AN ANALYSIS OF GREEN JUDGMENTS BY HON'BLE JUSTICE (RETD.) KULDIP SINGH

Dissertation submitted to National Law University, Assam

in partial fulfilment for award of the degree of

MASTER OF LAWS

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LL.M One Year

Degree Programme

2020-2021

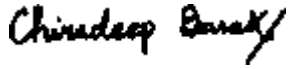
National Law University and Judicial Academy, Assam

July, 2021

SUPERVISOR CERTIFICATE

This is to certify that Ms. TEJASWINI MISRA, LL.M student from National Law University and Judicial Academy, Assam and has completed her dissertation titled "AN ANALYSIS OF GREEN JUDGMENTS BY HON'BLE JUSTICE (RETD.) KULDIP SINGH" under my supervision. The research work is found to be original and suitable for submission.

Date: 15.07.2021



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DECLARATION

I, TEJASWINI MISRA, pursuing Masters of Law (LL.M.) from National Law University and Judicial Academy, Assam, do hereby declare that the dissertation titled "AN ANALYSIS OF GREEN JUDGMENTS BY HON'BLE JUSTICE (RETD.) KULDIP SINGH" is an original research work and has not been submitted either in part or full anywhere else for any purpose, academic or otherwise, to the best of my knowledge.

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ACKNOWLEDGEMENT

This research work is the result of ceaseless hard work and practice of trial and error. I believe that any research should be a melting pot of theoretical knowledge and practical experiences, however in the midst of this pandemic it was not possible to look for alternatives outside of a computer. While it is true that technology has the capability to bring everything at our doorstep, still it is short of realizing the impact of human interaction vide internet. Nonetheless, my first and foremost acknowledgement goes to the progressions in the field of information technology, without which it wouldn't be possible to attend classes, let alone completing this dissertation.

With all due credit to the internet which can teach us a lot, it still falls short of what a teacher can make us learn, particularly a teacher and supervisor like Dr. Chiradeep Basak. I would like to take this opportunity to extend my sincere thanks and gratitude to Dr. Basak, who has been a constant pillar of support, guidance and encouragement for me throughout this journey. He is the kind of teacher who helps his students in the toughest of times and through most difficult of circumstances.

The completion of my work has not only been a constant effort on my part, but also on the part of my parents, Supriti and Anurag Misra, who have made sure with utmost sincerity and sheer hard work throughout their life and mine, to make my life easier to the best of their capacities, at each and every step. It is because of their continual support and love that I can always make the best out of the possible, without anything to worry about. My most earnest thank you to my parents for being there, always.

Lastly, I would extend my most honest gratitude, with folded hands, to the Almighty for all the blessings in disguise, during these difficult times.

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PREFACE

More often than not, the solutions we seek are right Infront of us staring at our face what makes us dodge them is simply the upheaval or changes they are meant to cause in the status quo. A person with strong mind and stability of thoughts could only stare in the face of these challenges and changes, and accept them, in short 'do the right thing' as we say. Hon'ble Justice (retd.) Kuldip Singh was one such person. It is not for nothing that he has been called as "the Green Judge of India", and for a long time no other judge has been able to take away this title from him.

India, like most developing countries, is faced with the daunting challenge of developing itself rapidly, while at the same time preserving and protecting its environment. Major environmental problems have resulted in India from the use (and more often the misuse) of its natural resource base. Legislative and regulatory responses to environmental problems have been adopted in India-especially in the wake of the Bhopal tragedy which is clearly the world's worst industrial disaster. But the judicial approaches to environmental problems which have also followed, have been especially interesting in India.

The last two decades of the past century brought about many changes. The judiciary has changed its stand on the environmental related issues with special emphasis on the safety and security of human life, now the thrust is shifted from human centric to eco-centric, since in the guise of development, with total disregard and disrespect to our environment, the natural elements have been totally disfigured. The law has taken a firm stand on the protection of environment for the safety, security and wellbeing of the humans in the longer run.

In this research work, we analyze five of the most iconic judgments authored by Justice Singh, relating to our environment, and while doing so we shall trace the journey of evolution of environmental jurisprudence in India especially in the later part of the last century, keeping the wisdom of Justice Singh and his landmark judgments as our vantage point.

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LIST OF ABBREVIATIONS

Abbreviated Form	Full Form
Art.	Article
Annex.	Annexure
Cl.	Clause
COP	Conference of Parties
CPCB	Central Pollution Control Board
CRZ	Coastal Zone Regulation
DPSP	Directive Principles of State Policy
EU	European Union
HTL	High Tide Line
LTL	Low tide line
MoEFCC	Ministry of Environment, Forest and Climate Change
NEERI	National Environment Engineering Research Institute
NGO	Non-Governmental Organization
Retd.	Retired
P. No.	Page Number
Para	Paragraph
PIL	Public Interest Litigation
PPM	Parts per million
Pt.	Point
Sec.	Section
Sch.	Schedule
SPCB	State Pollution Control Board
SPM	Suspended Particulate Matter
TDS	Total Dissolved Solids
TTZ	Taj Trapezium Zone
U.K.	United Kingdom
U.N.	United Nations
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, scientific, and Cultural Organization
UOI	Union of India
U.S.A.	United States of America
UT	Union Territory

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CHAPTER I

Introduction

1.1 Introduction

The last Century saw a complete revival of how the Human species lived on this planet. It would not be an over-assessment to say that before the last century, Human life was more about survival than anything, everything came second to our animalistic tendencies of survival by any means. However, the last century saw how scientific inventions and technology made our lives change, the tide had turned away from cataclysm and towards industrialization, and with the amalgamation of industries and technology came incessant economic growth. This economic growth and population boom made us leave behind the last century as if it was a millennium ago. By the mid of 20th century, the wars had subdued and people wanted to make a better life away from the bitterness and uncertainty of those times. The world as we know it today had begun to take shape, and Independent India was finding its way in this new post-colonial and neo-liberal world. Our new nation needed to utilize all her resources, human or natural, to the best and fullest of her capabilities if she had to survive the new order. The “hard power” of armies and muscle was slowly being replaced with “soft-power” of diplomacy and economy. In between all these vicissitudes, we blurred the lines between utilization and exploitation.

In the pursuit of rapid economic development, over the years, the environment came to be subordinated to developmental goals. By the seventies, we were heading towards irreversible environmental damage, due to widespread land degradation, water pollution, air pollution, mushrooming growth of slums, and population explosion. This not only led to environmental degradation but also acute human rights violation by denying the use of local and community resources that were the means of livelihood for the mass of Indian population, especially in the rural areas.

During the Colonial rule, several laws were enacted to deal with environmental matters. The Indian Penal Code and the Code of Criminal Procedure dealt with the fouling of air and water under the title “Public Nuisance”, the Poison Act was enacted to control pesticides, and the Indian Forest Act was legislated for forest and wildlife management. However, these laws on forests, mines and minerals, water, and other common natural resources were enacted more for their appropriation, privatization, and utilization rather than for their protection. These laws

remained unequipped to deal with the issues arising from urbanization, industrialization and population have enhanced the problem of environmental degradation. In post-colonial India, things changed for the better but not for enough.

Judicial awakening and activism for the protection of the environment in India began formally after the 1972 Stockholm Conference on Human Environment. The 1972 conference also led India to introduce 42nd Amendment to the Indian constitution inserted articles 48-A directing the state to protect and improve the environment and to safeguard the forests and wildlife of the country and Article 51-A (g) mentioning fundamental duties of the citizens to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures. Armed with the power of judicial review and constitutional scheme of independence of judiciary the Indian judiciary has performed a stellar role in protecting the environment and spreading environmental awareness among the Indian people. The Indian jurisprudence regarding the environment gives greater importance to the concerns of the public than fulfilling private interests, which is the basic element in most of the laws in the Indian constitution. The environmental jurisprudence relies explicitly and implicitly on the indigenous values of the Indian constitution, which is the basic element in the Indian law regime covering the main postulate of dharma.

1.2 Statement of Purpose

The examination of the implications of the Supreme Court's innovations for environmental jurisprudence reveals that the application of innovative methods to resolve environmental disputes and implement Court orders is certainly a deviation from the usual adjudication function of the Court. While the procedural innovations have widened the scope for environmental justice through recognition of citizens' right to a healthy environment, Judges like Kuldip Singh have redefined the role of the Court in the decision-making process through the application of environmental principles in substance, entertaining petitions on behalf of affected people and inanimate objects and expanding the scope of environmental jurisprudence. It is vital to recognize and credit the role of the Hon'ble Supreme Court of India, and Judges like Hon'ble Justice (retd.) Kuldip Singh for expanding the meaning of existing Constitutional provisions, taking Suo Motu action against the polluter, expanding the sphere of litigation, applying international environmental principles to domestic environmental complications, appointing an expert committee to give inputs and monitoring implementation of judicial decisions, making spot visit to assess the environmental problem at the ground level, appointing

amicus curiae to speak on behalf of the environment, and encouraging petitioners and lawyers to draw the attention of Court about environmental problems.

1.3 Aim

This research work aims to trace the judicial implementation of environmental law in India, especially focusing on the pioneering work by Hon'ble Justice (retd.) Kuldip Singh. It seeks to establish a link between the green judgments of Hon'ble Justice (retd.) Kuldip Singh and the expedition of environmental jurisprudence in India, by the way of analyzing his five most momentous decisions relating to the environment. It also pursues the exploration of the journey of adoption of various international environmental law principles in the Indian discourse of environmental protection.

1.4 Objectives

The objectives of this research are as follows:

1.4.1 To analyze the distinct nature of the outstanding contribution of Indian judiciary into development of environmental jurisprudence and its development within a broader constitutional and jurisprudential framework.

1.4.2 To study and evaluate the "Green Judgements" authored by Hon'ble Justice (retd.) Kuldip Singh.

1.4.3 To trace the trajectory of evolution of Environmental Jurisprudence in India and the role of Hon'ble Justice (retd.) Kuldip Singh in this path.

1.4.4 To investigate the extent of Judicial Activism, specifically relating to matters of environment, and its overall impact on our society.

1.4.5 To undertake an analysis of international environmental law principles like Sustainable development, polluter pays principle, precautionary and public trust doctrine in the light of the Hon'ble Justice (retd.) Kuldip Singh's Judgments.

1.4.6 To establish a relationship between an active judiciary and environmental justice.

1.4.7 To assess and estimate the implications of Supreme Court's innovations for environmental jurisprudence.

1.5 Scope and Limitations

The scope of this research extends to environmental jurisprudence in India, while focusing on the pioneer work by Hon'ble Justice (retd.) Kuldip Singh. It discusses, in details, five landmark cases authored by Justice Singh which have impacted the handling of matters related to environment by Indian Judiciary forever. The said five judgments are what famously granted the title of "Green Judge of India" to Justice Singh and we ought to examine precisely what is it in these judgments that bestowed the honor upon him by experts and masses unanimously. While we examine these five momentous judgments, we shall simultaneously endeavor to find out how has environmental jurisprudence taken shape in India specially during the last decades of the past century when we faced grave environmental hazards like the Bhopal tragedy and the Oleum leak case.

While we draw out the features of environmental jurisprudence in India, we shall also find out to what extent has the Indian Judicial system adopted the principle of sustainable development, public trust doctrine, polluter pays and precautionary principle, enshrined in the international discourse on environment. This study is focused primarily on these five case laws and four principles as mentioned above, but not limited to them. We attempt to locate the relationship between them and their importance in leading us to where we stand today in the context of environmental jurisprudence in India.

While undertaking this research, sincere efforts have been made to access and collect relevant, accurate and up to date material, however a few obstacles were faced in the process which should be highlighted in the spirit of hard work and efforts in the field of research and academics. A few are mentioned below: -

1.Lack of physical access to Library: Pursuant to the Covid-19 pandemic and subsequently the deadly second wave of the virus outbreak, the efforts to obtain authentic resources had been seriously undermined. The limited access to books, journals and articles on the subject meant a great reliance on the material and sources available on the internet, and also a sudden break in the habit of using physical books etc.

2.Lack of previous work on the subject: Despite there being a substantial and indeed surprising abundance of both international and national discussion on matters pertaining to environmental law and justice, there has been relatively lesser work done on the subject of environmental law and jurisprudence being developed by the judiciary, let alone to focus on the efforts of a single

judge like Justice (retd.) Kuldip Singh himself and his contributions in relation to international principles of environmental law.

3. Lack of free contact with peers and faculty members: While research in mainly an individual endeavor, the tremendous benefit in consulting a group of scholars cannot be stressed enough. Due to the outbreak of Covid-19 pandemic, we were unable to follow an open and consultative approach during the course of her research. In addition to making the study less comprehensive, the restricted contact with other faculty members has deprived us from knowing multiple viewpoints and credentialed views on the subject matter.

