CHAPTER 3
PRINCIPLES OF LIABILITY FOR ENVIRONMENTAL HARM:
AN INDIAN PERSPECTIVE

3.1 Introduction

This chapter explores the nature and scope of environmental liability in India with special reference to the emerging principles of liability. Indian judiciary has paved a path for environmental liability on the bitter experience of the Bhopal gas tragedy. The higher judiciary has very consciously and conscientiously developed the environmental jurisprudence of India. In recognising and applying the concept of sustainable development and the “precautionary principle”, “polluter pays” and the preventive principle the Indian courts have shown the path to other legal systems. The Indian Parliament has been foremost in providing constitutional status to environment protection and preservation.

Environmental issues have been brought to the courts under public interest litigation. And the Supreme Court of India has addressed issues of river pollution by tanneries, industrial effluents, and untreated sewage, soil and groundwater pollution, indiscriminate mining, protection of forests, fencing of parks and sanctuaries, preservation of monuments of archaeological and historical significance and their protection from vandalism and industrial pollutants and automobile pollution.

While evolving the environmental jurisprudence the courts through judicial pronouncements have contributed by recognition of liability for environmental damage in terms of Constitutional “Right to Safe Environment”, absolute liability of hazardous industries, remedial measures based on application of the “polluter pays
principle” and the obligation to take into consideration precautionary principle.

3.2 Constitutional Provisions for Protection and Preservation of Environment

The Indian Constitution is one of the first constitutions in the world to accord constitutional status to the concern to protect and preserve the environment. It provides for a directive principle of state policy Article 48-A,¹ a fundamental duty of the citizens to protect and preserve the environment under Article 51 A(g)² and a fundamental right to a healthy environment under Article 21.³ The Environment Protection Act, 1986 defines Section 2(a) “environment” includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property”. Environmental pollutant” means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment and “environmental pollution” means the presence in the environment of any environmental pollutant.⁴ The constitutional provisions have been well utilised both by the public spirited persons and the Indian judiciary to evolve and develop the environmental jurisprudence of India.⁵ According to the Supreme Court it is well settled that Article 32 does not merely confer power on this Court to issue a direction, order or writ for enforcement of the fundamental rights but it also lays a

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¹ Article 48A. Protection and improvement of environment and safeguarding of forests and wild life The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country. Constitution of India 1949

² Article 51 A Fundamental duties It shall be the duty of every citizen of India (g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.Ibid

³ Article 21. Protection of life and personal liberty No person shall be deprived of his life or personal liberty except according to procedure established by law.Ibid

⁴ Article 2 (b) and (d) Environment Protection Act, 1986.

⁵ LK Koolwal v State of Rajasthan AIR 1988, Raj,2; Rural Litigation Entitlement Kendra v State of Uttar Pradesh AIR 1985 SC 652
constitutional obligation on this Court to protect the fundamental rights of the people and for that purpose this Court has all incidental and ancillary powers including the power to forge new remedies and fashion new strategies designed to enforce the fundamental rights.\(^6\) The Supreme Court can design remedies for enforcement of fundamental rights, as the jurisdiction under Article 32 of the Constitution to issue appropriate directions, orders or writs, extends to preventive measures against the apprehended violation of the fundamental rights, as well as to the remedial measures against actual violation.\(^7\)

3.3 Contribution of Indian Courts in Development of Environmental Jurisprudence

Generally environmental law provides for a system regulation by statutes. However in India most of the environmental jurisprudence has been developed through writ jurisdiction.\(^8\) Judicial activism and the development of the concept of public interest litigation under the writ jurisdiction of the Supreme Court and the High Courts has brought a mutation change in the processual jurisdiction and it has played a pivotal role in developing and providing an impetus to environmental jurisprudence with human rights approach.\(^9\) This remedy is preferred over tort action or public nuisance remedy because it is relatively speedy, cheaper and provides direct approach to the higher judiciary thereby reducing the chances of further appeals.\(^10\) The relaxed rules of *locus standi* and the recognition of epistolary jurisdiction by the Supreme Court and the High Courts have further ensured the public

\(^6\) Bandhua Mukti Morcha v Union of India AIR 1984 SC 802
\(^7\) AIR 1987 SC 1086, 1091.
\(^9\) Ibid.
\(^10\) Ibid.
participation in matters like environment protection. The remedy under writ jurisdiction also provides flexibility to the courts to choose an appropriate relief by issuing appropriate orders, direction or writs.

3.3.1 Right to Life in Article 21 Includes Right to Safe Environment

The “right to a healthy environment” as a fundamental right of Indian citizens has emerged from public interest litigation before the higher judiciary. It has been recognised as an inherent and implied right within the right to life enshrined in Article 21 of the Constitution. Therefore, under Article 32 of the Indian Constitution, any person or group can approach the Supreme Court of India in case a threat of or actual occurrence of environmental degradation or contamination is perceived. In such cases, the “onus of proof” may still lie with the actor or with the developer or industrialist to show that the action is or was environmentally benign or that the entity exercised all diligence to prevent the degradation or contamination. The fundamental right to a clean environment and its implications were also considered by a Bench of the Tribunal in a recent judgment in the case of M/s Sterlite Industries Ltd. v. Tamil Nadu Pollution Control Board, where the Tribunal, upon deliberation, held as under:

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11 Article 32 in The Constitution of India, 1949
32. Remedies for enforcement of rights conferred by this Part
   (1) The right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed;
   (2) The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part;
   (3) Without prejudice to the powers conferred on the Supreme Court by clause (1) and (2), Parliament may by law empower any other court to exercise within the local limits of its jurisdiction all or any of the powers exercisable by the Supreme Court under clause (2);
   (4) The right guaranteed by this article shall not be suspended except as otherwise provided for by this Constitution.

Article 21 of the Constitution of India which provides that no person shall be deprived of his right to life or personal liberty, except according to the procedure established by law, is interpreted by the Indian courts to include in this right to life, the right to clean and decent environment. Right to decent environment, as envisaged under Article 21 of the Constitution of India also gives, by necessary implication, the right against environmental degradation. It is in the form of right to protect the environment, as by protecting environment alone can we provide a decent and clean environment to the citizenry.

3.2.2 Principle of Absolute Liability

The right to compensation in environmental cases has been traditionally linked to strict liability as enunciated in Rylands v. Fletcher. Following the Bhopal gas leak tragedy, the Indian Supreme Court found this rule inadequate to deal with situations where the masses do not have the resources to enter into litigation against a powerful industrial company. Therefore, the Supreme Court laid down a new judicial norm of “absolute liability” for a hazardous and inherently dangerous industry to pay compensation. The new rule of absolute liability developed by the court was enunciated by the Constitution Bench judgment in M.C. Mehta and Another v. Union of India and Others,13 (Oleum Gas Leak Case), wherein it was held thus:

We are of the view that an enterprise which is engaged in a hazardous or inherently dangerous industry which poses a potential threat to the

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health and safety of the persons working in the factory and residing in the surrounding areas owes an absolute and non-delegable duty to the community to ensure that no harm results to anyone on account of hazardous or inherently dangerous nature of the activity which it has undertaken. The enterprise must be held to be under an obligation to provide that the hazardous or inherently dangerous activity in which it is engaged must be conducted with the highest standards of safety and if any harm results on account of such activity, the enterprise must be absolutely liable to compensate for such harm and it should be no answer to the enterprise to say that it had taken all reasonable care and that the harm occurred without any negligence on its part.

