The Polluter Pays Principle in Effect at the National Green Tribunal in India

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ABSTRACT

India has witnessed several infamous cases of industrial pollution on a massive scale, the most tragic being the Bhopal Gas Disaster in 1984, which led to thousands of deaths and several hundred thousand injuries for over thirty years. However, the significant progress over the past few decades in the expansion and enforcement of domestic environmental law has gradually broken the perception that India could be used as a pollution haven by multinational companies. The 'Polluter Pays Principle' (hereinafter referred to as 'PPP') under Principle 16 of the Rio Declaration on Environment and Development, 1992 (Rio Declaration), has recently begun to occupy significant standing in domestic environmental disputes. The principle essentially implies that polluters must bear the costs of restoring the environment of that pollution. In India, the Supreme Court has used the PPP in several landmark environmental decisions; in 2010, the National Green Tribunal Act (NGT Act), codified the application of the PPP by the National Green Tribunal (NGT) when deciding civil cases involving a substantial question of the environment.

In this article, the author will gauge the exact purpose of the PPP in its application in the NGT in India; the forum created to adjudicate legal disputes with substantial question of the environment. The author seeks to examine whether the PPP creates economic repercussions for polluters and acts as a deterrent, and compensates those harmed by environmental damage, and is able to generate the amount necessary to restore the environment to its previous state. The PPP is now used far too often as a compensatory tool as opposed to other motivations and the author seeks to discuss both the benefits and limitations of this approach. Benefits include that victims of pollution are assured some monetary relief in harsh circumstances while the limitation includes reduced penalties upon polluters if there is a lack of direct victimization.

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Introduction

Given the lax environmental regulation standard and enforcement in India, the significance of the application of the PPP lies in diminishing the perception of India as a pollution haven. A developing economy like India which seeks to increase its receipt of Foreign Direct Investment, also risks exposing itself as a potential pollution haven for industries that seek to avoid far higher standards of care and compensation in their parent jurisdictions; hence, operating in developing nations with weaker environmental regimes (Atapattu, 2007). By strictly applying the PPP, the NGT in India therefore tries to minimize this potential for abuse of greater global industry. The other major benefit of applying the PPP is that it offers monetary relief to victims of environmental degradation. The harm to health and property arising from this degradation can be remedied partially by the awarding of monetary damages, especially if the victims are financially vulnerable.

However, owing to difference in purchasing power parity, purely monetary damages for polluting a developing country may be perceived as a mere business cost that still allows the polluting a developing country to be a more profitable venture than polluting a more exacting nation. In other words, damages extracted as a result of the application of the PPP can be seen by industries as nothing more than the cost of conducting a polluting business, a convoluted permit for pollution. Irrespective of intent, the imposition of fines or fees and damages awarded under the polluter pays regime could potentially be powerful deterrents against faulty environment practices, especially for small establishments or individuals who cannot afford to pay the same. However, we see that the PPP has often been used in a rather distorted fashion, where the onus of restoring the environment is placed on citizens, without a defined nexus between the "payers" and the pollution. This is instead, akin to a fee or a tax,

but was introduced on the basis of the PPP. This article uses

Principle 16 of the Rio Declaration states that it is the responsibility of domestic governments of all signatory nations, to promote "the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment." This is the interpretation of the PPP most commonly used within judgments in India as it is the easiest to adapt in a domestic scenario. Prior to the Rio Declaration, most applications of the principle were with regards to international and transboundary pollution as mentioned in Article 22 of the Stockholm Declaration of 1972; the principle was promoted by the Organization for Economic Cooperation and Development in the 1970s when public pressure and international developments led to several governments introducing policies in favor of environmental protection (Trehan and Mandal, 1998). COD/2006/0086 amending the European Directive 2004/35/EC mentions and describes the PPP, stating that the EU Member States, had to ensure action to "remediate the contaminated sites identified within their national territory" (Parker, 2009).