1.6 Literature Review

1.6.1 M.C. Mehta[1]

Mr. M.C. Mehta is a pioneer in the field of environmental jurisprudence and public interest litigation. In this Article, he traces the path of Indian Judiciary's quest for Environmental Justice, in light of rapid industrialization and economic growth during the last two decades of the last century, with the study of landmark judgments delivered by the Supreme Court of India. The Author himself being a trail-blazer of environmental justice presents a first-hand account of why he sees the Indian Judiciary as the savior of India's environment and its people, through a positive interpretation of fundamental rights in the Constitution, and by imposing positive obligations on the State to carry out its duties as laid down in the 'Directive Principles'.

1.6.2 P. Leelakrishnan and N.S. Chandrashekharan[2]

This article discusses the need for technical and scientific expertise in matters of environmental apprehension. The authors also stress on the fact that the process of judicial review in environment related case and application of 'Wednesbury rule' is not applicable as in matters of other concerns. This is so because decisions relating to environment should be based on ecology, technical data and scientific material and without the knowledge of these factors, the reviewing body may fail to act in a bona fide manner. Thus arises a need for the combination of legal acumen and technical knowledge. This article published in 1999 advocated for special environmental courts, with a broader jurisdiction, long before the National Green Tribunal

[1] M. C. Mehta, "Growth of Environmental Jurisprudence in India," *Acta Juridica*, pp. 71–79, 1999. Available: https://books.google.com/books?id=pFuwFcbrpdUC&pgis=1.
[2] P. Leelakrishnan., and N.S. Chandrasekharan. "Environmental Expertise and Judicial Review: Need for Strategy Shift And Law Reform." *Journal of the Indian Law Institute*, vol. 41, no. 3/4, pp. 357–367, 1999.

Came into existence. It was argued that the national environmental Appellate authority, being a statutory body in nature, could tie the hands of the Supreme court.

1.6.3 C.M. Jariwala[3]

This literature is a chapter in a book that commemorates fifty years of the Supreme Court of India. The chapter tries to explain the interior of the judicial activities through a quick overview of the overall scenario for the case-law concerning environmental justice in its statistical form. A total of 88 judgements relating to environment were taken up by the Supreme court in the course of fifty years, 1998 being the most fruitful. It discusses the stance taken up by various judges in the due course when dealing with matters of ecological concern, including but not limited to, Justice Kuldip Singh. In a simply worded yet innovative style of writing the authors takes us through a guided tour of the role of Supreme Court in the development of environmental jurisprudence in India.

1.6.4 Zafar Mehmood Nomani[4]

The author talks about the evolution of enviro-huma rights of the citizens of India and how the Indian judiciary has played a catalyst in this development. He states that despite the prolixity of constitutional, criminal, tort and environmental legislation, legal sagacity is guided in terms of procedural gateways available to statements, orders, representative proceedings, collective actions, proceedings in public interest, amicus curiae and tribunal-sponsored entities. However, the Indian judiciary has actively engaged in laying principles and precedents regarding enviro-human rights apart from fashioning environmental rights out of a conventional catalogue of constitutional rights. He points out that the activism at the ground level has guided this shift in approach, after meticulously going through the legislative, institutional and judicial framework of environmental law in India. The author draws out how the range of environment related statutes is a mixture of technocentric, eco-centric, anthropocentric and trans-anthropocentric environmentalism. Yet, how environmental rights are not bestowed from above, but are seized from below by activists.

[3] C. M. Jariwala, "The directions of environmental justice: an overview," in *Fifty Years of the Supreme Court: It's grasp and reach*, 1st ed., S. K. Verma, Ed. New Delhi: Indian Law Institute, pp. 469–494, 2000.
[4] Z. M. Nomani, "The human right to environment in India: Legal precepts and judicial doctrines in critical perspective," *Asia Pacific J. Environ. Law*, vol. 5, no. 2, pp. 113–134, 2000.

1.6.5 Ritwick Dutta[5]

This article establishes clearly that environmental problems lead to severe social implications like a lack of equal access to resources for different groups within the society. In light of this, it analyses the contribution of Judicial Activism in strengthening the environmental and Human rights movement in the country, by inter-linking the two concerns. This article also tries to study the degree to which courts and specialized bodies with expert knowledge on environmental science and technology can steer our way towards best possible solutions in cases of environmental injustice and incidental Human rights violations.

1.6.6 J. Mijin Cha[6]

This article traces the path of India's environmental jurisprudence while discussing it's legislative as well as judicial aspects, especially the role of Supreme court and PILs. It deals with the concept of specialized courts dealing specifically with environment related matters. The author seeks to convey how the Supreme Court of India, post Stockholm, has liberalized the locus Standi to accommodate a wider range of litigation which would otherwise be unsound in legal technicality. Also, he tries to point at lacunas and lapses on the part of both judiciary and legislature in dealing with environment related issues and how the judiciary addressed it.

1.6.7 Geetanjoy Sahu[7]

The author discusses the activist role assumed by the Supreme courts in many respects including protection of environment. He cites the failure on the part of implementing agencies to discharge their Constitutional and Statutory duties leading to the judiciary to step up and take charge prompting civil society groups and the people to approach the Courts, particularly the Supreme Court, for suitable remedies. Interestingly, the Court has also responded in a pro-active manner to address different governance problems. The author guides us through the substantive and procedural innovations, like the concept of PIL, adaptation of international environmental law principles and new realm/scope of fundamental rights and its impact on Environmental Jurisprudence in India. The article explains how the procedural innovations have widened the scope for environmental justice through recognition of citizens' right to healthy environment, entertaining petitions on behalf of affected people and inanimate objects

[5] R. Dutta, "environmental justice and courts," *Soc. Change*, vol. 33, no. 2, pp. 16–28, 2003.
[6] J. Mijin Cha, "A Critical Examination Of The Environmental Jurisprudence Of The Courts Of India," *Albany Law Environ. Outlook J.*, vol. 10, no. 2, pp. 197–228, 2005.
[7] G. Sahu, "Implications of Indian Supreme Court's Innovations for Environmental Jurisprudence," *Environ. Dev. J.*, vol. 4, no. 1, pp. 1–21, 2008.

and creative thinking of judges to arrive at a decision by making spot visit, substantive innovations have redefined the role of Court in the decision-making process through application of environmental principles and expanding the scope of environmental jurisprudence.

1.6.8 Shalini Iyengar, Nives Dolšak and Aseem Prakash[8]

This article examines, with help of case law studies, why India's Supreme Court has selectively intervened to enforce environmental laws. While the Indian Judiciary has substantial political insulation, judges recognize the need for tactical balancing to preserve the legitimacy of their institution. It investigates about where judicial action imposes costs on a large number of actors and motivates protests from organized groups, the justices have tended to overlook enforcement failures. In sum, in spite of political insulation, judges remain attentive to the popular mood and interest-group politics.

1.6.9 Garima Prashad[9]

This article talks about the fundamental right to life enshrined under article 21 of the Indian Constitution specifically in the context of right to clean environment and emphasizes on the role of judiciary, through its Writ Jurisdiction vis-a-vis Public Interest Litigation (PIL) to enforce this right, while comparing it with English and American courts. The article deals with active instances of the Higher Judiciary, with special reference to sustainable development, in cultivating environmental jurisprudence in India. The article also defines the jurisdiction of the Sub-ordinate Judiciary in the matters of environmental concern. It explains all possible ways by which the jurisdiction of the lower judiciary can be invoked for expeditious relief, both civil and criminal jurisdiction.

While a lot of academicians and jurists have authored into books and articles their views on the evolution of environmental jurisprudence in India in the light of judicial activism and the impact of international environmental law principles, none of it specifically deals with the judgments of Kuldip Singh: the Green Judge of India. This research work attempts to analyze five of his landmark judgments with regards to international environmental law principles and how has it impacted environmental jurisprudence in India.

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[8] S. Iyengar, N. Dolšak, and A. Prakash, "Selectively assertive: Interventions of India's supreme court to enforce environmental laws," *Sustain.*, vol. 11, no. 24, pp. 1–18, 2019, doi: 10.3390/SU11247234.
[9] G. Prashad, "Indian Judicial Activism on the 'Right to Environment': Adjudication and Locus Standi," *SSRN*, 2019. https://ssrn.com/abstract=3391846.

1.7 Research Questions

Q-1: How did environmental jurisprudence evolve in India?

Q-2: What is the contribution of Justice (retd.) Kuldip Singh in shaping India's environmental jurisprudence?

Q-3: How did polluter pays principle, precautionary principle, sustainable development and public trust doctrine evolve in India under the aegis of Justice (retd.) Kuldip Singh?

Q-4: What is the precedential value of judgments authored by Justice (retd.) Kuldip Singh?

1.8 Research Methodology

To answers the above noted questions, the Researcher will adopt a very precise Research Methodology based on study of legal literature available on this subject at National and International level. The study will follow descriptive research method in compilation, organization, interpretation and systematization of the primary and secondary source material. The study will be doctrinal in nature. The findings and conclusions will be based on qualitative analysis.

The Primary source materials would include Case laws and legislations while the Secondary sources of research would be journals, books, Law Commission Reports and articles on the subject. Review and analysis of legal literature available in India and in other common law countries will be examined. Several online databases and search engines will be surfed to make the study effective and realistic. The Researcher will frame the findings and outcome in the design as proposed in the next section.

1.9 Research Design

This study has been divided into seven parts or chapters. The first part has been discussed above. The second part titled **Environmental Jurisprudence in India and its pioneer Justice (retd.) Kuldip Singh** discusses about the life and journey of Hon'ble Justice Kuldip Singh and his contributions as a Supreme Court judge especially in the field of environmental law. It also discusses the evolution of environmental jurisprudence in India, the concept of judicial activism and Public Interest Litigation (PIL). In this chapter, an attempt has been made to understand what is judicial environmentalism in light of Indian courts and their approach towards environmental justice in a more eco-centric manner.

The third part titled **The tanneries pollution cases and Polluter Pays Principle** discussed two cases relating to pollution of rivers by leather industries, namely Vellore Citizens' Welfare Forum vs. Union of India and M.C. Mehta vs. Union of India. The chapter also discusses the polluter pays principle and the menace of river pollution in India.

The fourth part titled **The Shrimp Culture Case and Sustainable development** discusses the landmark case of S. Jagannath vs. Union of India along with the evolution of CRZ notifications from 1991 till 2019, the principle of Sustainable development and the Apex courts' stance on the debate between ecology and development.

The fifth part is titled **The Span Motels Case and Public Trust Doctrine.** This chapter discusses the adaptation of public trust doctrine in light of the milestone judgment of M.C. Mehta vs. Kamal Nath. Also, an attempt has been made to discuss the legal aspects of ownership of Natural resources.

The sixth part is titled **The Taj Trapezium case and Precautionary Principle**. This chapter discusses the popular case of M.C. Mehta vs. Union of India and the Precautionary principle. The case of corrosion of Taj Mahal due to air pollution raises the question of harm to our culture and heritage due to incessant pollution, which has been discussed in this chapter

The seventh and last part, titled **Conclusion,** sums up whatever has been observed in the due course of this study and tries to answer the question that we have posed to ourselves at the beginning.

CHAPTER II

Environmental Jurisprudence in India and It's Pioneer Justice (Retd.) Kuldip Singh

2.1 Environmental Law and Justice in India

Environmental issues contributed to major problems in the 20th century. Some of them arose due to developmental activities and failure to guard the environment against the hazards resulting from development, while others occurred, paradoxically so, as a result of lack of reach of the said development to the right corners. The environmental problems have begun to show their ugly faces at local, regional, or rural levels, like pollution occurring due to industrialization, as well as at a larger global scale, like climatic change and global warming. Since the 1972 Stockholm conference, India has worked tirelessly towards reducing the burden of environmental degradation by making necessary legislation from time to time. The citizens understand that keeping the environment healthy is a fundamental right for them as mentioned in the Indian constitution. In this race against various environmental challenges, the Judiciary has participated with all its might and power.

The legislative and executive efforts have been notable towards Environmental Protection laws and principles in the legal jurisprudence of India, most notably, in 1976, the 42nd Amendment of the Constitution was introduced under which Articles 48-A and 51-A (g) were inserted in the Indian Constitution. Article 48-A placed the environment as a responsibility of the state government under the Directive Principles of State Policy. Article 51-A (g) made environmental protection and conservation a Fundamental Duty of all the citizens of India. Although not enforceable in a court of law, an activist judiciary has given effect to the objective underlying these Principles by reading them in conjunction with the fundamental rights, which are enforceable in a court of law.

The remedies available in India for environmental protection comprise tortuous as well as statutory law remedies. The tortuous remedies available are trespass, nuisance, strict liability, and negligence. The statutory remedies incorporate a citizen's suit, e.g., an action brought under Section 19 of the Environmental (Protection) Act, 1986, an action under area 133, Criminal Procedure Code, 1973 and an action brought under the Section 268 for open irritation, under Indian Penal Code,1860. Apart from this, a writ petition can be filed under Article 32 in the Supreme Court of India or Article 226 in the High Court.