The Court further enunciated upon the rationale behind such kind of liability, ‘If the enterprise is permitted to carry on an hazardous or inherently dangerous activity for its profit, the law must presume that such permission is conditional on the enterprise absorbing the cost of any accident arising on account of such hazardous or inherently dangerous activity as an appropriate item of its overheads. Such hazardous or inherently dangerous activity for private profit can be tolerated only on condition that the enterprise engaged in such hazardous or inherently dangerous activity indemnifies all those who suffer on account of the carrying on of such hazardous or inherently dangerous activity regardless of whether it is carried on carefully or not . . . . We would therefore hold that where an enterprise is engaged in a hazardous or inherently dangerous activity and harm results to anyone on account of an accident in the operation of such hazardous or inherently dangerous activity resulting
for example, in escape of toxic gas the enterprise is strictly and absolutely liable to compensate all those who are affected by the accident and such liability is not subject to any of the exceptions which operate vis-à-vis the tortuous principle of strict liability under the rule in *Ryland v. Fletcher*.\(^\text{14}\)

### 3.2.2.1 The Bhopal Gas Tragedy

After being refused by the US district court on basis of discretionary doctrine of *forum non conveniens*, the Union of India filed a suit in the district court of Bhopal which ordered interim compensation which was reduced by the High Court. The Supreme Court in *Union Carbide Corporation v. Union of India*,\(^\text{15}\) based on an earlier settlement, directed the Union Carbide to pay US $ 470 million to the Union of India in full and final settlement of all claims, rights and liabilities related to and arising out of Bhopal Gas Tragedy. Following that, it was ordered that all civil proceedings arising out of Bhopal Gas Disaster, shall stand concluded in terms of the settlement and all criminal proceedings related to and arising out of the disaster shall stand quashed, wherever they were pending. Later, this Court modified that order upholding the settlement except the condition of quashing criminal charges \(^\text{16}\). In *Union Carbide Corporation v. Union of India and others*, a Constitution Bench regarded the Bhopal Gas Leak Tragedy as a horrendous industrial mass disaster, unparalleled in its magnitude, and the devastation and remains a ghastly monument to the dehumanizing influence of inherently dangerous technologies. While dealing with the justness and reasonableness of the quantum of settlement, the Constitution Bench adverted to the problems emerging from the pursuit of such dangerous technologies for economic gains by multinationals, availability of cheap labour, captive markets and the

\(^{14}\) *Supra* note 7.

\(^{15}\) (1989) 2 SCC 40.

\(^{16}\) *Union Carbide Corporation v. Union of India*, AIR 1992 SC 248.
These issues and certain cognate areas of even wider significance and the limits of the adjudicative disposition of some of their aspects are indeed questions of seminal importance. The culture of modern industrial technologies, which is sustained on processes of such pernicious potentialities, in the ultimate analysis, has thrown open vital and fundamental issues of technology options. Associated problems of the adequacy of legal protection against such exploitative and hazardous industrial adventurism, and whether the citizens of the country are assured the protection of a legal system which could be said to be adequate in a comprehensive sense in such contexts arise. These, indeed, are issues of vital importance and this tragedy, and the conditions that enabled it happen, are of particular concern”.\footnote{Supra note 7.}

However the Supreme Court deliberately missed the opportunity to develop new principles with regard to multinational corporations operating with dangerous technologies in developing countries.\footnote{P. Leelakrishan, \textit{Environmental Law in India}, (Lexis Nexis, 2005).}

There were various dimensions to the problem of liability such as protection of environment, standard of liability of disaster liability of multinational corporations, permissibility of ultra hazardous technologies all of which were set aside in face the immediate question of relief to the victims. The Bhopal in the aftermath is living
with contaminated soil and ground water, whereas the survivors have not been rehabilitated and the cleanup of the site is a dilemma which no one has been able to resolve. In fact it necessitates international human rights framework that can be applied to companies directly, that could also act as a catalyst for national legal reform, and serve as a benchmark for national law and regulations.\textsuperscript{19}

The Public Liabilities Insurance Act, 1991 was the legislative attempt to fashion the doctrine of strict liability for hazardous activities. It imposes no fault liability in case of accidents involving death or disability due to hazardous substances.

\textbf{3.2.2.2 Measure or Quantum of Liability}

In the \textit{Oleum gas leakage case} the court also laid down the criteria for the measure of such liability. “We would also like to point out that the measure of compensation in the kind of cases referred to in the preceding paragraph must be co-related to the magnitude and capacity of the enterprise because such compensation must have a deterrent effect. The larger and more prosperous the enterprise, the greater must be the amount of compensation payable by it for the harm caused on account of an accident in the carrying on of the hazardous or inherently dangerous activity by the enterprise”. \textsuperscript{20}

\textbf{3.2.2.2 Liability for Hazardous or Inherently Dangerous Activities}

The strict liability principle has been examined by the Supreme Court in several judgments. Whereas in the \textit{Oleum Gas Leakage} case, the Supreme Court held that the industries which are engaged in hazardous or inherently dangerous activity, pose a serious threat to health and safety of persons and have an absolute and non-delegable

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\item \textsuperscript{19} Amnesty International, “Clouds of Injustice: Bhopal Disaster 20 years on”, ASA 20/104/2004
\item \textsuperscript{20} Supra note 7
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duty to ensure that no harm is caused to the life and safety of the people. In *Indian Council for Enviro-Legal Action v. Union of India*, the court held that once the activity carried on in hazardous or inherently dangerous, the person carrying on such activity is liable to make good losses caused to any other person by his activity, irrespective of the fact that he took reasonable care while carrying on his activity.

In *Vellore Citizens Welfare Forum v. Union of India*, this Court held that once the activity carried on is hazardous or potential hazardous, the person carrying on such activity is liable to make good the loss caused to any other person by his activity, irrespective of the fact that he took reasonable care. The absolute liability extends not only to compensate the victims of pollution, but also the cost of restoring environmental degradation.

### 3.4 Polluter Pays Principle

The principle of absolute liability in cases of environmental injury has further found judicial validation in the polluter pays principle, which has become the law of the land through Supreme Court judgments. In the *Bicchri* case, while imposing the cost of remediation on the polluter, the Supreme Court held, ‘Where an enterprise is engaged in a hazardous or inherently dangerous activity and causes harm to any one on account of an accident, the enterprise is strictly and absolutely liable to compensate all those who are effected by the accident and such liability is not subject to any of the exceptions as laid down in tortuous principles of strict liability under the rule laid down in *Rylands v Flecher*.

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24 *Supra* note 22.
3.4.1 Costs for Remediation and Compensation for Environmental Damage

The Supreme Court in *Oleum gas leakage* case,\(^{25}\) had held that ‘the ‘Polluter Pays’ principle demands that the financial costs of preventing or remedying damage caused by pollution should lie with the undertakings which cause the pollution, or produce the goods which cause the pollution, Under the principle it is not the role of Government, to meet the costs involved in either prevention of such damage, or in carrying out remedial action, because the effect of this would be to shift the financial burden of the pollution incident to the taxpayer’.\(^{26}\)

Further, in the *Vellore tanneries pollution* case, the Supreme Court has elaborated on the polluter pays principle as follows:\(^{27}\) ‘the ‘Polluter Pays Principle’ as interpreted by this Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation. Remediation of the damaged environment is part of the process of ‘Sustainable Development’ and as such the polluter is liable to pay the cost to the individual sufferers as well as the cost reversing the damaged ecology’. The polluter pays principle was applied in *Indian Council for Enviro-Legal Action and Others v. Union of India and Others*,\(^{28}\) to fasten liability for defraying the costs of remedial measures. The task of determining the amount required for carrying out the remedial measures, its recovery/realization and the task of undertaking the remedial measures was placed in this case upon the Central Government.

3.4.2 Cost of Destroying Hazardous Waste

\(^{25}\) Supra note 7.

\(^{26}\) Ibid.

\(^{27}\) Supra note 23.