In India, the words "Polluter Pays Principle" were first explicitly included as part of domestic law only in the text of the NGT Act. However, the statutory acceptance of this principle was the culmination of years of public interest litigation relating to environmental issues, and judicial activism which repeatedly included and upheld the PPP, ensuring that the international environmental law principle became part of the law of the land, through judicial precedent (Sharma, 2008). Thus, environmental rights were not granted or created by legislation, but became part of the law through precedent. Judges recognized that the government had a duty to protect the ecology, prevent pollution and ensure sustainable development (Nomani, 2000).

Public Interest Litigation

The PPP although originally an international environmental law principle, has been an integral part of the decisions of the NGT in India, in the six years since its inception through the enactment of the NGT Act. In previous decades, environmental protection and protecting the rights of the public to a clean and healthy environment were processed predominantly through 'Public Interest Litigation' (PIL). PIL is a special kind of writ petition which can be filed before the High Court or Supreme Court under the Constitution of India, or before the Magistrate's Court under the Code of Criminal Procedure. The Supreme Court of India issued guidelines regarding PILs in 1988, stating the Courts must hear "[p]etitions pertaining to environmental pollution, disturbance of ecological balance, drugs, food adulteration, maintenance of heritage and culture, antiques, forest and wild life and other matters of public importance" as public interest litigation. In a PIL, any 'public spirited individual', could bring an action irrespective of whether his or her rights were directly violated, or if he or she was an affected party. By enabling environmentalists, non-profit organizations and ordinary citizens to sue on behalf of the public to ensure that environmental rights are protected, PIL emerged as a powerful tool in the context of environmental justice.

The development of PIL in India was spearheaded by a judiciary that instead of only following the bare text of the Constitution, interpreted the fundamental right to life to include the right to a healthy environment. This ensured that international environmental law principles such as the PPP and the precautionary principle were included in judicial decisions. An institutional fillip to these developments has emerged in the form of the NGT, a specialized tribunal with jurisdiction over civil matters involving a 'substantial question of the environment'. It was established through the enactment of the NGT Act, 2010, which has continued and advanced the law established by the Supreme Court in its decisions, guaranteeing the right to a healthy environment to all persons. In this article, the author shall discuss some of these landmark decisions in the next section. The NGT has strongly espoused the PPP, in particular, in the six years of its operation.

This article provides a brief overview of the development of the principle by the Supreme Court of India, and then analyses crucial decisions of the NGT applying the PPP. The author argues that, over time, the PPP has expanded in scope and intention. As opposed to merely being a principle to economically restore the damage done to the environment, it has become a tool to compensate victims of such damage and pollution, bringing into question its efficacy and raising questions regarding liability and retribution.

Supreme Court of India

India's ecosystem and its water sources have undergone considerable degradation over the years, owing to a combination of factors including corruption in the bureaucracy and misplaced priorities of successive governments, irrespective of their political ideologies. This corruption and environmental degradation was one of the outcomes of large scale industrialization and liberalization of the economy.

At such a time, judicial intervention was one of the last resorts to arrest environmental degradation, and the judiciary rose to the occasion by interpreting the Constitution in a manner which would help preserve the environment in India, and the health and well-being of its people in the interest of social justice (Luppi, Parisi and Rajagopalan, 2012). In particular, the Supreme Court has expressed both willingness and creativity in applying the PPP in India, through its interpretation of Constitutional principles (Carnwath, 2012). The application of the PPP by the Supreme Court sent a clear message to industries that the environmental costs of production would have to be internalized. Consistent decisions to that effect have also included the shutting down of errant establishments, relocation away from residential areas, and mandating the introduction of new norms by relevant authorities (Sawhney, 2003). It may seem intuitive that the one who pollutes must bear the responsibility to restore the damage resulting from such pollution. The need for the establishment of such a principle may be rooted in the conception of natural resources, especially air, water and forests as common goods, to be used by the public, and maintained for such use by the government. According to this understanding, private entities obtain permits or licenses to pollute from the government and the overall responsibility of maintaining an optimal level of environmental protection remains with the government, which only has the public's tax money to spend to remediate the pollution. The PPP requires that the polluter be held directly responsible for paying for the restoration of the environment, depending on the circumstances and magnitude of the pollution.