The enactment of the Environment Protection Act, 1986 as an umbrella legislation to protect all parts of our environment and introduce specific rules and regulations under it was massive positive growth. Although initiatives have been taken by the Legislature and the Executive, the Judiciary has taken a lead in this race through careful judicial thinking of the Courts which has been very helpful in controlling environmental pollution. Due to non-compliance of its laws by the State machinery, the Judiciary invented a new method of Judiciary-driven implementation of the regulations in India. Recently judicial activism has provided an impetus to campaign against various environmental pollution issues arising in the country. The Indian Judiciary has interpreted Art.21 to give it an expanded meaning to bring within its ambit the right of every citizen to a clean, safe and healthy environment. The right to life under Art 21, it was held by the Supreme Court, was not limited to a mere animal existence. This article was later interpreted to bring within its sweep the right to a pollution-free environment. Art 32 and 226 provide for the issuance of prerogative and other writs have been invoked to grant reliefs. Art 32 enables an individual to approach the Supreme Court directly for infringement of a fundamental right. Art 226 empowers a High Court to issue a writ for violation of a fundamental right or any other legal right. Further, the rulings concerning the expansion of the principle of locus standi for invoking these provisions were applied to protect against environmental degradation.

The internationally recognized third-generation right to development has been established by environmental law jurisprudence with a focus on human rights. Over the decades, the problem of environmental pollution has grown to massive and grave proportions. Through the growth of the law of public nuisance into environmental law, it has been left to the Indian courts to look beyond the language of the law to the spirit of the law to discover feasible remedies to the problem. Through the implementation of statutory provisions, as also by embracing various international doctrines, the Supreme Court of India as well as various High Courts have tried time and again to develop environment-friendly jurisprudence in India through the recognition of the principle of Sustainable Development. However, the acts of the judiciary have been criticized by other state organs, who claim that the court is overstepping its bounds and interfering with the executive and legislative branches. The Indian environmental jurisprudence is based on legislation from other developed countries, although various adjustments have been made to the legislation, making the context of Indian law distinct. The voices of many experts who have the knowledge and are interested in maintaining a healthy environment have also been included in the Indian jurisprudence after making necessary

changes for the Indian context. The laws written in the Indian constitution regarding the environment to sustain a healthy environment have three basic qualities which are related to each other. The Indian jurisprudence regarding the environment gives greater importance to the concerns of the public than fulfilling private interests, which is the basic element in most of the laws in the Indian constitution. The environmental jurisprudence relies explicitly and implicitly on the indigenous values of the Indian constitution, which is the basic element in the Indian law regime covering the main postulate of dharma. In diminutive, the enlargement of ecological jurisprudence in India exhibits neo-dharmic jurisprudence in postmodern communal law.

A distinctive feature of the growth of environmental law in India is the fact that major developments in the law have been at the instance of non-governmental organizations and the public. As mentioned earlier, the judiciary assumed a more activist role during the 1980s as new modes of justice delivery were devised. The courts overcame the limitations imposed by the traditional adversarial system by expanding the principle of locus standi. In the celebrated SP Gupta case,[10] the Supreme Court declared that any member of the public acting bona fide can maintain an action for redress where a public wrong or injury is caused by the state. It is significant to note that the court ruled that such a member of the public may approach the court on behalf of a person(s) who has been injured but is not able to approach the courts because of disabilities like poverty, social or economic hardship. This expansion of locus standi has been extensively used by environment groups and individuals to seek redress against environmental degradation by taking recourse to Arts 32 and 226 of the Constitution.[11]

2.2 The Constitution of India and Environment Protection

The part III of the Indian Constitution[12] contains fundamental rights which are guaranteed to all citizens. These rights, which take precedence over any other law of the land, include the right to life, freedom of speech and expression, equality before the law, and freedom of religion etc. Article 14, Right to equality, states that the State shall not deny to any person equality before the law and equal protection of laws within the territory of India.[13] This indicates that any action of the State relating to the environment must not infringe upon the right to equality as enshrined in Article 14 of the Constitution. The Stockholm Declaration, 1972 also

[10] S.P. Gupta vs. Union of India, AIR 1982 SC 149.
[11] G. Guru Krishnakumar, "Environment law in India - an overview," C. Law-Now, 1999.
[12] The Constitution of India, 1950, Part III.
[13] Ibid, Article 14.

recognized this principle of equality in environmental management. Principle 1 of the Declaration states,[14]

'*Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being*.'

On various occasions, the Indian Supreme Court has struck down the arbitrary official sanction in environmental matters on the basis that it was violative of Article 14.[15] Article 19 (1) (g)[16] of the Indian Constitution guarantees freedom of trade and commerce but at the same time, it states that this right is subject to reasonable restriction. Some of the industries or trades are carried in manners that endanger vegetation cover, animals, aquatic life, and human health. Time and again, it has been mentioned by the Supreme Court that this freedom of trade is subject to reasonable restriction. Any activity which pollutes the environment and makes it unhealthy, hazardous to human health and flora and fauna, is violative of the right to a wholesome and living environment which is violative of a right guaranteed in Article 21 of the Constitution.[17] Article 21 is the key chosen for widening the scope of application of provisions of law. Further, the judiciary is allowed litigation under articles 32 and 226 to achieve the constitutional goal of socio-economic justice.[18]

Part IV[19] of the Indian Constitution deals with the Directive Principles of State Policy. Some of them specifically deal with the various facets of human health and the environment. In some cases, these Directive Principles become complementary to the fundamental rights and are enforced by courts of law. All these articles are not directly related to environmental protection except Article 48 A which has been introduced by 42nd Amendment Act, to the Indian constitution in the year 1976. Article 39 of the Constitution envisages the distribution and management of material resources which includes natural and man-made resources in such a manner that their concentration and monopoly over their use should not give rise to ecological imbalance and health hazards. Article 42 of the Constitution empowers the State to make provisions for securing just and human conditions of work and for maternity relief. The State is directed to secure just and human conditions of work which can be achieved in a clean

[14] Principle 1, United Nations Conference on the Human Environment held at Stockholm in June, 1972.
[15] Ajay Hasia vs. Khalid Mujib, AiR 1981 SC 487.
[16] Supra note 12, article 19 (1)(g).
[17] Ibid, Art. 21.
[18] Ibid, Art. 32, 226.
[19] Ibid, Art. 36-51, Part iv.

environment. Article 47 provides that the State shall regard to the raising of the level of nutrition and the improvement of public health as among its primary duties and the standard of living of its people and in particular the state shall endeavor to bring about prohibition of the consumption except for the medical purposes of intoxicating drinks and of drugs which are injurious to health. Under this article, the State is duty-bound to improve public health. This Constitutional duty can be fulfilled only in an atmosphere of a clean environment. Article 48 provides for the security of cows and calves and other milch cattle which help in maintaining ecological balance.[20] Article 48 A deals specifically with environmental protection which was inserted by the 42nd Constitutional amendment.[21] Article 49 provides that it shall be the obligation of the State to protect every monument or place or object of historic interest, declared by or under law made by parliament to be of national importance from spoliation, distinguishment, distraction, removal and disposal or export as the case may be.[22]

The 73rd and 74th amendments to the constitution in the year 1992 also inserted provisions that would raise the protective cover for the human environment in India by decentralizing the power. The 73rd amendment made the Panchayats were responsible for, under schedule xi, Land improvement, Land Consolidation, Soil Conservation, Water management and watershed management, Development, Social and farm forestry, and non-Conventional energy sources, among other things. Similarly, the 74th amendment, under schedule xii, made the panchayats responsible for Domestic, commercial and industrial use, Solid Waste Management, Sanitation, Urban forestry, protection of the environment, promotion of ecological aspects of urban development.

2.3 Evolution of Environmental Jurisprudence in India vis-à-vis Indian Judiciary

In India, environmental protection is not a new notion. Living in harmony with nature is an age-old concept. Since time immemorial, the concept of environmental conservation has been ingrained in Indian culture and ethos. The scale of India's awareness of the necessity of environmental protection may be seen in Vedic culture traditions, prehistoric and ancient periods, and medieval India. It is critical to understand the current legal structure for environmental preservation by looking back at historical Indian environmental traditions.

[20] Ibid, Art. 48.
[21] Ibid, Art. 48-A.
[22] Ibid, Art. 49.

Although the notion of environmentalism and environment protection goes a long way back to pre-vedic times, we shall focus on environmental jurisprudence under the common law system. In the past thirty years, the government of India has developed a comprehensive structure of cohesive policies for environmental protection and assessment of environmental impacts. Moreover, India has incorporated constitutional guarantees for the protection of the environment. Most significantly, the environmentally sympathetic stance of India's judiciary has created innovative procedural remedies even where they are not provided for under existing legislation. In its interpretation of cases, India's judiciary has expanded the role of the courts, in its commitment to rectify perceived problems within other branches of the government. This expanded role of courts has earned the name of Judicial Activism in India.[23] As per Prof. N.R. Madhava Menon, in the past century the stand taken by law to remedy environmental pollution problems can be divided broadly into four approaches,[24] firstly the Liability-Compensation Approach wherein the fact that risk and injuries are inevitable in progress and development is accounted. Law cannot stop development to put an end to pollution.[25] Hence this method seeks to put the liability on the perpetrators and award compensation to the victims appropriately. However, given the recent enormity in pollution cases, this method has virtually ceased to exist. Second, comes the Conservation-Co-operation Approach where the focus is on the prevention of harm and intelligent management of resources by co-operation among the stakeholders. Sustainable development is the mantra and not taking liberties with ecology is the approach. Next is the Bargain-Trade-off Approach which states that development would involve environmental costs, therefore it is for the law to see how and where to absorb these costs, thereby keeping the damage to the minimum. If harm still occurs, the Polluter Pays Principle comes into play. This is a popular approach endorsed in environmental laws. Lastly, according to the Rights-Sovereignty Approach, people have sovereign rights over natural resources, and the state's role is to control them. A constitutional right to a clean environment is included in the right to life. As a result, environmental law must be construed from the perspective of people.[26]

[23] Du Bois, Francois., Social Justice and the Judicial Enforcement of Environmental Rights and Duties, in *Human Rights Approaches to Environmental Protection*. pp 153.
[24] Madhava Menon, N.R., Legal Aspects of Environmental Protection, *Prof. S.K. Bose Memorial Lecture*, January 11, 2002, Centre of Mining Environment, Indian School of Mines, Dhanbad. Available: http://ismenvis.nic.in/lecture2002.pdf.
[25] Ibid.
[26] Ibid.

Although in the present time, the dynamics of environmental law have changed. Judiciary has played a really important role in bringing about these changes. The timeline of the past few decades which is filled with landmark judgments is evident of the role played by the judiciary by giving a wide interpretation to the Fundamental Rights of the individuals of this country. One of the major developments was the introduction of Public Interest Litigation (PIL). Supreme Court realized that the vast majority of our country is unable to approach court because of the rule of locus standi which means only the party aggrieved can approach the court. But in the 1980s the judiciary relaxed this rule which allowed every citizen whose interest has been affected in some way or the other to approach the court. PIL got its constitutional sanction in the 42nd Amendment of the Constitution. PIL proved to be a game-changer, particularly in the field of environmental cases as it expanded the horizon of social justice. The interpretation and application of the fundamental rights provisions in conjunction with Directive Principles of State Policy and Fundamental Duties to grant substantive relief is indeed a unique approach. Such an approach may, to a puritan, appear to be a deviation from established legal norms, but the need and necessity of the times have warranted it. With the onset of the millennium and the globalization that is taking place in all walks of life, there are crucial issues to be tackled. With the introduction of the National Green Tribunals Act, 2010, the jurisdiction of environmental courts is now commanded by National Green Tribunal (NGT).

2.3.1 Judicial Activism

The power of judicial review of an independent judiciary in India has enabled it to promote constitutionalism under the Indian Constitution. The phrase "judicial activism" has been applied to a variety of situations. Activism refers to situations in which a group or authority participates in deliberate and planned behavior to attain specific goals. This procedure involves a body or authority taking the side of a policy or set of goals. As a result, judicial activism refers to the process of the judiciary taking a stand on a contentious matter. The judiciary, on the other hand, is intended to be an independent, impartial arbitrator, which entails maintaining objective while making decisions. The voyage of judicial activism in the realm of environmental law began in the 1990s. After the Bhopal Gas Disaster in 1986, there was a strong desire to address environmental issues. This is not to say that the legislature was unconcerned about environmental issues before the Bhopal disaster. The Indian Parliament has passed the historic 42nd Constitutional Amendment, taking note of the United Nations

Conference on Human Environment (Stockholm), 1972, and the growing awareness of environmental protection and eco-imbalance.