\(^{28}\) Supra note 22.
In the Research Foundation For Science Technology National Resource Policy v. Union of India & Athr,\textsuperscript{29} case the approximate expenditure to be incurred for destroying the hazardous waste has been mentioned in report ‘The liability of the importers to pay the amounts to be spent for destroying the goods in question cannot be doubted on applicability of precautionary principle and polluter pays principle. These principles are part of the environmental law of India. There is constitutional mandate to protect and improve the environment. In order to fulfill the constitutional mandate various legislations have been enacted with attempt to solve the problem of environmental degradation. The polluter pays principle basically means that the producer of goods or other items should be responsible for the cost of preventing or dealing with any pollution that the process causes. This includes environmental cost as well as direct cost to the people or property, it also covers cost incurred in avoiding pollution and not just those related to remedying any damage. It will include full environmental cost and not just those which are immediately tangible. The principle also does not mean that the polluter can pollute and pay for it. The nature and extent of cost and the circumstances in which the principle will apply may differ from case to case.\textsuperscript{30}

Apart from polluter pays principle, support can also be had from principle 16 of the Rio Declaration, which provides that national authorities should endeavour to promote the internalisation 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 interests and without distorting international trade and investment.

### 3.4.3 Exemplary and Penal Damages

\textsuperscript{29} Research Foundation For Science v. Union of India and Another, (2005) 13 SCC 186; see also 2007 (8) SCC 583, 2007 AIR(SC) 3118.

\textsuperscript{30} Ibid.
Further, the court clarified that in a given case, it may be possible to levy exemplary or penal damages depending as well upon the nature and extent of offending activity, the nature of offending party, the intention behind such activity. It is, however, to be borne in mind that in India the liability to pay compensation to affected persons is strict and absolute and the rule laid down in *Rylands v. Fletcher* has been held to be not applicable. Under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environmental (Protection) Act, 1986, it is a criminal offence to cause or knowingly permit any poisonous, noxious, or polluting matter to enter into the rivers, streams, groundwater, and coastal waters. The occupier of a facility has “strict liability” in this regard and the

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31 The Court made an observation that ‘The Central Government shall consider whether it would not be appropriate, in the light of the experience gained, that chemical industries are treated as a category apart. Since the chemical industries are the main culprits in the matter of polluting the environment, there is every need for scrutinising their establishment and functioning more rigorously. No distinction should be made in this behalf as between a large-scale industry and a small-scale industry or for that matter between a large-scale industry and a medium-scale industry. All chemical industries, whether big or small, should be allowed to be established only after taking into considerations all the environmental aspects and their functioning should be monitored closely to ensure that they do not pollute the environment around them. It appears that most of these industries are water-intensive industries. If so, the advisability of allowing the establishment of these industries in arid areas may also require examination. Even the existing chemical industries may be subjected to such a study and if it is found on such scrutiny that it is necessary to take any steps in the interests of environment, appropriate directions in that behalf may be issued under Section 3 and 5 of the Environment Act, the Central Government shall ensure that the directions given by it are implemented forthwith. *Ibid*, para 34-37.

32 In *M.C. Mehta and Anr. v. Union of India and Others*, 1987 (1) SCC 395; Constitution Bench has held that the rule in *Rylands v. Fletcher* laying down the principle of liability was evolved in the 19th century at a time when all the developments of science and technology had not taken place cannot afford any guidance in evolving any standard of liability consistent with the constitutional norms and the needs of the present day economy and social structure. In a modern industrial society with highly developed scientific knowledge and technology where hazardous or inherently dangerous industries are necessary to be carried on as part of the developmental programme, Court should not feel inhibited by this rule merely because the new law does not recognize the rule of strict and absolute liability in case of an enterprise engaged in hazardous and dangerous activity. An enterprise which is engaged in a hazardous or inherently dangerous industry which poses a potential threat to the health and safety of the persons working in the factory and residing in the surrounding areas owes an absolute and non-delegable duty to the community to ensure that no harm results to anyone.
regulators (in this case the state or central pollution control board) need only prove that the pollutants originated from the concerned facility for the liability to be imposed.\textsuperscript{33}

The liability in such cases may extend to remedial costs i.e. costs to “reinstate or restore damaged or destroyed elements of the environment”, which are payable in advance to the SPCBs.\textsuperscript{34} Compensation for direct and indirect damages and punitive fines levied by the authorities may also be required. Therefore the principles of “strict and absolute liability” have been applied to environmental cases. As a result there may be imposition of severe liability irrespective of the financial capacity of the polluter. A large number of dyeing units are located upstream in and around Tirupur. They discharge their chemical and toxic effluents either directly or indirectly into the Noyyal River. As a result, all the irrigation wells along the river and in the downstream villages have been polluted, and the ecosystem has been adversely affected by the seepage and percolation of water stored in the Orathapalayam Dam. The local communities, through various organizations, filed a PIL against the polluters in the Supreme Court to direct TNPCB to regulate against the dyeing and bleaching units causing pollution in the Tirupur area.\textsuperscript{35} The Supreme Court based its ruling on the precautionary principle and the polluter pays principle to extend its statement to the dyeing units to compensate the victims of the pollution along the Noyyal River and also to bear the cost of restoring the environmental degradation.\textsuperscript{36} The Supreme Court directed the dyeing units to deposit US$ 11.6 million to clean up the Orathapalayam Dam.

\subsection*{3.4.4 ‘Restitution’ and ‘Unjust Enrichment’}


\textsuperscript{34} \textit{Ibid}.

\textsuperscript{35} \textit{Ibid}.

\textsuperscript{36} \textit{Ibid}.
The callous attitude of the ‘rogue’ industries which did not pay for the cost of remediation of the environment as per the decision of the Supreme Court in 1996 became a reason for the Indian Supreme Court in 2011\(^{37}\) to address this situation where even after decade and a half of the pronouncement of the judgment by this court based on the principle of ‘polluter pays’, till date the polluters (concerned industries in this case) have taken no steps to ecologically restore the entire village and its surrounding areas or complied with the directions of this court at all.\(^{38}\) The orders of Apex court were not implemented by keeping the litigation alive by filing interlocutory and interim applications even after dismissal of the writ petition, the review petition and the curative petition by this court. The Supreme Court applied the concept of ‘unjust enrichment’ in this case, further evolving the principle of polluter pays. According to the court in a previous decision had defined ‘unjust enrichment’ means retention of a benefit by a person that is unjust or inequitable.\(^{39}\) ‘Unjust enrichment’ occurs when a person retains money or benefits which in justice, equity and good conscience, belong to someone else'.\(^{40}\) ‘Further the terms ‘unjust enrichment’ and ‘restitution’ are like the two shades of green - one leaning towards yellow and the other towards blue. With restitution, so long as the deprivation of the other has not been fully compensated for, injustice to that extent remains. Which label is appropriate under which circumstances would depend on the facts of the particular case before the court. The courts have wide powers to grant restitution, and more so where it relates to misuse or non-compliance with court orders.’\(^{41}\) The court held: ‘We

\(^{37}\) Indian Council For Enviro-Legal Action, Etc. v. Union of India and Others (2011) 8 SCC 161

\(^{38}\) Ibid.

\(^{39}\) Sahakari Khand Udyog Mandal Ltd. v. Commissioner of Central Excise & Customs, (2005) 3 SCC 738, para 181.

\(^{40}\) Ibid.

\(^{41}\) Ibid, para 184.
may add that restitution and unjust enrichment, along with an overlap, have to be viewed with reference to the two stages, i.e., pre-suit and post-suit. In the former case, it becomes a substantive law (or common law) right that the court will consider; but in the latter case, when the parties are before the court and any act/omission, or simply passage of time, results in deprivation of one, or unjust enrichment of the other, the jurisdiction of the court to levelise and do justice is independent and must be readily wielded, otherwise it will be allowing the Court’s own process, along with time delay, to do injustice. For this second stage (post-suit), the need for restitution in relation to court proceedings, gives full jurisdiction to the court, to pass appropriate orders that levelise. Only the court has to levelise and not go further into the realm of penalty which will be a separate area for consideration altogether’. The Supreme Court substantiated its stand in holding the respondent liable for compound interest by referring the principle stated in the decisions of House of Lords “There seems in principle no reason why compound interest should not be awarded. Had prompt recompense been made at the date of the wrong the plaintiff should have had a capital sum to invest; the plaintiff would have received interest on it at regular intervals and would have invested those sums also. By the same token the defendant will have had the benefit of compound interest. Although not historically available, compound interest is well suited to compensate a plaintiff for the interval between when damages initially arise and when they are finally paid”. This view according to the Supreme Court seems to be correct and in consonance with the principles of equity and justice.

and the court applied it in the present case of *Indian Enviro-Legal Action Group v. Union of India*.