There are two components comprising the PPP: the polluter, and the payment. In a case of environmental pollution, there is significant cost incurred to restoring the environment to a pristine state, before this degradation occurred. If this environment is public land, usually the government would have to bear the cost of restoring the pollution. This would result in the government, and therefore taxpaying individuals having to pay for pollution caused by third parties. In order to forge a direct causal link to the pollution, it is necessary to determine the source or origin of the pollution and then attribute liability to that source, so that the 'polluter' and not the general public is responsible for the 'payment'. However, without explicit statutory recognition of such a principle, petitioners seeking redress required the creation of the PPP, first in international law, and subsequently in domestic law to recognize this causal link. It reinforces the logical conclusion that the government, and thereby the taxpayer, who is also the victim of pollution, should not have to pay for cleaning up the pollution caused by corporations or individuals. The polluting processes are designed to generate profits to the private sector and corporations, and do so at the taxpayers' expense.

The first Supreme Court judgment to use the PPP as part of its legal rationale was *Indian Council for Enviro-Legal Action v. Union of India and Ors.* (1996 AIR 1446), also referred to as the *'Bicchri'* case. In the judgment, the Court relied upon the Principle, to answer the "question of liability of the respondents to defray the costs of remedial measures". The judgment held that that the cost of prevention and remediation of environmental damage should be borne by the entities causing the said pollution, explaining that placing the burden of bearing the costs on the government, and by extension, the taxpayer was not justifiable.

In the *Bicchri* case, the Court recognized the fact that sections 3 and 5 of the Environment Protection Act, granted the Central Government the power to issue directions and take steps in order to ensure that the PPP is effective, and allowed the Central Government to decide the quantum of remedial damages. Moreover, a close reading of the judgment also reveals how the Court fused the PPP closely with the principle of strict liability (the principle which states that if one is engaged in an inherently dangerous activity, they will be responsible for the damage it does, irrespective of whether they directly caused the damage or not). The Court held that if the activity in question was inherently dangerous or hazardous then the perpetrator was required to make good any damage to the environment or affected person, regardless of whether the perpetrator had taken reasonable care regarding the same, by virtue of the very nature of the activity.

Subsequently, in 1996, in the case of *Vellore Citizens Welfare Forum v. Union of India*, (AIR 1996 SC 2715), the Supreme Court applied the PPP strictly, and directed the tanneries which were polluting the surrounding water sources to pay compensation not only to the persons who were affected by the pollution, but also towards the restoration of the ecological damage, in pursuance of the principle (Mehta, 1999). The Court reiterated that the PPP was a crucial component of sustainable development. This case is of tremendous significance because the rationale employed by the Court was that the PPP, although an international environmental law principle, was decidedly part of the 'law of the land' through constructive interpretation of the Constitution. The Constitution recognizes the fundamental right to life and liberty (Article 21), and the fundamental duties to improve public health (Article 47) and to protect and improve the natural environment (Article 48A). When these were read in conjunction with the provisions in the Environment Protection Act, 1986, the Air Act, 1981 and the Water Act,

1974, the judges came to the conclusion that the PPP was a part of Indian law.

The next year, the Supreme Court developed its application of the principle in the case of *M.C. Mehta v. Kamal Nath*, (1997) 1 SCC 388, against, among others, a former Minister for Environment and Forests, involved in a company which had constructed a resort that released wastes and pollutants into the river Beas. The Court applied the PPP while invoking the doctrine of public trust, and awarded not only damages for ecological degradation, but also exemplary damages for constructing on the riverbed.

The Supreme Court ensured the application of the PPP, despite it not being a codified part of domestic environmental law, until the NGT Act included it as a guiding principle for judicial and expert members of the Bench, in the adjudication of environmental matters at the NGT.

National Green Tribunal Act, 2010

The NGT Act, established the judicial body, the NGT, having "jurisdiction over all civil cases where a substantial question relating to environment is involved" (Section 14). Therefore, any civil dispute which contains a substantial question or issue relating to the environment under statutes like the Environment Protection Act, 1986, the Air Act, 1981 the Water Act, 1974, the Forest Act, 1927, the Biological Diversity Act, 2002 and the Public Liability Insurance Act, 1991 can be adjudicated upon by the NGT.