There are three sources of judicial activism. The primary sources of judicial activism lie in the principal rule of law. The second source is the judicial review which is the charter for judicial activism. The third source is article 142 of the constitution from which began the era of PIL. It is interesting to note that the Supreme Court has observed that no statute can limit the powers of the Supreme Court to give directions if it feels they are required to ensure 'Complete Justice" in any matter. The only thing that the court should be cautious of is that it does not trample upon some other provision of the constitution while exercising this power under Article 142(1).[27]

There are two models of judicial review: one is a technocratic model in which judges act merely as technocrats and hold law ultra vires qua the powers of the legislature.[28] In the second model, a court construes the provisions of a constitution profusely and in the light of the spirit underlying it, keeping the constitution up-to-date through dynamic interpretations.[29] A court giving new meaning to a provision to suit the changing social or economic conditions or expanding the horizons of the rights of the individual is said to be an activist court. Judicial Review was incorporated into the Indian Constitution in the same way that it was in the US Constitution.[30] The Indian Constitution does not make Parliament paramount. Its powers are restricted in such a way that power is shared between the Centre and the States. Furthermore, the Supreme Court holds a position that gives it the authority to evaluate legislative acts passed by both Parliament and state legislatures. Under the constitution, the court now has a significant judicial review tool.[31]

In India, neither the judiciary nor the legislature is supreme, but the rule of law is, even judges are held accountable for their actions. The Constitution under art. 124(4) read with proviso (b) to art. 124(2) and proviso (b) to art. 217(1), provides for the dismissal of judges of the high court and Supreme Court by the address of the Houses of Parliament to the President for proven misbehaviour or incapacity. However, the independence of the Judiciary amounts to the basic structure of our Constitution.[32] The power of judicial review has been granted for the

[27] Delhi Judicial Service Association v. State of Gujarat (1991) 4 SCC 406.
[28] M. Parikh, "Environmental Jurisprudence: The role of Indian Judiciary; A critical study," Gujrat University, Ahmedabad, 2011.
[29] Ibid.
[30] Ibid.
[31] A.K.Gopalan v. Madras, AIR 1950 SC 27.
[32] Kesavananda Bharati v. Union of India, AIR 1973 SC 1461.

maintenance of the supremacy of the constitutional law of the land. The constitutional provisions which guarantee judicial review of legislations are articles 13, 32,131- 136, 143, 145, 226, 246, 251, 254, and 372. Article 245 states that the powers of both Parliament and State legislatures are subject to the provisions of the constitution. The legitimacy of any legislation can be challenged in the court of law on the ground that the legislature is not competent enough to pass a law on that particular subject matter the law is repugnant to the provisions of the constitution or the law infringes one of the fundamental rights. Article 131-136 entrusts the court with the power to adjudicate disputes between individuals, between individuals and the state between the states and the union but the court may be required to interpret the provisions of the constitution and the interpretation given by the Supreme Court becomes the law honoured by all courts of the land. Hence, the Judicial Review has two prime and co-dependant functions: (1) legitimizing Governmental action; (2) protecting the constitution against any undue encroachment by the Government.

This interpretation of the fundamental right to life entitles citizens to invoke the writ jurisdiction of the Supreme Court and high courts. The involvement and initiatives for environment protection by the community through the medium of public interest litigation open the door for the Indian judiciary to play an outstanding role in developing environmental jurisprudence in India. This credit goes to the constitutional scheme of independence of the judiciary from the other two organs of the government and the provision for judicial review which expands the scope of the judicial intervention in matters related to environmental protection in India. The extension of the locus standi has fuelled judicial activism in the development of India's environmental law. The expansion of locus standi and the entertainment of public interest litigation has given the judiciary ample opportunity to advance civil liberties, worker rights, gender justice, public institution accountability, environmental conservation, and the guarantee of socio-economic entitlements such as housing, health, and education, among other things. As a result, the emergence of public interest litigation (PIL) is one of the essential components of the Indian higher judiciary's approach of "judicial activism."

2.3.2 Public Interest Litigation

One of the most significant barriers to the impoverished classes gaining justice in the courts has been their lack of understanding of their legal rights. A similar stumbling block was the incapacity of the underprivileged groups to access the courts due to the hefty costs involved. Public interest litigation is litigation in which a person though not aggrieved personally, brings

an action on behalf of the downtrodden masses for the redressal of their grievances. This type of litigation is undertaken to redress public injury, enforcing public duty, protecting social, collective, and diffused rights, interest or vindicating public interest. The courts in India, duly supported by the initiative taken by public-spirited lawyers, have started forging new juristic techniques to overcome these hurdles. The first revolution was to do away with the outdated rules of locus standi.[33] There has been recognition that the restrictive straitjacket of traditional rules of locus standi prevents the underprivileged and genuinely aggrieved persons from approaching the courts.[34] There is growing sentiment in favour of modifying the rules of locus standi and injecting them with dynamism to allow genuine demands to reach the courts.[35]

There has been a movement to simplify cumbersome legal procedures to bring justice to the doorstep of the common man. In India, in addition to substantial modification of locus standi, the traditional restrictive procedural laws have themselves been substantially changed. We have instances of judges reading a newspaper report of injustice to an underprivileged citizen or group of citizens, and taking immediate action by treating it as a formal Petition to the Court. There have also been several cases of judges who have received letters from aggrieved individuals and treated them as substantive writ petitions so that justice can be done.[36] The Supreme Court observed in the matter of PUDR vs. Union of India, that "the court is moved …by a member of the public by addressing a letter drawing the attention of the court to such legal injury or wrong. The court would cast aside all technical rules of procedure and entertain the letter as a writ petition on the original side and take action upon it.[37] It was against this backdrop that the access to justice movement came to the forefront in environmental issues. The Supreme Court, which has original jurisdiction of judicial review, stepped in and with a single stroke did away with the outdated principles and procedures governing the dispensation of justice.[38] The access to justice movement rose to prominence in environmental concerns against this backdrop. The Supreme Court, which has original judicial review jurisdiction, stepped in and, with a single stroke, abolished the antiquated principles and processes that govern the administration of justice.[39] Thus, where a question of violation of the provisions of the statutes governing the country's environment or ecology has been brought to its attention

[33] J. Mijin Cha, "A Critical Examination of The Environmental Jurisprudence Of The Courts Of India ", *Albany Law Environ. Outlook Journal*, vol. 10(2), pp. 197–228, 2005.
[34] Bandha Mukti Morcha v. Union of India, AIR 1984 SC 802.
[35] Ibid.
[36] PUDR v. Union of India, AIR 1982 SC 1473.
[37] Ibid.
[38] K.K. Venugopal, Access to Justice: The Indian Experience, *HeinOnline.com*, 2000 pp 195-196.
[39] Ibid.

in the matter of depletion of forest areas, or when the executive, while exercising its administrative functions or making subordinate legislation, has interfered with the environment or ecology, public interest litigations have been entertained more frequently.[40]

2.4 An Introduction to the Green Judge of India: Hon'ble Justice (retd.) Kuldip Singh

Justice Kuldip Singh's name is worthy of the title of the "Green Judge of India" not in one but many ways. Kuldip Singh was born on January 1st, 1932,[41] and practiced law as an attorney, and served as the Additional Solicitor General before his elevation to the Supreme Court of India.[42] He is one of the very few Supreme court judges to be elevated directly from the bar, and he justified the laurel bestowed upon him in the light of his talent, grit, and determination. He served as a Supreme Court judge between 1988 and 1996, following his retirement from the Bench, he headed the National Delimitation Commission from 2002 to 2008, which redistricted all of India after the 2001 census. Justice Singh received his higher education from Col. Brown Cambridge School, followed by his first law degree from Punjab University in 1955 and a second one from the University of London in 1958.[43] He served as a barrister-at-law at Lincoln's Inn in London before returning to India in 1959.[44] Justice Singh was appointed to the Supreme Court on 14 December 1988 and retired on 21 December 1996.[45] After his retirement in 1996, he shortly fiddled in politics and became the president of the World Sikh Council, following which he was at the receiving end of litigation for some time.[46]

Justice Kuldip Singh had the demeanour of a lion: towering, ponderous, and grizzled, with a distinctive roar that made his presence felt in the Supreme Court's vast courtrooms, and properly so. Justice Singh was not one to be taken for a ride by the lawyers; always well-read, prepared, and on his toes during every hearing, he had something valuable and extraordinary to say to any discussion. Although Justice Singh is most known for his environmental judgments and public interest litigation (PILs), he was as passionate and fair in every case that came before him as a judge. He gave a fresh dimension to human rights litigation while dealing with alleged police atrocities in Punjab, he wasn't the one to bow before the pressures of his

[40] Ibid.
[41] "Chief Justice & Judges." n.d. Gov.in. Available: https://main.sci.gov.in/chief-justice-judges.
[42] Ibid.
[43] Ibid.
[44] Ibid.
[45] Ibid.
[46] B. Kang, Haryana, "More than a Green Judge", *Outlook India*. Available: https://magazine.outlookindia.com/story/more-than-a-green-judge/202888.

decriers. He was also party to the 1993 nine-judge Supreme Court bench ruling which gave the judiciary primacy over the executive in the appointment of judges, wherein he disagreed with his colleagues' view that the chief justice should be appointed based on seniority, rather than selection.[47] He has always been a strong advocate of judicial activism and the role that the judiciary plays in cases involving abuses of citizens' civil, political, and social rights. He has always been adamant that the political elite does not deserve special treatment, and he went on to condemn the Supreme Court's decision to create a separate court for former prime minister P.V. Narasimha Rao.[48]

Justice Kuldip Singh wrote over 220 judgments,[49] ranging from the Mandal commission to the right of commercial speech. In the Mandal decision,[50] he said that the caste system, with its religious sanction, sent a message to the invaders, that amounted to saying, "We are divided, come and rule us." In the Tata Press case, he expanded the freedom of expression, stating that "it cannot be denied by creating a monopoly in favor of the government or any other authority. The publication of advertisements is commercial speech."[51]

His boldness and innovative use of law provoked critics to accuse him of passing off-the-cuff orders. But there was a method in the apparent madness, said environmentalist and advocate M.C. Mehta. He was pragmatic in all he did, whether it was reducing pollution surrounding the Taj Mahal or removing hazardous factories from Delhi. He coaxed the Gas Authority of India (GAIL) for months to provide pollution-free natural gas to the Taj's factories. Bureaucrats were frequently summoned and threatened with imprisonment for failing to carry out directives on time. The sharp edge of his tongue was also directed at obstinate lawyers who failed to prepare their briefs. But he went out of his way to make the common man feel at ease, even if it meant conversing in Hindi or Punjabi. In family matters, he was at his gentlest treading cautiously around the issue. At his crusading best while dealing with human rights violations, he handed out unprecedented compensations of Rs 10 lakh to victims and their families.[52]

[47] Supreme Court Advocates-on-Record Association vs. Union of India, W.P. (civil) 1303 of 1987.
[48] Supra, "*More than a Green Judge".*
[49] Supra, "*Chief Justice & Judges*."
[50] Indra Sawhney vs. Union of India, AIR 1993 SC 477.
[51] Tata Press Limited vs. Mahanagar Telephone Nigam Limited and ors., 1995 SCC (5).
[52] Mohini Jain vs. the State of Karnataka, 1992 SCC (3) 666.