### 3.5 Precautionary Principle

In the *Vellore tanneries pollution* case, the court has deemed the international norm of the precautionary principle as part of Indian law and considered its application mandatory in the interest of sustainable development. As held by the Supreme Court in the *Vellore tanneries pollution case*: “We are however, of the view that “the Precautionary Principle” and “the Polluter Pays Principle” are essential features of “Sustainable Development”. The “Precautionary Principle” – in the context of the law – means: ‘Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The “onus of proof” is on the actor or the developer/industrialist to show that his action is/was environmentally benign. We have no hesitation in holding that the precautionary principle and the Polluter Pays Principle are part of the Environmental Law of the Country”. The precautionary principle generally describes an approach to the protection of the environment or human health based around precaution even where there is no clear evidence of harm or risk of harm from an activity or substance. It is a part of principle of sustainable development, it provides for taking protection against specific environmental hazards by avoiding or reducing environmental risks before specific harms are experienced. Having regard to the aforesaid principle, the import of waste oil containing PCBs of detectable limit has been banned in India. The fact that PCBs content in the consignments was only marginal or minimal and under Basel Convention its permissible limit is 50 PPM, is of no consequence. Judging by Indian conditions, our law has provided the limit of PCBs

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44 *Supra* note 23.

which if of detectable limits, the import is not allowed. The national law has to apply and shelter cannot be taken under guidelines of Basel Convention’. 46

3.6 The Principle of Proportionality

The Supreme Court of India puts great emphasis on the principle of proportionality and in its exposition of the said principle it relies on various sources outside India. For example it refers to the In his Keynote Address, on ‘Global Constitutionalism’,47 Lord Goldsmith, Her Majesty’s Attorney General (UK), stated that British Constitution though unwritten is based on three principles, namely, rule of law, commitment to fundamental freedoms and principle of proportionality. European Convention on Human Rights (“ECHR”) also refers to the concept of balance’. The concept of “balance” under the principle of proportionality applicable in the case of sustainable development is lucidly explained by Pasayat, J. in the case of T.N. Godavarman Thirumalpad v. Union of India and Ors.,48 reads as under: “It cannot be disputed that no development is possible without some adverse effect on the ecology and environment, and the projects of public utility cannot be abandoned and it is necessary to adjust the interest of the people as well as the necessity to maintain the environment. A balance has to be struck between the two interests. Where the commercial venture or enterprise would bring in results which are far more useful for the people, difficulty of a small number of people has to be bypassed. The comparative hardships have to be balanced and the convenience and benefit to a larger section of the people has to get primacy over comparatively lesser hardship”. The above paragraphs indicate that while applying the concept of “sustainable development” one has to keep in mind the “principle of

46 Supra note 29
48 (2002) 10 SCC 606 para 35
proportionality” based on the concept of balance. It is an exercise in which we have to balance the priorities of development on one hand and environmental protection on the other hand.

### 3.7 Domestic Implementation of International Environmental Obligations and Principles

The objectives of international environmental agreements would be effectively achieved if all relevant states become party to them and rigorous implementation including monitoring of compliance is ensured. India is a contracting party or signatory to numerous international treaties or agreements relating to regional or global environmental issues.\(^{49}\) Article 51 (c) of the Constitution of India provides that “state shall endeavour to foster respect for international law and treaty obligations in the dealings of organized people with one another”. Article 253 of the Constitution specifically empowers the Parliament ‘to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at an international conference, association or other body’. Further, Article 253 of the Constitution read along with Entry 13 and 14 of the Union List provides the Parliament with a very wide power of legislation including the subjects mentioned in state list provided those issues are addressed at international conferences, association or other body or it is the implementation of international treaty, agreement or convention. In other words these provisions have served as potent weapon in the armoury of the Courts to uphold any Parliamentary legislation if it is in pursuance of Article 253 read along with Entry 13 and 14 of the Union List. Secondly in India, the Parliament has used this power to enact the Air (Prevention and Control of Pollution) Act, 1981 and the Environment Protection Act, 1986 to implement the obligations and

\(^{49}\) Supra note 8

In the case of Research Foundation for Science Technology National Resource Policy v. Union of India and Anr., 50 a writ petition came up for hearing before this Court, concerning ship-breaking as a recurring controversy. Therefore, the Court decided to lay down norms concerning infrastructure, capacity of Alang to handle large volume of ship-breaking activity, safeguards to be provided to the workers who were likely to face health hazard on account of the incidence of ship-breaking activity, the environmental impact assessment, regulation of the said activity and strict regulation of the said activity. Accordingly, the Court constituted a Committee of Technical Experts to submit a report on the afore-stated aspect. The Division Bench of the Court held that “precautionary principle” is a part of the concept of sustainable development: “The legal position regarding applicability of the precautionary principle and polluter-pays principle which are part of the concept of sustainable development in our country is now well settled. In Vellore Citizens’ Welfare Forum v. Union of India, a three-Judge Bench of this Court, after referring to the principles evolved in various international conferences and to the concept of “sustainable development”, inter alia, held that the precautionary principle and polluter-pays principle have now emerged and govern the law in our country, as is clear from Articles 47, 48-A and 51-A( g ) of our Constitution and that, in fact, in the various environmental statutes including the Environment (Protection) Act, 1986, these concepts are already implied. These principles have been held to have become part of our law. Further, it was observed in Vellore Citizens’ Welfare Forum case that these principles are accepted as part of the customary international law and hence there should be no difficulty in accepting them as part of our domestic law. Reference may also be

made to the decision in the case of *A.P. Pollution Control Board v. Prof. M.V. Nayudu*,\(^{51}\) where, after referring to the principles noticed in *Vellore Citizens’ Welfare Forum* case the same have been explained in more detail with a view to enable the courts and the tribunals or environmental authorities to properly apply the said principles in the matters which come before them. In this decision, it has also been observed that the principle of good governance is an accepted principle of international and domestic laws. It comprises of the rule of law, effective State institutions, transparency and accountability and public affairs, respect for human rights and the meaningful participation of citizens in the political process of their countries and in the decisions affecting their lives. Reference has also been made to Article 7 of the draft approved by the Working Group of the International Law Commission in 1996 on “Prevention of Transboundary Damage from Hazardous Activities” to include the need for the State to take necessary “legislative, administrative and other actions” to implement the duty of prevention of environmental harm. Environmental concerns have been placed on the same pedestal as human rights concerns, both being traced to Article 21 of the Constitution. It is the duty of this Court to render justice by taking all aspects into consideration. It has also been observed that with a view to ensure that there is neither danger to the environment nor to the ecology and, at the same time, ensuring sustainable development, the court can refer scientific and technical aspects for an investigation and opinion to expert bodies. The provisions of a covenant which elucidate and go to effectuate the fundamental rights guaranteed by our Constitution, can be relied upon by courts as facets of those fundamental rights and hence enforceable as such.\(^{52}\) The Basel Convention, it cannot be doubted, effectuates the fundamental rights

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\(^{51}\) *A.P. Pollution Control Board v. Prof. M.V. Nayudu (Retd.) and Ors.*, (1996) 5 SCC 718.