Section 20 of the NGT Act states that the NGT shall apply the principles of Sustainable Development, the Precautionary Principle and the Polluter Pays Principle when rendering a decision, or order or an award. Section 19 of the NGT Act makes it clear that the NGT is not bound by the rules of procedure under the Code of Civil Procedure, 1908 but by the principles of natural justice. "Natural justice" is the term of art used to describe procedural rights in legal systems based on English law; rights which originate from ideas of morality, such as the principle of audi alterem partem, meaning both parties must have a chance to be heard by the Court (Schwartz, 1952-1953). These guiding principles have enabled the NGT to adjudicate environmental disputes in keeping with the interest of the environment under the law, without being hampered by complex procedural rules unlike the traditional civil courts.

In *Jan Chetna v. Ministry of Environment and Forests* (Appeal No. 22 of 2011(T) 9/02/2012), the NGT examined the principles of the Brundtland Report (World Commission on Environment and Development, 1987) on sustainable development, and international environmental law principles, reiterating that the PPP was an integral part of Indian environmental law. The judgment introduced the reasoning that the PPP was effective and applicable in a geographic region which was governed by "uniform environmental law", such as a nation state. While examining the efficacy of non-binding international law, it is important to note the example of the PPP wherein an international principle had evolved to an extent that it was seen as more effective through domestic frameworks.

Hindustan Coca Cola Beverages Pvt Ltd. v. West Bengal Pollution Control Board (Principal Bench, Appeal No. 10 of 2011) involved water pollution caused by one of the biggest bottling and beverage companies in the country. The NGT was stringent in its application of the PPP against the company stating that a "polluting industry" must bear the costs for abatement of the pollution and that they were "bound to compensate", hence bearing liability for expenses of restoring the environment. Moreover, the Tribunal delegated the responsibility of assessing the costs of restoration and damage to the environment to the West Bengal Pollution Control Board (WBPCB), and ordered that the company should deposit the money with the WBPCB as they would carry out the restoration of the environment. One observes a shift in the application of the principle, wherein the role of awarding damages, previously reserved for the Court was transferred to the government body in charge of conducting the restoration.

Since the PPP essentially functions as a cost, the quantum of damages awarded is illustrative of the amount of environmental damage caused by the industry. In *Vanashakti & Anr. v. MPCB and Ors.*,(Application No. 37 of 2013 (WZ)) damages worth INR 760 million were awarded for the purpose of "restitution and restoration", to be paid by several publicly owned Common Effluent Treatment Plants and industrial establishments for polluting the rivers Ulhas and Waldhuni in the state of Maharashtra in Western India.

In *M/s. NGT (SZ) Bar Association v. The Chief Secretary, Govt. of Tamil Nadu and Ors.* (Application No. 41 of 2015 (SZ)), the South Zone Bench of the NGT took suo moto notice of an incident involving the Ranipet SIDCO Finished Leather Effluent Treatment Company Ltd., in which an illegal tank containing waste from nearby tanneries collapsed. The accident resulted not only in pollution but also led to the deaths of 10 workers, who were buried alive under the onslaught. The NGT awarded damages of INR 7.5 million, against the effluent plant for the incident, including damages for environmental damage and compensation for the families of the victims.

Perma Nand Khanta v. State of Himachal Pradesh (CWP1480/2010), the question before the Tribunal was regarding the air and noise pollution at the Rohtang Pass glacier in Shimla in Himachal Pradesh arising from indiscriminate entry of vehicles onto the motorable Himalayan roads. The NGT further deployed the essence of the PPP to practical effect in this case by imposing a fee on each vehicle to be contributed to the State Government's Green Tax Fund instead of asking a particular polluting industry to pay for the pollution caused. The Fund is used for afforestation and controlling and prevention of pollution. It is evident that the NGT used the principle innovatively, and shifted responsibility from the industry, to the consumers of that industry, thereby widening the scope of who should pay. Further, instead of awarding damages post adjudication, it imposed a pre-emptive payment accounting for inevitable damage, thus alleviating the need for exact assessment of damage and litigation for damages.

