Figures* Water pollution is on the rise globally, available at: <https://www.unesco.org/reports/wwdr/2022/en> (last visited on March 14, 2023).
5. Central Pollution Control Board, "Inventorization of sewage treatment plants" (Ministry of Environment and Forests, Govt. of India, 2015), available at: https://nrcd.nic.in/writer/readata/FileUpload/NewItem_210_Inventorization_of_Sewage-Treatment_Plant.pdf (last visited on March 14, 2023).
6. David Haberman, *River of Love in an Age of Pollution: The Yamuna River of Northern India* (University of California Press, 1st edition, 2006).
7. Kelly D. Alley, *On the Banks of the Ganga: When Wastewater Meets a Sacred River* (The University of Michigan Press, 2002).
8. Wong, CM, Williams, CE, Pittock, J, Collier, U and P Schelle, "World's top 10 rivers at risk" (WWF International, Gland, Switzerland, March 2007), available at: <https://wwfeu.awsassets.panda.org/downloads/worldstop10riversatriskfinalmarch13.pdf> (last visited on March 14, 2023).
9. Benjamin Elisha Sawe, *The Most Polluted Rivers in the World*, April 2017, available at: <https://www.worldatlas.com/articles/the-most-polluted-rivers-in-the-world.html> (last visited on March 14, 2023).
10. Brian Smith, Wendy Doniger, *The Laws of Manu* (Penguin Books London, England, 1991).
11. 1868 LR 3 HL 330.
12. AIR 1991 SC 420.
13. (1995) 2 SCC 577.
14. The Water (Prevention and Control of Pollution) Act, 1974 (Act 6 of 1974), s.18.
15. Geetanjoy Sahu, "Implications of Indian Supreme Court's Innovations for Environmental Jurisprudence", 4/1 Law, Environment and Development Journal (2008), available at: <http://www.lead-journal.org/content/08001.pdf> (last visited on 31 March, 2023).
16. AIR 1987 SC 965.
17. 1996 (3) SCC 212.

18. 1999 (2) SCC 718 and 2001 (2) SCC 62.
19. Law Commission of India, “*186th Report on Proposal to constitute Environment Courts*” (September, 2003).
20. The National Green Tribunal Act 2010, the Gazette of India Extraordinary (No. 19 of 2010).
21. (2017) 5 SCC 326
22. 2018 (2) SCALE 456.
23. Yamuna Monitoring Committee, “*Tabular Statement Covering Major Issues in Yamuna Monitoring Committee’s Final Report*” (June 2020).
24. AIR 1991 SC 420.
25. AIR 1988 SC 1037.
26. *Ibid.*, at p.no. 1044.
27. AIR 1996 SC 1446.
28. (1996) 5 SCC 647.
29. (1997) 1 SCC 388.
30. (2004) 9 SCC 362.