\(^{52}\) *People’s Union for Civil Liberties v. Union of India*, 1997 (3) SCC 433.
guaranteed under Article 21. The right to information and community participation for protection of environment and human health is also a right which flows from Article 21. The Government and authorities have, thus to motivate the public participation. These well-enshrined principles have been kept in view by us while examining and determining various aspects and facets of the problems in issue and the permissible remedies.\textsuperscript{53} Since the liability for environmental harm is particular to inherently dangerous and hazardous activities, the study presents a few of the recent laws on such activities and their interaction with the international obligations of India.

\textbf{3.7.1 Hazardous Waste}

Considering the alarming situation created by dumping of hazardous waste, its generation and serious and irreversible damage as a result thereof to the environment, flora and fauna, and also having regard to the magnitude of the problem as a result of failure of the authorities to appreciate the gravity of situation and the need for prompt measures being taken to prevent serious and adverse consequences, the Indian judiciary has ensured strict application of domestic and international laws.\textsuperscript{54} The transboundary nature of environmental issues has been brought before the Indian courts particularly with regard to the movement of hazardous wastes. The dual system of applicable laws i.e. international conventions and national legislations to a particular situation in the domestic field is illustrated by these few cases of transboundary movement of hazardous waste.

\begin{footnotesize}
\begin{itemize}
\item[\textsuperscript{53}] Ibid.
\item[\textsuperscript{54}] A High Powered Committee (HPC) was constituted by this Court with Prof. M.G.K. Menon as its Chairman, in terms of order dated 30th October, 1997. The Committee comprised of experts from different disciplines and fields and was required to examine all matters in depth relating to hazardous waste. On consideration of the detailed reports submitted by the HPC various directions have been issued by the Supreme Court from time to time.
\end{itemize}
\end{footnotesize}
Section 16 of the Hazardous Wastes (Management and Handling) Rules, 1989, as amended in 2003 states that the occupier of a facility shall be liable for damages to the environment resulting from the improper handling and disposal of hazardous waste listed in Schedules 1, 2, and 3. The liability extends to remedial costs to “reinstate or restore damaged or destroyed elements of the environment”, which are payable in advance to the SPCBs, and also any fine that may be levied by relevant authorities. Further Rule 25 of these rules states that ‘The occupier of the facility shall be liable for all damages caused to the environment or third party due to improper handling of the hazardous waste or disposal of the hazardous wastes. The occupier of the facility shall be liable to pay financial penalties as levied for any violation of the provisions under these rules by the State Pollution Control Board with the prior approval of the Central Pollution Control Board’.

In the Research Foundation for Science Technology National Resource Policy v. Union of India and anr.,\textsuperscript{55} the contention of all the importers was ‘that their material had not violated the 50 ppm limit prescribed in the Basel Convention and were thus not Hazardous Waste was found devoid of strength if the same are not examined in the light of the Laws framed by the Country in the process of aligning with the recommendations of the Convention as the contents of the Convention are by themselves not any Law that could be implemented’.\textsuperscript{56} Referring to the definitions and various clauses in the Convention which indicate that the contents of the convention cannot be seen in isolation to the follow-up laws framed in this regard by the individual member countries the Court held that the contents of the Convention are only in the form of guidelines to the member nations and the final question of whether the material is Hazardous Waste or

\textsuperscript{55} Supra note 29

\textsuperscript{56} Ibid.
not cannot be answered on the basis of the contents of the Convention alone. With reference to the presence of PCBs in waste oils, the national laws framed need to be examined to categorically state whether the subject cargo is hazardous or not.\textsuperscript{57}

In respect of consignments of category one, learned counsel for importers sought to contend that PCBs were within the limits prescribed by the Basel Convention and also that the same were of small quantity, it being minimal and negligible and, therefore, the recommendation of the Monitoring Committee for destruction of oil by incineration does not deserve to be accepted. Reference was also made to \textit{Technical Guidelines on Hazardous Waste: Waste Oils From Petroleum Origins and Sources [(Y8) Basel Convention]} to contend that the presence of PCBs and waste oil as a secondary fuel upto 50 PPM was fairly acceptable in respect of marketing and use. On this basis and with reference to the test report, it was contended that since the PCB in the consignments in question being minimal and negligible, there was no contravention of the Basel Convention.\textsuperscript{58}

\textsuperscript{57} The report makes a detailed reference to The Hazardous Wastes (Management and Handling) Rules, 1989 as introduced in 1989 and amendments effected in January 2000 and in the year 2003. In regard to amendments made in January 2000 whereafter the imports were made, the report notices as under:

“For the purpose of import, Rule 3(i) (c) defined Hazardous Waste as those listed in List ‘A’ and ‘B’ of Schedule-3 (Part A) if they possessed any of the hazardous characteristics listed in Part-B of Schedule. List A of Schedule 3 is a reflection of List A as Annex III of the Basel Convention and the hazardous wastes appearing in this list of Schedule 3 are restricted and cannot be allowed to be imported into the country without DGFT Licence. In this list attention is drawn to the entry ‘Waste mineral oils unfit for their originally intended use’ against Basel No A 3020. Such Waste mineral Oils would be characterized as hazardous if they possess any of the Characteristics enumerated in Part B of Schedule 3. The presence of PCB contents in Waste mineral oils renders the material carcinogenic, bio accumulative and ecotoxic. Therefore, any consignment of Waste mineral Oil having PCB would be rendered Hazardous”.

(Emphasis supplied).

\textsuperscript{58} It was contended that as per recommendations of Commissioner of Customs re-refining was possible but the Monitoring Committee has only recommended destruction by incineration without any legal basis. The Monitoring Committee comprises of experts in the field. It has recommended destruction of the consignment by incineration. The PCBs may be within permissible limit insofar as parameters of Basel Convention are concerned but, at the same time, it has to be kept in view that parameters fixed by the Basel Convention are only guidelines and the individual
that as it may, insofar as our country is concerned, the provision is that the presence of PCBs shall be of non-detectable level. The national law laying stricter condition has to prevail.\textsuperscript{59}

The issue is in regard to the appropriate directions for dealing with the consignments in question, having regard to the precautionary principle and polluter pays principle. The main question is whether directions shall be issued for the destruction of the consignments with a view to protect the environment and, if not, in what other manner the consignments may be dealt with. In regard to the possibility of re-export of the cargo, reference has been made to Article 9(2)(a) of the Basel Convention which provides that in the case of illegal traffic as a result of conduct on the part of the exporter, the state of export shall ensure that the waste in question is taken back by the exporter within 30 days from the time the state of export was informed. It has been stated that even though there are provisions, both in international Conventions, like Basel Convention, and in our national laws, a holistic view needs to be taken in view of the prevailing circumstances since four years have lapsed, The re-export of cargo at this point of time and under the conditions in which the cargo was lying has been ruled out also stating that issues like transportation charges and the ownership and acceptability of the cargo at the destination point may be highly vexed and difficult to surmount. In this backdrop, the possibility of disposal locally as a one-time measure was examined. Regarding the disposal of the imported hazardous waste, the report states that certain drastic one-time measures are required to be taken. Both the modes of disposal, i.e. by subjecting the waste to re-cycling and alternatively by incinerating it, were examined. It has been suggested that overlooking the PCB presence up to 50 ppm, if the countries can provide different criterion in their national law to lay down the limits of concentration of PCBs so as to label it as hazardous waste. Even European Community is considering to reduce PCBs concentration from 50 PPM to 20 PPM to make it consistent with the limits on oils being used as fuel.\textsuperscript{59}

\textit{Ibid}

\textsuperscript{59}
waste oil conformed to the other specifications mentioned in schedule 6, then such consignments may be considered for recycling.