2.5 Contributions of Hon'ble Justice (retd.) Kuldip Singh in India's Environmental Jurisprudence

Socrates describes a judge as a courteous person who must soberly and impartially decide cases. Therefore, it is evident from the plods of philosophers/jurists from centuries that a judge must possess stout common sense and empathetic concern with humane qualities while deciding a case.[53] A judge may come and go, but his decision stands forever. A judge is said to speak via his decisions, which is exactly what Justice Singh did. Justice Kuldip Singh was one such Judge who, against all obstacles, caused a revolution to the field of environmental law by establishing several notions such as sustainable development, intergenerational equality, polluters pay principles, and so on.[54]

It cannot be stressed enough that with every other decision, Justice Singh, especially in the 1990s, gave new dimensions in the genus of environment law. His lordship brought to light various doctrines which became the greatest boon for the journey of environmental jurisprudence in India. Right from the Vellore Citizens Welfare Forum vs. Union of India case[55] (hereinafter referred to as the Vellore case) to the M.C. Mehta vs. Union of India case (hereinafter referred to as the air pollution case), he has authored his judgments in a manner that give equal weightage to the law of the land as well as international environmental law, his judgments gave a new dimension to how the ideologies like sustainable development, the doctrine of intergenerational equity, polluters pay principle and the precautionary principle was interpreted in India. Although the Indian Council for Enviro-Legal vs. Union of India[56] had introduced the polluters pay principle for the first time in India, this principle was extensively discussed and carry forwarded in Vellore Case. In the same case, Justice Singh showcasing his spirited approach also directed the Madras High Court to constitute a 'Green Bench', which would especially hear matters for environmental law and matters incidental thereto. Worthwhile it is to appreciate that this was the first time any directions were issued by the court to specifically dedicate a court for adjudication of environmental law cases.[57]

The bulk of Justice Kuldip Singh's judgments, particularly on environmental problems, have demonstrated that his lordship has a wonderful balance between his mind and heart. In many

[53] S. Malhotra, "Justice Kuldip Singh: Remembering the 'Green judge" *Legal Wires*, 29-Jul-2020. [Online]. Available: https://legal-wires.com/columns/justice-kuldip-singh-remembering-the-green-judge/.
[54] Ibid.
[55] Vellore Citizen's Welfare Forum vs. Union of India, AIR 1996 SC 2715.
[56] Indian Council for enviro-legal action vs. Union of India, (1996) 3 SCC 212.
[57] Supra, Vellore Citizens' welfare forum case.

of his decisions, Justice Singh has let his emotions guide him and freely acknowledged his endless love for nature. His authoring is marked by a high level of sensitivity, indicating that flora and animals have always piqued his interest. In the landmark case of M C Mehta vs. Kamal Nath[58] (hereinafter referred to as the Kamal Nath Case), while passing strictures against Span Motel for changing the flow of River Beas, his lordship held that area around the land in question situated on Kullu-Manali highway is ecologically fragile and full of scenic beauty and such area should not be allowed to be converted into private ownership for commercial gains. In the same para, Justice Singh referred to the River Beas as 'young and dynamic'. It is prima-facie sincere that Justice Singh has a deep sense of affection towards nature and he attributes human qualities to objects of nature as if they have a life of their own and deserve rightful treatment just as human beings. Justice Singh stood firm on his stand and did not let even an inch of forest land be mal-utilized by the Span Motel for commercial purposes.

Remarkably, while dealing with the M.C. Mehta vs. Union of India[59] (hereinafter referred as Taj Trapezium Case) the same affection and tenderness, this time towards our rich culture and its art and architecture, which is depicted in the introductory lines of the judgment delivered in the case. Justice Singh considers the Taj Mahal as the final feat and pinnacle of Mughal Art. He further pens that the Taj Mahal is the perfect epitome of the artistic interplay of the architects' skills and jewelers' inspiration. In this case, Justice Singh had directed more than 300 industries to shift their work from Agra to various other places. However, Justice Singh while being solicitous about the workmen working in all such industries, observed that employers should not retrench workmen amid the period when industries are to be shifted from the vicinity of Agra to other places of the country, as the poor would become jobless and destitute which would aggravate their miseries. In his quest to save the environment, he would leave the poor citizens hanging high and dry. His lordship's judicial consciousness and a fine sense of judgment through such crafty pronouncements unequivocally indicate that Justice Singh had a fine balance between his heart and head. He acted prudently but compassionately, strictly but kindly and vigorously but persuasively.

Time and again an astonishing fact which outshined in most of the verdicts passed by Justice Singh is his lordship's bold way of delivering Justice. Be it the Taj Trapezium case or Air pollution matter,[60] Through his unbiased rulings, Justice Singh has remained unaffected by

[58] M.C. Mehta vs. Kamal Nath, (1997) 1 SCC 388.
[59] M.C. Mehta vs. Union of India, (1997) 2 SCC 353.
[60] M.C. Mehta vs. Union of India, 1991 SCC (2) 427.

critics and naysayers. In the Taj Trapezium case, Justice Singh boldly ordered the relocation of over 500 companies that were mutilating the Taj Mahal or polluting the air in and around the vicinity. His Lordship's ever-green courageous approach imposed a condition on the government, requiring it to encourage the transfer of industry from Delhi and the Non-Capital Regions to other regions of the country. The result of such valiant rulings was that within a short period after the order was issued, more than half of the industries had already relocated their operations.

Justice Singh made it crystal clear through his judgments that the government must protect and preserve the environment. While extensively speaking on the doctrine of public trust, for the bench, Justice Singh observed in Kamal Nath's Case that forest lands, lakes, rivers, air, etc are all under the trusteeship of government and are ultimately for free and incessant use of the public. Therefore, the government is ipso-facto liable for reserve forests, rivers, riverbeds, air, etc. In the mater of S. Jagannath v. Union of India[61] (hereinafter referred as Shrimp Culture Case), where a bench consisting of Justice Singh was dealing with a matter of shrimp farming and its ill-effects on the environment, Justice Singh observed that shrimp farming through modern techniques is directly responsible for environmental degradation, especially in coastal areas. While reminding constitutional mandate to government, enshrined in Article 48-A of the Constitution of India, Justice Singh held that State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country. Justice Singh further pointed out that there are other legislations such as Fisheries Act 1987, Wild Life Protection Act, 1972 and Forest Conservation Act, 1980 which postulate relevant provisions for environmental protection and pollution control but unfortunately, the authorities responsible for the implementation of various statutory provisions are wholly remiss in the performance of their duties under the said provisions. Resultantly, Justice Singh authored strict rules as part of his judgment and held that environmental clearance is the sine qua non for all shrimp farming industries, and any industry found working clandestinely would be sternly dealt with per the law. With such verdicts, Justice Singh sent a clear message, be it industries, employers, government, or politicians of any 'rank and file', no one would be spared if they disrupt the environment in any manner. The courage with which such orders/judgments were passed speaks volumes of the valiant and dauntless decision-making ability which Justice Singh possessed.

[61] S. Jagannath vs. Union of India, AIR 1997 SC 811.

2.6 Environmentalism

Environmentalism is a political and social movement that seeks to improve and protect the quality of the natural environment ethically by changing or adopting alternatives to activities that are directly or indirectly linked to environmental degradation; through espousal of forms of political, economic, and social organization that are thought to be necessary for, or at least conducive to, comparatively better treatment of the environment by humans. In a way, environmentalism claims that living things other than humans, and the natural environment as a whole, are deserving of consideration in reasoning about the morality of political, economic, and social policies.[62] Environmentalism advocates the preservation, restoration, and improvement of the natural environment and critical earth system elements or processes such as the climate, and may be referred to as a movement to control pollution or protect plant and animal diversity. For this reason, concepts such as land ethic, environmental ethics, biodiversity, ecology, and the biophilia hypothesis figure predominantly.[63]

At its crux, environmentalism is an attempt to balance relations between humans and the various natural systems on which they depend in such a way that all the components are accorded a proper degree of sustainability. The exact measures and outcomes of this balance are controversial and there are many different ways for environmental concerns to be expressed in practice. Environmentalism and environmental concerns are often represented by the color green, but this association has been appropriated by the marketing industries for the tactic known as greenwashing.[64] Lobbying, activism, and educating people about the environment and ways to protect it to protect natural resources and ecosystems are the key modes for propagating the ideas of environmentalism.[65]

The idea of Environmentalism appears very easy to relate to and accept once we see ourselves as not entitled to all that this planet has to offer us, rather when we view ourselves, the human species as a whole, as a part of the greater scheme of things. Once our greater good takes over our greed, it becomes easier to co-exist with every, small or large component of our ecology.[66] This is innate to human nature which is why the concept of environmentalism has existed as

[62] L. Elliott, "Environmentalism," *Encyclopaedia Britannica*. 09-Sep-2020.
[63] Ibid.
[64] A. Davies, "Environmentalism," in *International Encyclopaedia of Human Geography*, Elsevier, 2009, pp. 565–570.
[65] Ibid.
[66] A. Motta *et al.*, "A brief history of environmentalism," *Greenpeace.org*. [Online]. Available: https://www.greenpeace.org/international/story/11658/a-brief-history-of-environmentalism/.

long as man has recorded its history and philosophies existing in the time. Ecological awareness first appears in the human record at least 5,000 years ago.[67] Vedic sages praised the wild forests in their hymns, Taoists urged that human life should reflect nature's patterns and the Buddha taught compassion for all sentient beings.[68] In the Mesopotamian Epic of Gilgamesh, we see apprehension about forest destruction and drying marshes. When Gilgamesh cuts down sacred trees, the deities curse Sumer with drought, and Ishtar (mother of the Earth goddess) sends the Bull of Heaven to punish Gilgamesh. In ancient Greek mythology, when the hunter Orion vows to kill all the animals, Gaia objects and creates a great scorpion to kill Orion. When the scorpion fails, Artemis, goddess of the forests and mistress of animals, shoots Orion with an arrow.[69] Through, stories like these, we gather with certainty, how intricately environmentalism is woven into our history, culture, and religions[70].

In the modern world also, time and again the need and demand for protecting the environment have come up as a socio-political movement of various degrees and scales.[71] Concerns about the conservation of the countryside in Europe and the wilderness in the United States, as well as the health repercussions of pollution during the Industrial Revolution, sparked the modern environmental movement in the late nineteenth century.[72] In contrast to the dominant political philosophy of the time, liberalism, which held that all social problems, including environmental ones, could and should be solved through the free market, most early environmentalists believed that it was the government, not the market, that should be responsible for environmental protection and resource conservation.[73] Environmental organizations established from the late 19th to the mid-20th century were primarily middle-class lobbying groups concerned with nature conservation, wildlife protection, and the pollution that arose from industrial development and urbanization. There were also scientific organizations concerned with natural history and with biological aspects of conservation efforts.[74]

[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Ibid.
[71] Ibid.
[72] G. Prashad, "Indian Judicial Activism on the 'Right to Environment': Adjudication and Locus Standi," SSRN, 2019. https://ssrn.com/abstract=3391846.
[73] Ibid.
[74] Ibid.

2.7 Judicial Environmentalism

The early strategies of the contemporary environmental movement were self-consciously activist and unconventional, involving direct-protest actions designed to obstruct and draw attention to environmentally harmful policies and projects. Other strategies included public education and media campaigns, community-directed activities, and conventional lobbying of policymakers and political representatives. The movement also attempted to set public examples to increase awareness of and sensitivity to environmental issues. Such projects included recycling, green consumerism (also known as "buying green"), and the establishment of alternative communities, including self-sufficient farms, workers' cooperatives, and cooperative-housing projects. The electoral strategies of the environmental movement included the nomination of environmental candidates and the registration of green political parties. These parties were conceived of as a new kind of political organization that would bring the influence of the grassroots environmental movement directly to bear on the machinery of government, make the environment a central concern of public policy, and renders the institutions of the state more democratic, transparent, and accountable.

However, here we would discuss another, comparatively newer, a form of environmentalism which has only come up in the latter half of the past century and India has been a leading example of its adoption, acceptance, and implementation: Judicial Environmentalism. Earlier in the chapter, we have discussed how environmentalism i.e., a kind of social, political, ethical way of life, that later developed into a widespread movement and eventually formed a part of active electoral politics in various parts of the world like Australia, New Zealand, the United Kingdom, etc, has have had another major ally in its support, the judiciary. In India, the Judiciary has actively participated in the environmentalist movement, through its path-breaking judgments, setting precedents, prioritizing rights of the elements of nature, and establishing principles like that of 'absolute liability[75] in cases of gross violations of human and environmental rights as well as keeping in check escaping of responsibilities by the mighty, well-connected and powerful sections of the society.

The common law system is based on law developed by judges through decisions of courts and similar tribunals. A "common law system" is a legal system that gives great precedential weight to common law, on the principle that it is unfair to treat similar facts differently on different occasions. The body of precedent is called "common law" and it binds future decisions. If a

[75] Union Carbide Corporation vs. Union of India, AIR 1996 5 SCC 647.

similar dispute has been resolved in the past, the court is bound to follow the reasoning used in the prior decision. Litigation, private or public, rests or ends when justice is achieved and the wrongdoer is punished monetarily, or through imprisonment, or when unjust enrichment is reversed or damages or compensation is awarded to the victim. Since, disputes are mostly between two human beings or akin legal entities, smearing settled principles governing the adversarial system makes the life of a judge less problematic while delivering verdicts.[76] However, in the extant status where horizons of litigation have expanded and stretched in diverse streams of law, especially environment law, delivering Justice with a conventionally held set of rules becomes a painstaking effort.

The voyage of judicial environmentalism began in the late 1980s and early1990s. After the Bhopal Gas Disaster in 1986, there was a strong desire to address environmental issues. This is not to say that the legislature was unconcerned about environmental issues before the Bhopal disaster. Taking note of the United Nations Conference on Human Environment (Stockholm), 1972, and the growing awareness for environmental protection and eco-imbalance, the Indian Parliament enacted a landmark constitutional reform. This 42nd Amendment Act, thus introduced, included two major articles to protect and promote the environment, namely Article 48-A and Article 51-A (G). However, with the expansion of locus standi and the Court's broad interpretation of Article 21, judicial vigilance for environmental protection gained traction in the 1980s and 1990s. The constitutional scheme of Independence of the judiciary and the Supreme Court's power of judicial review of legislative or administrative action expanded the scope of judicial activism in India.[77] The court of P.N. Bhagwati while dealing with the Oleum gas leak case[78] deserves appreciation for giving a call to build up an Indian enviro-jurisprudence; and secondly, for evolving an Indianized principle of absolute liability against the well-established principle in Ryland v Fletcher.[79] The Supreme Court has consistently decided that although the absolute responsibility concept has attracted cross-currents, opinions and news.