In *Vardhaman Kaushik and Ors. v. Union of India and Ors.* (Principal Bench, Application No. 21/2014), the NGT addressed the issue of air pollution resulting from heavy vehicles plying within New Delhi. Using a similar rationale as in Khanta, the NGT ordered that all vehicles, would have to pay an Environment Compensation Charge at the rate of INR 500 for four-axle and above vehicles, INR 700 for two-axle vehicles and INR 1000 for three axle heavy vehicles, and that this charge would be addition to the toll already paid for use of certain roads. In a resounding show of support to the decision of the NGT, when the Supreme Court heard an appeal from this order of the NGT, it not only upheld the order, but also increased the quantum of charge to INR 700 for light commercial vehicles and INR 1300 for three-axle heavy vehicles entering New Delhi.

The NGT further developed the PPP in a case involving water pollution in the river Yamuna. The National Capital Region of India, is situated on the banks of the Yamuna. The NGT ordered that every household in Delhi would be required to pay a minimum environment compensation amount of INR 100, with the charge to be directly proportional to the water bill or the property tax paid by the household, and this charge was irrespective of whether the household had a sewer system, or whether it was an authorized construction (Jain, 2015). As discussed before, this distortion of the PPP results in citizens having to bear the burden of restoring the environment, and with no clear link between the "payers" and the pollution. This arrangement is similar to a tax but uses PPP as a justification, which is problematic.

Experiences at the Western Zone Bench of the NGT at Pune

The following section draws upon a few cases argued before the Western Zone Bench of the NGT which involved application of the PPP.[1] The case of *Sandip Kayastha v. Alandi Municipality and Ors.* (Application No. 62 of 2015) involved massive dumping of municipal solid waste and industrial effluents into the river Indrayani at the town of Alandi. At the time, there existed a practice of municipal authorities issuing directions to the errant companies and requiring the furnishing of bank guarantees by the companies, which would be forfeited if they did not pay damages. In this case, the NGT ordered that as opposed to these steps, the authorities must initiate "complete closure by sealing of machinery of the industry and taking over the industry by putting locks and shutting down everything." The industries which were found to be polluting the river were ordered to pay a sum of INR 500,000 each. This insistence by the judiciary to quantify environmental damage, and require monetary payment to address the same, as opposed to disciplinary action such as sealing of machinery, is evidence of the direct application of PPP by the NGT.

In *Ashok Kajale and Ors v. Godavari BioRefineries and Ors.* (Application No. 68 of 2014), the PPP was applied grossly as well as specifically. The Respondent owned a chemical manufacturing industry, and was releasing the trade effluents into the river banks. This release led to the contamination of the river water and of the groundwater in the wells. The pollution had tragic consequences on the health of the residents in the area and on the fertility of the soil, affecting agriculture. The NGT ordered the Respondent to pay INR 5.5 million towards the cost of remediation of the overall ground water and land, and INR 200,000 toward each polluted well in the area.

Similar to the pre-emptive application of the PPP by the Principal Bench in New Delhi, the Western Zone Bench issued an order referring to a green tax. The case, *Ravindra Bhusari v. The Ministry of Environment and Forests and Ors.* (Application No. 98 of 2014) regarded pollution caused by the use of fireworks and other recreational explosives. The NGT in its judgment directed civic bodies to levy INR 3,000 as 'green tax' from firecracker sellers. The NGT directed that the corpus collected from the tax be used to clean the solid waste generated from firecrackers at public places, and part of the amount be used for environmental activities such as planting trees and constructing toilets for women. We see here, a departure from the traditional application of

[1] The author personally assisted as Legal Counsel in these cases.

the PPP, wherein the direct polluter, the consumer who uses firecrackers, or the manufacturer, who is the creator of polluting products, does not bear the burden of a tax, but the seller or the intermediary does. Although it can be argued that the seller will eventually pass on the cost to the consumer, and therefore in effect, the consumer will pay the price, this application compromises the resourcefulness of the principle which lies in directly holding the polluter liable to compensate.