In the case of Research Foundation Science Technology National Resource Policy v. Union of India and anr,\textsuperscript{60} the question which arose for determination was whether this Court should grant permission for dismantling of the ship “Blue Lady” at Alang, Gujarat. To address this recurring problem the court decided to find out the infrastructural stability and adequacy of the ship breaking yard at Alang. The decided to find out and addressed whether the same are operational/operating in a way that environmental hazards and pollution are avoided and/or equipped to meet the requirements in that regard.

3.7.2 Civil Liability for Nuclear Damage

The Atomic Energy Act, 1962 was enacted to provide for the development, control and use of atomic energy for the welfare of the people of India and for other peaceful purposes. The Central Government, in exercise of the powers conferred under Section 27 of the Act, constituted the Atomic Energy Regulatory Board (AERB) vide notification dated 15.11.1983 to carry out certain regulatory and safety functions envisaged under Sections 16, 17 and 23 of the Act. In 1987, vide Amending Act 29 of 1987, by which the Central Government was empowered to produce and supply electricity from atomic energy. For achieving the envisaged target of nuclear power generation, a nuclear power corporation or a Government company was also decided to be set up which would design, construct and operate nuclear power stations in India. This led to the establishment of the Nuclear Power Corporation of India (NPCIL) with a view to design, build and operate nuclear reactors in the country was created in September 1987. NPCIL is a wholly owned by the Government of India undertaking which

\textsuperscript{60} Ibid, para 46.
functions under the administrative control of DAE. Further, India has also entered into various bilateral treaties and is also a party to various international conventions on nuclear safety, physical protection of nuclear material, nuclear accident, radiological emergency and so on. India, as already stated, is also governed by the safety and security standards laid down by IAEA. A brief reference to those conventions, treaties and IAEA may be apposite.

3.7.2.1 International Conventions and Bilateral Treaties on Nuclear Energy

India is not a signatory to the Nuclear Non-Proliferation Treaty (NPT). India is, however, party to various international conventions, such as the Convention on the Physical Protection of Nuclear Material. The Convention makes it legally binding for States parties to protect nuclear facilities and material for peaceful domestic use, storage as well transport. It also provides expanded cooperation between and among States regarding rapid measures to locate and recover stolen or smuggled nuclear material, mitigate any radiological consequences of sabotage and prevent and combat related offences. India is also signatory to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency was adopted in 1986 and the Convention on Nuclear Safety.

India is party to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, the first legal instrument to directly address these issues on a global scale, entered into force on 18.6.2001. The1986 Convention on Early Notification of a Nuclear Accident establishes a notification system for nuclear accidents which have the potential for
international trans-boundary release that could be of radiological safety significance for another State.\textsuperscript{61}

India is not a party to any of the Liability Conventions, specifically, IAEA Vienna Convention on Civil Liability for Nuclear Damage, however, India has enacted the Civil Liability for Nuclear Damage Act, 2010 (Nuclear Liability Act) which aims to provide a civil liability for nuclear damage and prompt compensation to the victims of a nuclear accident through No-Fault Liability to the operators. In \textit{People’s Union for Civil Liberties and Another v. Union of India and Others},\textsuperscript{62} the Court held that the Atomic Energy Act deals with a sensitive subject. Statutory scheme contained in the provisions of the Act, the Rules framed there under, composition of the AEC and AERB leave no manner of doubt that the effective functions of the nuclear power plants are sensitive in nature. Various Codes of Practice, safety guidelines, extensively discussed above and the decision taken in various international conventions and the guidelines laid down by various international agencies followed by India are meant to protect the life and property of people including the environment, guaranteed under Article 21 of the Constitution of India.\textsuperscript{63}

Developing modern sources for energy through Nuclear Power Plants (NPPs) carries the problem of potential damage, which might flow from a nuclear catastrophe. Several nuclear energy generating countries have adopted their own legislation on the issue of civil and criminal liability.\textsuperscript{64} Few of such legislations followed the basic

\textsuperscript{61} India has also entered into various Bilateral Civil Nuclear Co-operation agreements with France for the construction of ERR Power Plants, Canada, Namibia, Argentina and Mongolia and US.

\textsuperscript{62} (2004) 2 SCC 476.

\textsuperscript{63} \textit{Ibid}.

\textsuperscript{64} The U.S. Price-Anderson Act, 1957, the German Atomic Energy Act (1959), the Swiss Federal Law on the Exploitation of Nuclear Energy for Peaceful Purposes and
principle of imposing legal liability on a strict liability basis on the operator of a nuclear installation coupled with the limitation on liability. As discussed in chapter 3, there are currently, two main conventions on third-party liability in the field of nuclear energy. The first is the Paris Convention of 1960, which was supplemented by the 1963 Brussels Supplementary Convention and IAEA’s 1963 Vienna Convention on Civil Liability for Nuclear Damage.

### 3.7.2.2 The Civil Liability for Nuclear Damage Act, 2010

In 2008 the Indian government undertook to “take all steps necessary to adhere to the Convention on Supplementary Compensation (CSC), which it has since signed but not ratified. The government passed the Civil Liability for Nuclear Damage Act related to third party liability in August 2010 which is in tune with CSC. It brought the country’s nuclear liability provisions broadly into line internationally, making operators primarily liable for any nuclear accidents through public funds to be made available by the Contracting Parties on the basis of their installed nuclear capacity and UN rate of assessment. It also aims at establishing treaty relations among States that belong to the Vienna Convention on Civil Liability for Nuclear Damage, the Paris Convention on Third Party Liability in the Field of Nuclear Energy or neither; of them, while leaving intact the 1988 Joint Protocol that establishes treaty relations among States that belong to the Vienna Convention or the Paris Convention available at [https://www.iaea.org/…/convention-supplementary-compensation-nuclear](https://www.iaea.org/…/convention-supplementary-compensation-nuclear)

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65 The Convention on Supplementary Compensation for Nuclear damage (CSC) entered into force on 15th January 2015. The CSC was adopted on 12 September 1997 together with the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage. The Convention stipulates that at least five signatory States with a minimum of 400,000 units of installed nuclear capacity have to deposit their instrument of ratification, acceptance or approval with the IAEA before it can enter into force and Japan deposit of its instrument of acceptance, on 15 January 2015, triggered the Convention’s entry into force three months later. Apart from Japan, five other States have adhered to the Convention: Argentina, Morocco, Romania, the United Arab Emirates, and the United States.

accident, but without protecting third party suppliers. India’s Civil Liability for Nuclear Damage Act, 2010 or the Nuclear Liability Act mainly rests on the above Conventions, though India is not a signatory to those conventions.\(^67\) The Act aims to provide civil liability for nuclear damage and prompt compensation to victims of a nuclear incident through a ‘No fault’ liability to the operator, appointment of Claims Commissioner, establishment of Nuclear Damage Claims Commission, Nuclear Liability Fund and other matters connected therewith. The Act limits the liability of the operator to the tune of Rs.1500 crores and the maximum liability to rupee equivalent of 300 millions SDR’s, though the Act.

(i) **Convention on Supplementary Compensation and the Civil Liability of Nuclear Damage Act, 2010:** Liability in relation to a nuclear power plant is channeled exclusively to the operator. The only two situations in which an operator could claim a subsequent right of recourse against a supplier under international liability law as well as under domestic law of other countries were - i) Where the nuclear incident arose out of an act or omission by the supplier with an intent to cause damage (which is covered under Section 17(c) of the Act); and ii) A contractual right of recourse (which is covered under Section 17(a) of the Act). The 2010 Act however, went a step further and made the supplier also liable if the product supplied has patent or latent defects or the service provided is substandard (Section 17(b)). This expanded concept of supplier liability is vehemently resisted by major supplier countries including the United States, Russia and France, on the ground that these provisions are not consistent with international norms

\(^{67}\) *G. Sundarajan v. Union of India & Ors.*, on 6 May, 2013, para 79.
pertaining to nuclear liability. Parliament, however, deemed it fit to deviate from these international norms owing to India’s history with industrial accidents, particularly the Bhopal gas tragedy, and felt that this additional requirement contained in Section 17(b) was necessary in the Indian context. Moreover, making the operator liable would mean making the government liable therefore ultimately the taxpayers of India will be liable.