Justice Kuldip Singh is not merely a judge or an author of landmark judgments in cases related to the environment, but he is a strong proponent of this 'judicial environmentalism'. In the chapters to come, while we delve into five of his most iconic judgments, we shall see how

[76] Ibid.
[77] B.K. Chakravarty, "Environmentalism: Indian Constitution and Judiciary." *Journal of the Indian Law Institute*, vol. 48, no. 1, 2006, pp. 99–105. *JSTOR*, www.jstor.org/stable/43952020.
[78] M.C. Mehta vs. Union of India, AIR 1987 SC 96.
[79] Supra, C.M. Jariwala.

Justice Singh is just not another person at a position of power performing lip service to the cause of nature, but he is an activist in the true sense, an activist of nature and ecology. He is a judicial activist, in the strictest sense of the word. He is a fighter, a pioneer, a warrior standing on the side of the degraded, over-used, exploited environment and the poor, common, and powerless people of this country gravely impacted by the pollution, industries, tanneries, etc. Upendra Baxi says,[80] adjudication emerges as a form of social conversation, on issues of law, rights, and justice, between the judicial activist and the social/human rights movements on the nature and future of India's potential for just constitutional governance. The adjudication process under Justice Kuldip Singh justifies this statement to its fullest. Through his judgments, he pushed forward the principle that the co-existence and interaction of living and non-living elements in our ecology is vital for our survival on this planet.

[80] Supra, "The Avatars of Indian Judicial Activism: Explorations in the Geographies of (In)justice".

CHAPTER III

The tanneries pollution cases and Polluter Pays Principle

Vellore Citizens' Welfare Forum vs. Union of India[81]

M.C. Mehta vs. Union of India[82]

"If anyone intentionally spoils the water of another ... let him not only pay damages, but purify the stream or cistern which contains the water..."

~Plato

A clean and healthy atmosphere is essential for living a good life. Only if a person is given fresh air to breathe, clean water to drink, and other fundamental necessities will he remain healthy. As a result, a person must be surrounded by a clean environment to live a dignified and healthy life. As a result, people's right to live in a clean and healthy environment is a basic human right, essential to living a decent life, and its infringement will be regarded as a breach of their basic right to life. The Tanneries Cases were pivotal in the adoption and implementation of the polluter-pays paradigm in India. The Supreme Court acknowledged the urgency of dealing with environmental harm and, as a result, not only provided for compensation for the parties but also established a fund to repair the damage that had already been done. There's little doubt that the Supreme Court has influenced the country's environmental law, and it's not an exaggeration to argue that Indian environmental law owes its origins to Indian courts' judicial activism and so does the implementation of international environmental law principles in the Indian context.

Tanneries are important to the Indian economy because of the export revenue they create and the employment possibilities they provide for the economically disadvantaged. However, due to the worrying levels of pollution created by diverse tanning operations and practices, the survival of tanneries became increasingly challenging. The leather business has no business ruining the environment, degrading the ecological, or endangering human health. It should not be allowed to expand, at goss environmental costs, with its current production technique until and unless the pollution problem generated by the industry is addressed and remedied. The two

[81] Supra, Vellore Citizens' Welfare Forum vs. Union of India.
[82] M.C. Mehta vs. Union of India, (1997) 2 SCC 411.

cases, relating to pollution in River Palar and river Ganga, discussed in this chapters deal with the issues outlined hereinbelow.

3.1 River Pollution in India

River water pollution is a worldwide issue, not only in India. However, rising river pollution in India is a major subject of concern for the Indian government and people. There are approximately 20 major river basins in India. Unfortunately, pollution has affected the majority of India's rivers and river basins. In India, water pollution has claimed the lives of many people, particularly children, who are particularly sensitive to waterborne illnesses. Water pollution is a major environmental issue in India and it is due to many reasons which not only include rapid growth in population but also the more dependence of technology and lack of awareness amongst peoples about the preservation of water and the effect of water pollution on their future. Although, from flocculation and reuse of industrial water to contributions from local Indian businesses, India is taking many initiatives to improve the quality of its water supply, the achievements India has made should not be seen as the end of its fight against the water problem, but rather as the beginning, because many people still lack access to safe drinking water.

The major sources of river pollution are Sewage, garbage and waste from households, agricultural farms and industries, dumping of solid waste materials like plastic, glass, aluminium etc. and Industries that are mostly built on the bank of rivers because it is easy for them to discard the waste and chemical effluents coming out from industries into it. High population density around the river banks and the reckless dumping of non-biodegradable waste, especially plastics, is further adding to water pollution. It was pointed out by the Supreme Court on the basis of the material on record in the *Kanpur tanneries'* order, as regarding the noxious nature of the tannery effluent:

"*It should be remembered that the effluent discharged from the tannery is ten times more noxious when compared with the domestic sewage water which flows into the river from any urban area on its banks*."

In common law the ground of public nuisance available to the plaintiff is very broad when raised in the context of pollution. For instance, a Municipal Corporation can be restrained by an injunction in an action brought by a riparian owner who has suffered on account of the pollution of the water in a river caused by the Corporation by discharging into the river

insufficiently treated sewage from discharging such sewage into the river.[83] Even a statute cannot override the obligation imposed by the common law of not committing a public nuisance. In India public nuisance action can be brought before a court either by a civil or by a criminal action.[84] The provisions have been laid down Under the Indian criminal law to punish the person who commits an offence in contravention to the Indian Penal Code. Section 277 of the IPC provides for the punishment to be given to the person who commits an offence of fouling of a public reservoir or a public spring voluntarily shall be liable to be punished with imprisonment of three months or with a fine of 500 Rupees or with both.

The Indian Judiciary has also initiated a positive step for the controlling of pollution of water. Under the Indian Constitution, the judiciary has given a liberal interpretation to Article 21 of the Constitution of India and included the right to clean water and environment under the ambit of Article 21, Article 48, Article 51(g) of the Constitution of India.

3.1.1 The Water (Prevention and Control of Pollution) Act, 1974[85]

According to Section 24 of the Act, polluting or disposing in streams, wells, etc. is prohibited as no one can knowingly dispose of any poisonous or polluting matter into any stream, well or on land. 'Pollution' is defined u/s 2(e) as either water contamination or alteration in properties of water which may be done by discharging sewage or trade effluents into water which is injurious to public health or to health of other organisms or to any uses including domestic, commercial or agricultural. 'Stream' may include river, any water course, inland water, sea and subterranean waters.[86] 'Trade effluent' includes substances discharged from any premises like an industry, operation or disposal system, other than domestic sewage.[87]

Chapter-II[88] of the Water Act containing Sections 3 to 12 deals with the constitution of the Central and State Water Pollution Boards, Service Conditions of the members, the constitution of various committees etc. The Water Act provides for the constitution of the Central Pollution Control Board by the Central Government and the constitution of the State Pollution Control Boards by various State Governments in the country. The Boards function under the control of the Governments concerned.

[83] Pride of Derby and Derbyshire Angling Assn. Ltd. v. British Celanese Ltd., (1953) 1 All ER 179.
[84] Section 91 Civil Procedure Code, 1908 and Section 133 Criminal Procedure Code, 1973.
[85] Water (Prevention and Control) Act, 1974, No. 6, Acts of Parliament, 1974.
[86] Sec 2(j), Water Act, 1974.
[87] Sec 2(k), Water Act, 1974.
[88] Sec 3-12, Water Act, 1974.

According to Section 19 of the Act, the state board has the power to limit the territorial jurisdiction of any order passed by it in matters relating to prevention and controlling water pollution. This means that the orders passed by the state board will only apply in the areas that are affected by water pollution .it is up to the state board to determine which area is to be declared water polluted and which is not, this can be done by making reference to a map or making reference to a line of any watershed or the boundary of any district.[89]

Section 25 of the Act provides for consent from the State Board and restricts new outlets and discharges or any industry or system likely to discharge the waste into water or on land. The application for consent of State Board must be made as prescribed in the Act along with the fees. Section 26 of the act provides for the situation where a person was discharging sewage or effluents into the water before the commencement of the Act. In such a situation, provision under section 25 is applicable to him subject to some modifications as mentioned in the Act. Chapter VII[90] of the Act lays down the penalty provisions in case of contravention of the Act.

3.1.2 The Environment (Protection) Act, 1986[91]

The EPA, 1986 is the general legislation for protection of environment in India. It was enacted under Article 253 of the Indian constitution and the expression in the say of environmental quality was taken at the United Nation Conference on the Human Environment held at Stockholm in June 1972. The government of India strongly voiced against the environmental concerns and further passed many Acts related to the environment. The preamble of the act describes it as: "An Act to provide for the protection and improvement of environment and for matters connected therewith." As a result of the Stockholm conference,[92] this act makes provisions for protection and improvement of environment and the prevention of hazards to human beings, other living creatures, plants and property. As per the EPA, 1986 "Environment" includes water, air and land and the interrelationship, which exists among and between water, air and land and human beings, other living creatures, plants, micro-organisms and property.[93] The EPA, 1986 defines pollution as "presence in the environment of an environmental pollutant"[94] and further defines environmental pollutant as "any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment".[95] It also empowers the Central Government to establish authorities charged with the mandate of

[89] Sec 19, Water Act, 1974
[90] Sec 41-50, Water Act, 1974.
[91] Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986.
[92] Supra, United Nations Conference on the Human Environment held at Stockholm in June, 1972.
[93] Sec 2(a), EPA, 1986.
[94] Sec 2©, EPA, 1986.
[95] Sec 2(b), EPA, 1986.

preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country[96] and execute and plan the national programme for the prevention, controlling and the abatement of environmental pollution. The act also mandates the government to lay down the procedure to carry forward safeguards for the prevention of many inevitable accidents which may inculcate in more environmental pollution. Section 7 of the Environment Protection Act 1986 suggest that no person in the country shall be carrying any of the activity or operation in which there is a large emission of gases or other substances which may lead to excess environmental pollution. It provides certain standards that ought to be maintained in which it is a must that no person is allowed to damage the environment and if a person is found guilty for causing damage to the environment by polluting the pollution pay principle. Section 8 provides that any person who is handling the hazardous substance needs to comply with the procedural safeguards. If the emission is to a very large extent or is apprehended through an accident, the person responsible for it is obliged to mitigate from that place in order to reduce the environmental pollution.

3.2 Polluter Pays principle

The ‘polluter pays' principle states that those who cause pollution should pay for the costs of removing it in order to avoid harm to human health or the environment. A factory that creates a potentially dangerous material as a by-product of its operations, for example, is typically held liable for its safe disposal. The polluter pays idea is one of the guiding principles for global sustainable development. The ‘polluter pays' is an environmental law principle that states that individuals who generate pollution should pay for it. This Principle was first introduced in 1972 by the Organization for Economic Cooperation and Development (OECD) Guiding Principles[97] concerning International Economic Aspects of Environmental policies where, under this principle, the polluter was held responsible for the environmental damage and pollution. The Organisation for Economic Co-operation and Development held a seminar in 1971, in Paris, on environmental economics where polluter pays principle was the primary topic of discussion. This was the first instance of polluter pays principle being discussed on an international forum. In 1972, the Organisation for Economic Co-operation and Development formally recommended, on 26 May 1972, the polluter pays principle to be the ‘Guiding

[96] Sec 3(3), EPA, 1986.
[97] OECD, Recommendations, C (72) 128 (1972).

Principle Concerning the International Economic Aspects of Environmental Policies'. The recommendation clearly lays out the usage of the principle stating:

"*The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called Polluter Pays Principle*".[98]

The spirit of polluter pays principle was first incorporated in Principles 21 and 22 of the Stockholm Declaration, 1972.[99] It stated:

"Principle 21. States have the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Principle 22. States shall cooperate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage."

Subsequently, the Rio Declaration laid down the guidelines for sustainable development meaning thereby a strategy to cater the needs of the present generation without compromising the needs of the future generation. In furtherance of the aim of sustainable development, Principle 16 of the Rio Declaration enshrined the Polluter Pays principle stating that the polluter should bear the cost of pollution. It states:

"Principle 16. National authorities should endeavour 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."