Observing the different kinds of cases decided by the NGT provides an overview of the evolution of the PPP at the NGT. Since it is part of the guiding principles of the Tribunal itself, it has been applied liberally in environmental cases, resulting in a combination of welcome remedial measures, and worrisome inconsistencies within its application.

Critiquing the Polluter Pays Regime at the NGT in India

There are at least four drawbacks associated with the polluter pays regime as it currently works in India. One of the primary objections that could be raised to the application of this regime, is that it is an extremely capitalist solution to an ecological and social problem. While there may exist an economic nexus between the immediate problem at a micro level and its solution, there remains a jurisprudential and policy divergence between the larger systemic problem and its solution.

Second, problem with applying the PPP is that it can sometimes be inconsistent with the principle of inter-generational equity. Along with PPP, and the Precautionary Principle, the doctrine of inter-generational equity is an international principle which has now become part of domestic Indian law through judicial intervention. The principle implies that as a species, humans must share the environment with past, present and future members of the species, while also being beneficiaries, entitled to its use in the present (Malik, 2015). Principle 2 of the Stockholm Declaration (Declaration of the United Nations Conference on the Human Environment, 1972) states that "The natural resources of the earth, including the air, water, lands, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of the present and future generations through careful planning or management, as appropriate." This principle was part of the rationale in the Supreme Court's decision in the case of *A.P. Pollution Control Board v. Prof. M.V. Nayudu and Ors.* (1999 (2) SCC 718). In *Enviro-Legal Action v. Union of India* (1996 (5) SCC 281), the Supreme Court had held that the Parliament has enacted laws against pollution such as the Environment Protection Act, 1986 in order to "protect and preserve the environment and save it for the future generations." The NGT is bound by the Supreme Court's inclusion of the principle of inter-generational equity in domestic environmental law. However, there can be possible inconsistency while applying both the principle of inter-generational equity and the PPP together.

Reducing environmental damage, harm to human health and loss of biodiversity, almost all of which are irreparable and cannot be restored to their original state, leads to a compromise on the principle of intergenerational equity. By awarding monetary compensation at the present, we do not account for the costs of degradation which are imposed on future generations, and whether monetary damages can sufficiently restore the damage at all. In the absence of strong enforcement mechanisms complementing environmental legislation, the PPP is capable merely of reducing the award to an operational cost within the revenue model of most polluting industries.

Third, a problematic feature of the PPP in India is the frequency with which it is applied against government bodies. When municipal authorities or boards or Ministries are complicit in acts of pollution, either by omission or commission of pollution, the damages that they pay under the ambit of the PPP are essentially costs that are born by the Exchequer, and therefore funded by taxes paid by citizens. When citizens receive these awards, if they are being paid by the State, then they are in essence, compensating themselves, subverting the entire purpose of the principle. Therefore, it is necessary for the NGT to increasingly impose personal liability on errant officers of the government who have contributed to acts of pollution, instead of deriving this amount from the State coffers.

Fourth, particularly in developing countries, the PPP has emerged in a form which is focused more on compensating victims of environmental tragedy than restoration of the ecology. Since these incidents involve an urgent need for monetary compensation, the principle is used to ensure compensation to victims. Typically, in the wake of an environmental mishap, the urgency of the circumstances drive government authorities to provide compensation to the affected parties for actions of private parties; the State then acts in subrogation against the polluters recovering costs through different means like withdrawing permits required for operation of the polluter. This transformation of direct liability into indirect liability results in a situation where fiscal revenues restrict the budget of the local governments. Yet, in an attempt to avoid litigation and adverse awards the authorities become more efficient in regulation and the prevention of environmental pollution in the first place (Faure and Raja, 2010).

Another point relating to the PPP is that large scale polluting energy industries such as coal and nuclear energy, when not held liable for their environmental degradation de facto enjoy an implicit subsidy since any polluting industry that does not pay for environmental costs is essentially a subsidized industry. Removal of this implicit subsidy would have the twin effect of encouraging energy conservation along with environmental protection (United States Workshop on the Economics of Sustainable Development, cited in Kettlewell, 1992).