(ii) **Insurance and Compensatory Funds for Supplementary Liability:** The 123 Agreement signed between the United States of America and the Republic of India to set a framework for the U.S. nuclear industry to enter commercial talks on building nuclear reactors in India by resolving two concerns - one about inspections; the other about liability for a nuclear accident. A key clause in India’s 2010 nuclear liability law allows a plant operator to seek secondary recourse against a supplier - a legacy of the unresolved claims arising from the 1984 disaster at a U.S.-owned plant in Bhopal. To address this, India will set up an insurance pool to cover liability up to a hard cap. The state-backed insurance pool would cover operator liabilities of up to 15 billion rupees. Any recourse sought by the operator against a supplier could not exceed this figure. Insurance premiums have yet to be determined, but for suppliers they would be a “fraction” of the amount paid by the operator. The Civil Nuclear Liability Damage Act 2010 is a much needed legislation in the wake of rising number of nuclear accidents across the globe.\(^68\) India need not dilute the liability clause in the Act because of the sensitive history of nuclear

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\(^{68}\) Supra note 41.
accidents. It has been argued post Fukushima that nuclear energy is not very safe.\textsuperscript{69} However Fukushima disaster also shows the quick and effective way in which Japan has dealt with the situation. Japan’s compensation system is commendable. The government has taken liability and the aim is to compensate the people rather than to evade responsibility. So, the key lies in preparedness and readiness to deal with adverse situations effectively without evading responsibility. We may, in this connection, point out that the constitutional validity of the Price-Anderson Act, 1957 of U.S. which was challenged in the year 1978 before the U.S. Supreme Court in \textit{Duke Power Company v. Carolina Environmental Study Group} \textit{438 US 59(1978)}.\textsuperscript{70} It was urged before the U.S. Supreme Court that the Act did not ensure adequate compensation for victims of accidents and it violated Equal Protection Clause of the 14th Amendment by treating the nuclear accidents differently.

\begin{footnotesize}
\footnote{Japan’s liability system post Fukushima: Following a major earthquake, a 15-metre tsunami disabled the power supply and cooling of three Fukushima Daiichi reactors, causing a nuclear accident on 11 March 2011. All three cores largely melted in the first three days. Even though Japan has not signed the international conventions, it has a strong national third party compensation system. The Japanese law compensation are as under:

1. The operator of the Fukushima Daiichi Power Plant, TEPCO is strictly and exclusively liable.
2. TEPCO’s liability is unlimited.
3. TEPCO is required to financially secure its liability to private insurers upto JPY 120 million.
4. All rights of action will fully extinguish 20 years from the date of tort and actions should be brought within three years from the date of damage or knowledge.

The accident did not claim any lives but it lead to the evacuation of 71124 people. Japan effectively and quickly evacuated its people. This shows its remarkable preparedness. In September 2011 the government set up Nuclear Damage Compensation Facilitation Corporation to financially support any nuclear operator which would face nuclear damage compensation beyond JPY 120 million.}

\footnote{Cited by the Supreme Court of India in \textit{G. Sundarrajan v. Union Of India & Ors}, on 6 May, 2013, para 82}
\end{footnotesize}
from other accidents etc. The U.S. Supreme Court upheld the validity of the Act holding that it was lawful, in that there was adequate justification for treating nuclear accidents different to other claims; that Act provides a reasonably just substitute for the common law or state tort law remedies it replaces and that it cannot be said that the Act encouraged irresponsibility in the matter of safety and environmental protection.\(^71\).

(iii) **CLND is domestic law providing only domestic remedies against the operator:** Section 46 of the Act does not exempt the operator from any other proceedings instituted against him, apart from this Act, nor derogates from any other law in force in India. The provision “in addition to and not in derogation of” has to be given its normal plain meaning. Section 46 does not affect the applicability of other laws. Therefore it does not exempt the operator from application of other laws covering matters other than the civil liability for nuclear damage. At the same time it does not create the grounds for victims to move foreign courts. In fact that would be against the basic intent of the law to provide a domestic legal framework for victims of nuclear damage to seek compensation. The fact that a specific amendment to introduce the jurisdiction of foreign courts was negatived during the adoption of the CLND Bill buttresses this interpretation.

(iv) **Compensation payable under the CLND Act:** Section 6(1) of the CLND Act presently prescribes that the maximum amount of liability in respect of each nuclear incident shall be the rupee equivalent of three hundred million Special Drawing Rights (SDRs). As the current

\(^{71}\) *Ibid.*
value of 1 SDR is about Rs 87, three hundred million SDRs are equivalent to about Rs 2610 crores. Section 6(2) of the Act lays down that the operator’s maximum liability shall be Rs 1500 crore. In case the total liability exceeds Rs 1500 crores, as per Section 7(1)(a) of the CLND Act, this gap of Rs 1110 crores will be bridged by the Central Government. Beyond Rs 2610 crores, India will be able to access international funds under the CSC once it is a party to that Convention. Section 7(2) of the CLND Act provides that the Central Government may establish a “Nuclear Liability Fund” by charging such amount of levy from the operators, in such manner, as may be prescribed. The constitution of a Nuclear Liability Fund has been under consideration for some time. Such a Fund is proposed to be built up over 10 years by levying a small charge on the operators based on the power generated from existing and new nuclear plants. This is not expected to affect the consumer’s interests. As regards the question of possible enhancement of the amount of compensation in the Act in future and its effect on recourse against suppliers with respect to existing contracts, there is well established jurisprudence that a change in law cannot alter the terms of an existing contract made under the then extant law.

3.7.3 Dealing with Products of Modern Biotechnology: The Biotechnology Regulatory Authority of India Bill, 2013

The Parliament of India has proposed a bill\(^{72}\) to promote the safe use of modern biotechnology by enhancing the effectiveness and efficiency of regulatory procedures and provide for establishment of

\(^{72}\) Bill No. 57 of 2013 as introduced in Lok Sabha available at www.prsindia.org/billtrack/the-biotechnology-regulatory-authority-of-in.
the Biotechnology Regulatory Authority of India to regulate the research, transport, import, manufacture and use of organisms and products of modern biotechnology and for matters connected therewith or incidental thereto.\textsuperscript{73} The preamble to the Bill acknowledges that the modern biotechnology offers opportunities to address important needs related to agriculture, health, food production and environment and that India is a party to the United Nations Convention on Biological Diversity signed at Rio de Janeiro on the 5th day of June, 1992 which came into force on the 29th December, 1993; and Cartagena Protocol on Bio safety to the Convention which was adopted in Montreal on the 29\textsuperscript{th} September, 2000 and came into force on the 11th September, 2003.\textsuperscript{74}

The Bill makes reference to the international obligations under the Convention on Biological Diversity and the Cartagena Protocol according to which each Contracting Party shall, as far as possible and as appropriate, establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from modern biotechnology. According to Article 1 of Conservation of Biological Diversity the states are to take measures for the safe and responsible use of biotechnology for safeguarding the health and safety of the people of India and to protect the environment and consolidate regulatory policies, rules and services under statutory and autonomous regulatory authority and also to strengthen the implementation of the aforesaid Convention and Protocol. Genetically Engineered/Modified (GE/GM) crops are organisms created artificially in labs by inserting genes of unrelated organisms into the genetic structure of the plant since the technology is new the potential risk to human health and environment is uncertain. This necessitates a precautionary approach towards GMOs in their

\textsuperscript{73} Ibid, Preamble to the Bill.

\textsuperscript{74} Ibid.
regulatory systems. India currently has a regulatory system in place, the intention and efficiency of which had been under question.