Today, the Polluter Pays Principle is one of the core principles of sustainable development. It is also one of the fundamental principles governing modern environmental law and policy, underpinning most of the regulations imposed on potential polluters affecting land, water and air. The Polluter Pays Principle is often applied as a liability and compensation mechanism which can also act as an incentive for potential polluters to implement whatever measures deemed necessary to prevent potential pollution, comply with regulations, and avoid additional

[98] Ibid.

[99] Report of the U.N. Conference on the Human Environment, from the U.N. Conference in Stockholm, Sweden (Stockholm, 16 June 1972), U.N. Doc. A/CONF.48/14).

costs. Although, the basic principle that a State should ensure payment of prompt and adequate compensation for hazardous activities could be traced back as early as the Trail Smelter Arbitration case100 between the United States and Canada, the International Court of Justice in its landmark decision in the Case Concerning the Continental Shelf[101] between Libya and Malta determined as to when a particular rule or provision acquired the status of being a part of customary international law. The Court held that the provision in question should have state practice i.e., consistent and general behaviour of states as regards the provision in question and opinio juris i.e., a subjective obligation, a sense on behalf of a state that it is bound to the provision in question. The Court in the same paragraph, further went on to say those multilateral conventions also played an important role in developing and defining rules of customary international law. Since then, additional accords, key judgements, and comprehensive national law and practise have emerged, giving significant weight to compensation claims for pollution and harm caused across international borders. Some critics even see this as a need under customary law.[102] The Supreme Court of India interpreted the Polluter Pays principle as the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also to the cost of restoring the environmental degradation. In Indian Council for Enviro Legal Action v. Union of India,[103] the Polluter Pays principle has been described by the Hon'ble Supreme Court thus:

"*Once the activity carried on is hazardous or inherently dangerous, 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 whether he took reasonable care while carrying on his activity. The rule is premised upon the very nature of the activity carried on.*"

The notion of "polluter pays" is usually applied using one of two policy approaches: command-and-control or market-based. Performance and technological standards, such as environmental rules in the manufacture of a harmful technology, are examples of command-and-control systems. Pollution or ecotaxes, tradable pollution permits, and product labelling are examples of market-based mechanisms. A.C. Pigou first proposed the idea of using taxation to correct or internalise externalities in 1920, and it has since been widely accepted by economists as a cost-effective way to address inefficiencies in resource allocation. However, other social

[100] Trail Smelter Arbitration (U.S. v. Can,), 3 R.I.A.A. 1905 (1941).
[101] Continental Shelf (Libya. v. Mal.), Judgment, 1985 I. C.J. Rep 13, pp 27 (3 June).
[102] P. Sands, Principles of International Environmental Law 231 (2d ed. 2003); BIRNIE et. al., *International Law and The Environment, pp* 89 (3d ed. 1992).
[103] Supra, Indian Council for Enviro Legal Action v. Union of India.

considerations such as equity, rights, political considerations, and enforcement costs may tip the balance in favour of a preference for other policy instruments despite being less cost-effective. Pigou proposed that pollution reduction be pursued until the marginal cost of further reduction (reflected in the emissions tax) equals the marginal benefit of pollution reduction. The 'optimal pollution' tax is widely referred to as the 'Pigouvian rate'.[104]

There are certain statutes passed by the Indian Parliament, which directly or indirectly adhere to the polluter pays principle. The Public Liability Insurance Act of 1991 makes it a mandatory duty of all the industries, which have a capital value of Rs. two hundred thousand to get insured under the Act. The premium of such insurance shall be collected in the 'Environment Relief Fund' which shall be available with the collector of the district. The collector in case of industrial accident/ disaster shall pay, by way of relief, immediately to the victims of the accident/disaster. This relief will not be a bar to file a case for compensation separately. Similarly, the National Environment Tribunal Act, 1995 provides that the tribunal can award compensation on ground of any damage to environment and such an amount shall be remitted to the authority specified under section 7-A (3) of the Public Liability Insurance Act, 1991 for being credited to the Environmental Relief Fund. The Act provides that if the owner of the unit/industry fails to pay or deposit such an amount of award within the specified period, it shall be recoverable from the owner as arrears of land.[105] Section 15 of the Environment (Protection) Act, 1986 provides penalty for failure or contravening the provisions of the Act which includes imprisonment which may extend to five years or fine which may extend to rupees 1,00,000, or with both. Criminal liability has also been provided under sec. 268, 277, 278 and 290 of the Indian Penal Code, 1860.

Although the Polluter Pays Principle has helped to mitigate the damage being caused to the environment to some extent, the provision remains an inadequate remedy as ambiguity persists regarding clear identification of the actual polluter. The polluter may be a part of the "production chain" and When courts analyse the parameters of extent and contribution in causing pollution, it is difficult to establish blame on such polluters. Furthermore, under this principle, the amount of compensation to be charged for repairing environmental harm remains insufficient in contrast to the real loss. In the long run, it would be advantageous to have more effective and explicit provisions for the application of the Polluter Pays Principle. Also, introducing a gradation mechanism prescribed in a manner so that the polluter pays principle

[104] "Polluter pays principle" *Ejolt.org*. Available: http://www.ejolt.org/2013/05/polluter-pays-principle/.
[105] Sec. 23(3), The National Environment Tribunal Act, no. 27, Acts of Parliament, 1995.

can also have a deterrent effect on the big industries by evaluating the cost of reparation of the destruction caused, the capability and size of the industry must also be considered so that the penalty can be determined according to that.

3.2 The Vellore Citizens' Welfare forum case

This public interest litigation under Article 32 of the Constitution of India was filed by the Vellore Citizens Welfare Forum against pollution which was being caused by the enormous discharge of untreated effluent by the tanneries and other industries in the State of Tamil Nadu. The matter was brought before the Full Bench of the Supreme Court, comprising of Kuldip Singh, J., Faizanuddin, J., and K. Venkataswami, J. This was a case against pollution which was caused in the river Palar which is the source of water supply to the residents of the area. According to the petitioner the entire surface and sub-soil water of the river had been polluted resulting in non-availability of potable water to the residents of the area. This case is one of the most iconic cases in the history of Indian jurisprudence as it marks the beginning of a judicial environmentalism. While passing the order in this case, hon'ble justice (retd.) Kuldip Singh outlined the responsibility of the authorities under the government to put the precautionary principle and the polluter pays principle into action. The said authorities were also to identify the families who had been harmed by pollution and provide compensation as well as the sum that polluters would have to pay to rectify the environmental damage. The court also ordered the Madras High Court to supervise the implementation of its directives through the formation of a special bench known as the "Green Bench". It is evident in this case that Justice Singh meant business when it came to the implementation of international environment law principles into the Indian realm. This case has been cited numerous times and continues to be cited till date for the precedent it laid down and the constitutional and judicial validity it granted to the principle of polluter pays, precautionary principle and sustainable development.

3.3.1 Background of the Case

Several tanneries in Tamil Nadu discharged untreated wastewater into agricultural fields, roadside ditches, waterways, and open spaces. The untreated wastewater was eventually released into River Palar, which served as the primary source of water in the region. According to preliminary findings from the Tamil Nadu Agricultural University Research Centre (Vellore), over 35,000 hectares of agricultural land in the tanneries belt have become unsuited for cultivation, either partially or completely. About 170 different chemicals were used in

chrome-based tanning procedures to achieve this result. The tanning business used about 35 litres of water per kilogramme of finished leather, resulting in dangerously large amounts of poisonous effluents being released into the open. These effluents degraded the soil's physiochemical qualities and contaminated ground water through percolation. It was discovered that 350 of the 467 wells used for drinking and irrigation had been contaminated, requiring women and children to go miles to obtain drinking water. In the five districts of Tamil Nadu, there were about 900 such tanneries in operation. Some had been contaminating the environment for more than a decade, and in some cases much longer. In several orders, the Supreme Court stated that these tanneries were obliged to pay a pollution fine, compensate the injured people, and pay for the expense of rehabilitating the harmed ecology.

3.3.2 Arguments and Observations

According to the petitioner, the whole surface and sub-surface water of the river Palar had been contaminated, resulting in the inaccessibility of drinkable water to the residents of the region. It was stated that tanneries in the state of Tamil Nadu have degraded the environment in the region. According to an independent research conducted by Peace Members, a non-profit organisation that covered 13 towns in the Dindigal and Peddiar Chatram Anchayat Unions, 350 out of 467 wells used for drinking and water system purposes were contaminated. The respondents retorted that the Board's standard for Total Dissolved Solids (TDS) was invalidated. The NEERI was tasked by this Court to evaluate this angle and provide feedback in response to a request dated April 9, 1996. NEERI legitimised the models defined by the Board in a report dated June 11, 1996. For TDS, sulphates, and chlorides, the Ministry of Environment and Forests (MoEF) had not completely established models for inland surface water release. Individual State Pollution Control Boards made the decision on these rules depending on the requirements based on adjacent site characteristics. The guidelines stipulated by SPCB were advocated on afore alluded contemplations. The endorsed principles of the SPCB for inland surface water release could be met for tannery squander waters cost-viably through appropriate embed control gauges in tanning activity, and normally structured and viably worked wastewater treatment plants.

This judgment discusses Precautionary principle and sustainable development along with the Polluter Pays Principle, however while talking about the Polluter Pays Principle not only the definition and basics of the concept is discussed but the paragraph 12 of the judgement authored

by Justice Kuldip Singh etched the foundation of Polluter Pays Principle as a principle of Absolute Liability. It goes:

"12. "The Polluter Pays" principle has been held to be a sound principle by this Court in Indian Council for Enviro - Legal Action v. Union of India. The Court observed, "We are of the opinion that any principle evolved in this behalf should be simple, practical and suited to the conditions obtaining in this country". The Court ruled that "Once the activity carried on is hazardous or inherently dangerous, 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 whether he took reasonable care while carrying on his activity. The rule is premised upon the very nature of the activity carried on". Consequently, the polluting industries are "absolutely liable to compensate for the harm caused by them to villagers in the affected area, to the soil and to the underground water and hence, they are bound to take all necessary measures to remove sludge and other pollutants lying in the affected areas". 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 polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology."

It was also observed that the EPA, 1986 has provisions for pollution prevention that are beneficial. The primary goal of the Act is to establish, under Section 3(3), an authority or authorities with sufficient powers to control pollution and protect the environment. It is unfortunate that the Central Government has not yet established any authority. This Court and other Courts in the country are carrying out the task that is required of an authority under Section 3(3) read with other sections of the Act. It is past time for the Central Government to recognise its responsibilities and legal obligation to protect the country's deteriorating environment and if the current conditions in the five districts of Tamil Nadu where tanneries operate were allowed to continue, all rivers/canals will be polluted, underground waters will be contaminated, agricultural lands will be barren, and the residents of the area will be exposed to serious diseases in the near future. As a result, this Court must order the Central Government to take prompt action under the Environmental Act's provisions. Also, it was observed that The Board has the power under the Environment Act and the Rules to lay down standards for emissions or discharge of environmental pollutants. Rule 3(2) of the Environment Protection Rules even permit the SPCB to specify more stringent standards from those provided under the

Rules. The NEERI having justified the standards stipulated by the Board, we direct that these standards are to be maintained by the tanneries and other industries in the State of Tamil Nadu.

3.3.3 Orders and Directions

The court directed the Central Government to constitute an authority under Section 3(3) of the EPA, 1986. The said authority would have all the powers necessary to deal with the situation created by the tanneries and other polluting industries in the State of Tamil Nadu. The Authority, headed by a retired judge of the High Court and include other members, would have powers to take necessary action under sec. 5 of the EPA. The authority had to carry out three tasks. To begin, the newly formed authority would apply the "Precautionary Principle" and the "Polluter Pays" principle. The authority would assess the loss to the environment in the affected areas, as well as identify the individuals who have suffered as a result of the pollution, and then assess the compensation to be paid to the said individuals, using expert opinion and after giving the concerned polluters an opportunity to comment. Thereafter, post establishing a just and fair mechanism for completing the exercise, the authorities would have to decide the compensation to be recovered from polluters as the cost of correcting the harmed environment. Regardless of whether it has installed the requisite pollution-control devices, an industry would be liable for past pollution if it resulted in environmental degradation and hardship for the population of the area. The fines collected were to be credited to an "Environmental Protection Fund," which would be used to compensate those who had been harmed as well as to restore the environment. Lastly, if the sector dodged or refused to pay the compensation, the authority established might order the industry's permanent closure or relocation. The authority was also as also to be empowered to frame schemes for reversing the damage caused to the environment by pollution. Noting the importance of the matter, the Supreme Court further requested the Chief Justice of the Madras High Court, to constitute a Special Bench called the “Green Bench”, to deal with the case, and other environmental matters.

It is apparent in this case that the two principles of "Polluter Pays" and "Precautionary Principles" were further enmeshed in the fabric of Indian environmental law. The Supreme Court recognised the importance of demonstrating urgency in cases of environmental damage. The Court not only ordered compensation for those who were harmed, but also directed the establishment of a fund to compensate those who had already been harmed by the polluting tanneries. The fund was created to restore the status quo in terms of environmental conditions, which would have worsened further if the Supreme Court had not intervened.