Although environmental statutes like the Air Act, 1981, include criminal liability within their ambit, the NGT Act gives the Tribunal powers only for the purpose of civil jurisdiction. The PPP has been applied with the principle of strict liability within civil cases on several occasions, wherein irrespective of the fault of the polluters, they have been held liable for carrying out an inherently hazardous activity in the first place. However, several cases of pollution satisfy the basic elements of a crime. First, they display, on the very face of it, intention to pollute or at the very least, undertake the active decision of continuing to pollute with full knowledge of its effects, effectively satisfying the mens rea requirement for intention under criminal liability. Next, it remains undisputable that pollution or environment degradation is unequivocally a wrong against society as a whole, because there is tremendous potential for the NGT to impose criminal liability on errant entities. In light of this, amendments to its jurisdiction to include criminal jurisdiction would be useful, and would complement civil liability under the PPP.

Conclusion

The NGT, with its focus on environmental law has consistently applied the PPP to mixed effect over the six years since its inception. It must be noted that the NGT has civil jurisdiction, which in the context of the Indian legal system, refers to disputes between individual parties, for matters which are not criminal offences. Criminal offences are argued before designated criminal courts.

The NGT, on one hand it acts as an effective compensatory mechanism, and a possible deterrent for errant corporate entities; on the other hand, it has limited scope for use while dealing with State complicity in pollution, leading to instances of its misplaced application. Due to the emphasis on judicial activism and consequently on judicial benevolence which has been a key feature of the environmental movement in India, there still exists no clear consensus or formula how damages can be computed; whether it is based upon the actual costs of restoration of the environment to the original state or for incidental harms such as medical bills, there remains an ambiguity in how the compensation to victims should be awarded. Due to the multiplicity of pollutants in our cities today, it is also becoming increasingly difficult to attribute pollution to particular entities, which affects the applicability of the Principle in its original sense (Iyengar, 2016).

Looking ahead, one might note that 'the precautionary principle' is another principle of international environmental law which now finds itself to be part of domestic Indian law, as a guiding principle under Section 20 of the NGT Act. The precautionary principle refers to the approach which takes precautionary and preventive measures with respect to activities which pose a threat to human life and the environment, even if there is a lack of complete certainty regarding the causal link (Kriebel et al, 2001). If the PPP were to truly act in a manner which ensured payment for pollution in a direct sense, the Indian parliament could amend the existing Air Act or Water Act, to include specific PPP provisions, or a separate statute in the United States like the "Comprehensive Environmental Response, Compensation and Liability Act of 1980", which provides for the imposition of liability for environmental cleanup costs (Nanda, 2006).

A potential solution ensuring more equitable application of the principle is in accordance with the theory first formulated by Costanza and Corn regarding a "precautionary polluter pays principle" which modifies a system of a deposit and refund, as paying of an indemnity bond for fixed periods. This principle is already in practice in the United States where under the U.S. Surface Mining Control and Reclamation Act (1977) which requires companies to pay a bond to offset potential harms, before they even begin mining operations. This system of "environmental assurance" would guard against scientific uncertainty in case of potential environmental harm. By depositing an amount befitting the most damaging possible effect of its activities, potential polluters must prove that they have the financial ability to bear environmental costs at the very outset of production and can bear the damages for the worst possible scenario, with the amount of the bond acting as the polluters' own safety valve (Kim, 2008).

India, as a liberalized economy and as a welfare state in an intense transition to a developed state, faces constant pressures and threats to its environment. Therefore, using market based solutions to environmental crises for restitution and deterrence is not only logical, but also the most feasible. This makes application of the PPP an essential prerequisite for the delivery of environmental justice. However, India's high biodiversity and its forests, home to several endemic and endangered species, its snow fed rivers and freshwater sources, are extremely vulnerable to climate change. If the NGT merely puts

a price on environmental pollution, devoid of strict enforcement mechanisms, it will fail to restore the environment and its biodiversity adequately for future generations.

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