However the Bill omits to mention of Cartagena Protocol Biosafety’s latest and perhaps most critical sub-protocol - the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress (N-KL SP), the text of which was adopted at CBD meetings at Nagoya, Japan in October 2010. The Protocol makes it mandatory for countries to enact domestic rules and procedures providing for liability and redress for damage to biological diversity resulting from transboundary movements of living modified organisms (LMOs).

The Supplementary Protocol is a global acknowledgement that LMOs can cause damage. But it is yet to come into force. It awaits 40 ratifications, while nearly a score of countries (including the European Union) have ratified it thus far. The key LMO exporting countries - Argentina, Australia, Canada and USA, are neither parties to the Cartagena Protocol nor the Supplementary Protocol. Yet, as per the N-KL SP, domestic law implementing it shall also apply to damage resulting from cross border movements of LMOs from non-Parties such as USA. In the context of liability for environmental harm the Bill lacks on following aspects:

3.7.3.1 No provision for Liability and Redress

The Bill fails to take into consideration the 2010 The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Bio-safety. The regulatory scheme under the proposed law is devoid of any element of accountability and liability. There are no such measures as cancellation of approvals, or the requirement of labeling of GM food which may be perceived as

preventive measures to the obligation of prevention of environmental harm. The bill does not impose any liability on the crop developer. According to proposed Section 70 ‘no court shall take cognizance of any offence punishable under this Act save on a complaint made by the Authority or any officer or person authorized by it’. This absolves the regulator also from any deleterious decision made thus leaving no room for accountability. Since the bill is silent on the matter of any liability for damage caused by the product of biotechnology, the issue will remain open to the courts to determine liability arising out of any adverse impact of modern biotechnology.

3.7.3.2 No Provision for Remediation of Contamination

There are no provisions for remediation of the environment following a contamination incident or in the case of a wrong approval. In fact the remediation of the site and redress mechanisms for the affected are required to ensure the safety of public health and the environment. The bill is silent on this.

3.7.3.3 Right to Information Curtailed

The Section 28(1) of the BRAI bill overrides the requirement of the Right to Information Act and places the decision to disclose information for public interest with the authority instead of the central information commission or the court as required by the RTI act 2005.76

Thus, the proposed bill is only a regulatory scheme to promote the modern biotechnology without addressing the concerns of prevention and remediation of environmental damage. For all these

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76 28. (1) In case an application to be submitted under sub-section (1) of Section 24 or sub-Section (1) of Section 27 requires the disclosure of confidential commercial information such information shall, notwithstanding anything contained in the Right to Information Act, 2005, be retained as confidential by the Authority and not be disclosed to any other party.

(2) If the Authority is satisfied that the public interest outweighs the disclosure of confidential commercial information or such disclosure shall not cause harm to any person, it may refuse to retain that information as confidential commercial information.
inadequacies the bill may not be able to stand judicial scrutiny, given the well settled position of the principles of precautionary and polluter pays principle in the environmental jurisprudence evolved by the Indian judiciary.

3.8 The National Green Tribunal: Environmental Court for India

The National Green Tribunal has been established to deal with substantial question relating to environmental harm and its victim under the National Green Tribunal Act, 2010. An Act to provide for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto. The statute gives statutory recognition to the environmental principles of precaution and polluters pay. Section 15 provides for that the tribunal ‘may, by an order, provide,-

(a) relief and compensation to the victims of pollution and other environmental damage arising under the enactments specified in the Schedule I (including accident occurring while handling any hazardous substance);
(b) for restitution of property damaged;
(c) for restitution of the environment for such area or areas, as the Tribunal may think fit’.

77 Preamble to the National Green Tribunal Act, 2010.
78 Section 15(2). The relief and compensation and restitution of property and environment referred to in clauses (a), (b) and (c) of sub-section (1) shall be in addition to the relief paid or payable under the Public Liability Insurance Act, 1991.
3. No application for grant of any compensation or relief or restitution of property or environment under this section shall be entertained by the
Section 17 of the Act provides for liability to pay relief or compensation in certain cases. These are ‘where death of, or injury to, any person (other than a workman) or damage to any property or environment has resulted from an accident or the adverse impact of an activity or operation or process, under any enactment specified in Schedule I, the person responsible shall be liable to pay such relief or compensation for such death, injury or damage, under all or any of the heads specified in Schedule II, as may be determined by the Tribunal’.\textsuperscript{79} The statute provides for ‘if the death, injury or damage caused by an accident or the adverse impact of an activity or operation or process under any enactment specified in Schedule I cannot be attributed to any single activity or operation or process but is the combined or resultant effect of several such activities, operations and processes, the Tribunal may, apportion the liability for relief or compensation amongst those responsible for such activities, operations and processes on an equitable basis’.\textsuperscript{80} The Tribunal shall, in case of an accident, apply the principle of no fault.

The Tribunal has jurisdiction over all civil cases where a substantial question relating to environment (including enforcement of any legal right relating to environment), is involved and such question arises out of the implementation of the enactments specified in

\textsuperscript{79} Section 17(1).
\textsuperscript{80} Section 17 (2).
Schedule I.\textsuperscript{81} Section 2(m) “substantial question relating to environment” shall include an instance where,-

(i) there is a direct violation of a specific statutory environmental obligation by a person by which,- the community at large other than an individual or group of individuals is affected or likely to be affected by the environmental consequences; or the gravity of damage to the environment or property is substantial; or the damage to public health is broadly measurable;

(ii) the environmental consequences relate to a specific activity or a point source of pollution.\textsuperscript{82}

The Act does not define ‘damage’ rather it provides for the concept of ‘substantial question relating to environment’. The threshold for gravity of damage to environment is set at ‘substantial’ which seems to be higher than ‘significant’. The National Green Tribunal has administrative and experts members on the bench. The Tribunal has limited power of judicial review as it is a judicial tribunal with the trappings of a court. It is to supplement the higher courts but not to supplant them.\textsuperscript{83} Thus, the Tribunal has original Jurisdiction on matters of “substantial question relating to environment” i.e. a community at large is affected, damage to public health at broader level and “damage to environment due to specific activity” such as pollution. However there is no specific method is defined for determining “substantial” damage to environment, property or public health. There is restricted access to an individual only if damage to environment is substantial. The powers of tribunal related to an award are equivalent to Civil Court.

\textsuperscript{81} Section 14.
\textsuperscript{82} \textit{Ibid.}
\textsuperscript{83} \textit{Wilfred J. Anr vs Ministry of Environment and Forests Ors} 2013 Vol-1, All India \textit{NGT} Reporter 1.
Conclusion: The lessons learnt from the most devastating mass industrial accident has led to the development of a robust environmental jurisprudence based on the principles of absolute liability of dangerous and hazardous activities. The polluter pays principle has been applied by the Indian courts for including liability for remediation and restoration and cleanup costs. The liability for environmental damage can be fixed under the statutory laws like National Green Tribunal Act or by the Writ Courts for the violation of fundamental right to healthy environment or tortuous liability of strict or absolute liability on case of inherently dangerous or hazardous activities. All these laws are domestic laws and there is no special law pertaining to transboundary harm. If any case has to be addressed with a foreign element they shall be addressed by the application of national laws including the private international law. In case of claims for torts the private international law rules of place of torts or the place of damage shall apply. The liabilities of the multinational corporations are under the national laws. The more hazardous activities are covered under Rules made under the umbrella legislation of Environment Protection Act, 1986 and the special laws like the Civil Liability for Nuclear Damage Act, 2010. The concept of compensation funds and financial securities has been initiated after Bhopal Gas tragedy and the Oleum gas leakage case and Public Liability Insurance Act, 1991. With advent of nuclear and biotechnology the insurance sector is also now establishing itself more concretely. The requirement of Environment Impact Assessment is an important obligation of project proponents in India and generally is invoked to challenge the risk bearing activities in the courts. The problem has been the general apathy in implementation of rules and regulations.