3.4 The Calcutta Tanneries case

This case was a sequel to the landmark 1988 case of M.C. Mehta vs. Union of India[106] which ruled on the pollution caused by leather tanneries situated in Kanpur, Uttar Pradesh in the Holy River Ganga. The Kanpur tanneries case was the first environmental public interest litigation case involving river water contamination. In 1985, Mr. Mehta filed a writ case, *inter alia* for the issue of a writ/order/direction in the nature of mandamus to the respondents restraining them from letting out the trade effluents into River Ganga until the time they put up necessary treatment plants for treating the trade effluents in order to arrest the pollution of water on the said river. Alleging that, despite developments in the legal code, government officials had failed to take meaningful efforts to avoid contamination of the Ganga River. The case was decided by a Division Bench of the Hon'ble Supreme Court comprising of E.S. Venkataramiah and K.N. Singh, JJ. There was no doubt that the dumping of trade effluents from these tanneries into the River Ganga was causing significant harm to the lives of those who utilised the river's water as well as to the aquatic life in the river. However, the tanneries of Kanpur stated that most of them were unable to establish suitable treatment facilities due to a lack of physical infrastructure, technical know-how, and funds. On behalf of a few tanneries, it was argued that if they were given some time to set up pre-treatment units, they would do so. It was, however, submitted by all of them that it would not be possible for them to have the secondary system for treating waste water as that would involve enormous expenditure which the tanneries themselves would not be able to meet.

3.4.1 Background of the case

In continuousness with this milestone judgement, a division bench comprising Kuldip Singh and Saiyed Saghir Ahmed JJ. passed another breakthrough judgment in 1996 on protection of River Ganga from pollution causing trade affluents being dumped into the Holy River from tanneries situated in Calcutta, West Bengal. The illustrious judgment, authored by Hon'ble Justice Kuldip Singh, issued a number of directives to the tanneries and the government authorities in keeping with the Kanpur tanneries judgment. While the petition was being monitored, the scope of the petition was expanded, and industries in other cities along the Ganga's bank were asked to stop discharging untreated effluent into the river. The tanneries in Tangra, Tiljola, Topsia, and Pagla Danga, four adjoining districts on the eastern outskirts of Calcutta, are the subject of this judgement. Around 550 tanneries are housed in these locations.

[106] M.C. Mehta vs. Union of India, AIR 1988 SC 1037.

Ninety percent of Calcutta tanneries utilise chrome based tanning process, according to an examination report by the National Environmental Engineering Research Institute (NEERI) dated September 30, 1995.

3.4.2 Arguments and Observations

It was observed by the NEERI team that, in any of the tannery clusters, there was no suitable wastewater drainage and collection systems. Untreated wastewater was discharged into open drains, causing major environmental, health, and hygiene issues. In addition, none of the four tannery clusters had wastewater treatment facilities. Further, three distinct observations were made, firstly, Tannery units are situated in densely populated areas, with little or no room for future expansion, renovation, or ETP installation (s), secondly, tannery units are scattered throughout densely populated residential areas. Lastly, the tanneries' surroundings are particularly unsanitary due to the release of untreated effluents into open drains, the stagnation of wastewater in low-lying regions around the tannery units, and the accumulation of solid waste in the tanneries. The State Government told this Court that the Calcutta tanneries would be relocated and that the new location would be fully equipped with pollution control systems. The State Government was given three months to take suitable actions in that direction by this Court. In its application, the State Government requested an extension of time for the relocation of the Calcutta tanneries. On August 13, 1993, this Court heard the case and issued an order giving the State of West Bengal three months to take reasonable steps to remove 500 tanneries from the Ganga's banks.

The court further directed the Secretary, Small- Scale Industries, Government of West Bengal to prepare a plan regarding the land for shifting industries and the compensation to be paid to the industries. After analysing all the possibilities, it was stated that these tanneries were operating from a substantial time period but has paid no heed to the environmental pollution control and does not have enough space for even common ETPs to set-up. Now the only feasible and practicable solution is to shift the tanneries to a new area.

The tanneries had to apply for consent under the Water (Prevention and Control of Pollution) Act, 1974, however, no one applied till 1989, and around 1989 only around hundred tanneries applied for it. The State Board issued a show-cause notice to the tanneries and as a result around 275 tanneries to apply for consent, however it was granted to none. Those tanneries submitted a stamped paper that they were willing to move to any place as decided by the State government. On 20-2-1995 this Court was informed that the estimated cost of the land in the

new complex would be Rupees 860.00 per sq. m. The learned counsel appearing for the Calcutta tanneries, however, contended that the price suggested was on the higher side. Various suggestions for reducing the cost of land were considered. Mr. Gupta, learned Advocate General, appearing for the State of West Bengal, very fairly stated that it would be possible for the State of West Bengal to meet 50% of the cost of the project. He further states that the State will arrange the funds either from its own sources or from financial institutions or other sources. Therefore, it was agreed by all that the project of setting up of common effluent treatment plant shall be undertaken under the Ganga Action Plan, Phase II and its total cost of Rs. 65 crores shall be met 50% by the Ganga Project Directorate and the remaining 50% by the State Government in the manner indicated by the learned Advocate General.

The court reiterated that after the treatment plant is constructed and the tanneries are shifted to the new complex, 'effluent charge' shall be levied on the tanneries for reimbursing the amount spent on the common effluent treatment plants in a phased manner. Mr Harish N. Salve, learned Senior Counsel appearing for the Tanneries' Association stated that there was no objection to relocate. The main difficulty was to set up an ETP. The State and Central Government along with tanneries association must pool financial resources for the same. Thus, essentially what was required to be worked out was the dynamics of accounting the costs involved in relocation and setting up of the treatment plant. Mr R. Mohan, learned Senior Counsel appearing for the West Bengal Pollution Control Board, stated that individual notices have been issued to all the tanneries to be relocated. The learned counsel for the tanneries has brought to our notice that some of the tannery-owners are residing within the tannery premises. The learned counsel further contends that after the tanneries are relocated, the residence part of the premises may be permitted to remain with them. Learned counsel appearing for about 208 Calcutta tanneries of Chinese origin, stated that it was technically feasible to set up a common effluent treatment plant within the area where the tanneries were situated. It was further stated that the tanneries were prepared to meet the cost of the project by pooling the resources. However, all this was contrary to the State Pollution Board’s contention placed before the Court that the setting up of the common effluent treatment plant/plants at the existing tanneries’ complexes was not possible and relocation was the only alternative available.

Although the Board had repeatedly stated before the Hon’ble Supreme Court that the setting up of the common effluent treatment plant/plants at the existing tanneries' complexes was not possible but despite that this Court gave liberty to Mr. Shanti Bhushan to file a short affidavit indicating the details of the project. The learned counsel for the Calcutta tanneries contended

that the site where the new leather complex is being set up is a part of the wetland. However, it was observed in the Technical Report by the surveyor indicating that the new leather complex does not fall within the area of the wetland. No material to the contrary has been placed on record by the Calcutta tanneries. Therefore, the court rejected the contention of the learned counsel that the new leather complex was a part of the wetland.

3.4.3 Orders and Directions

This case reiterated its definition of the Polluter pays principle cited by the hon'ble court in the Vellore Citizens' Welfare Forum Case, which laying down that both polluter pays and precautionary principles were accepted as a part of the law of the land. The Court order the relocation of 550 tanneries operating in Tangra, Tiljola, Topsia and Pagla Danga areas in the eastern fringe city of the Calcutta. The State Government and the State pollution Control Board were put in charge of the relocation process along with all incidental activities like land allocation and appointment of an authority/Commissioner who with the help of Board and other expert opinion and after giving opportunity to the polluting tanneries concerned assess the loss to the ecology/environment in the affected areas. The said authority would also further determine the compensation to be recovered from the polluter - tanneries as cost of reversing the damaged environment. The authority would lay down just and fair procedure for completing the exercise. The amount of compensation would be deposited with the Collector/District Magistrate of the area concerned.

The Court held that the state had a constitutional obligation to protect and improve the environment, as well as the country's forests and wildlife. It was also a fundamental duty of every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife, as well as to have compassion for all living creatures, according to the Court. As a result, it was made illegal to dispose of polluting materials in any stream or well. This meant that no one could knowingly cause or permit any poisonous, noxious, or polluting matter to enter a stream, either directly or indirectly; or knowingly cause or permit any other matter to enter a stream that could obstruct the proper flow of the stream's water, either directly or in combination with similar matters. The Court went on to say that it was the State Government and the Centra Government's responsibility, through pollution control boards at the state and central level respectively, to use the powers granted to them by statute to take all measures necessary or expedient for the purpose of protecting and improving the environment, as well as preventing, controlling, and abating water pollution. I was also held by the court that any

tannery that is unable to build up a main treatment plant, much like an industry that is unable to pay minimum wages to its employees, cannot be allowed to continue to exist. This is because the negative impacts on the general population that are expected to result from Ganga contamination would much surpass any difficulty that the closure of the tanneries would give to the management and the workers employed by it. As a result, the tanneries' financial capacity was to be ignored while they were required to build primary treatment plants. This ruling of the Hon'ble Supreme Court took a proactive and courageous position in the conservation of the fragile ecology of our rivers. There is a growing awareness of the importance of our rivers, particularly the Ganga, in the lives of millions of Indians, as well as the urgent need to safeguard them. The high standards of accountability that this decision establishes for the concerned statutory entities in terms of environmental protection are notable. Another noteworthy feature is the high priority it places on environmental preservation over the economic interests and viability arguments advanced by polluting tanneries.

A positive role was indeed played by the Supreme Court in clamping down on the polluting activities of the tanneries in both *M.C. Mehta cases — Kanpur* as well as *Calcutta* and in *Vellore case*. The impact on community health, ecology and marine life forms was too severe for the Supreme Court to turn a blind eye to. It should be reiterated that the leather industry in India occupies a prominent place in the economy especially because of its export earnings and its scope for employment. Thus, the approach taken in the *Calcutta Tanneries'* matter, whereby the Court's attitude was more directed towards striking a balance between the concerns of industry and environment is preferable. Therefore, rather than imposing a blanket order of closure, courts should emphasise on relocation of tanneries and protection of jobs as it has done in latter case. This requires active support of the Government.[107]

Further, while courts have realised that beyond a certain point it is not economically feasible for many small, privately owned tanneries to incur expenditure on anything more than primary effluent treatment plants, it is now upon the courts to direct the Government to sponsor larger effluent treatment facilities which will go a long way in eradication of the problem of polluting tanneries. The Court was categorical about the accountability of the statutory bodies (like those created under the Water, Air and Environment Acts) formed for the purpose of enforcing environmental standards by industries. They cannot now remain inactive. Also, unlike the Kanpur Tanneries' matter where the Court had held that the environmental issues at stake

[107] S. C. Shastri, "The Polluter Pays Principle and the Supreme Court of India," *J. Indian Law Inst.*, vol. 42, no. 1, pp. 108–116, 2015.

outweighed the unemployment considerations, in the present case, the workmen employed in the Calcutta tanneries were held to be entitled to certain rights and benefits. The workmen were to have continuity of employment at the new place where the tannery was being shifted and the terms and conditions of their employment were also not to be altered to their detriment. Further, the period between the closure of the tannery at its old site and its restart at the place of relocation was to be treated as active employment and the workmen were to be paid their full wages with continuity of service. All workmen agreeing to shift with the tanneries were to be given one year's wages as "shifting bonus" to help them settle at the new location. However, the workmen employed in the tanneries, which failed to relocate, were to be deemed to have been retrenched with effect from the closure dates of the tanneries.

Both of these cases have been instrumental in checking upon contamination of rivers caused by the tanneries. However, the implementation of these orders to the fullest extent is questionable. The implementation of any policy, judgement or order is mostly a question of political will but other factors also feature in. in the case of Vellore Tanneries, the Supreme Court appointed a monitoring committee. The Loss of Ecology Authority was set up in 1996 on Supreme Court orders to assess the damage caused by industrial pollution in the districts of Vellore, Dindigul, Kancheepuram, Tiruvallur, Erode and Tiruchi. Assessing damage to ecology and loss of livelihood is a task which needs careful balancing of various interests[108]. The Calcutta tanneries case was mentioned later by Madras High Court in C. Lakshmi Narain vs. Govt. of Tamil Nadu,[109] and relied upon by the petitioners.

Justice Kuldeep Singh's views on precautionary principle and polluter pays principle in Vellore Citizens Welfare forum case has been quoted with approval in M.C. Mehta v. Union of India[110] and many other cases. Many cases in the past 20 years have drawn inspiration from the tanneries case judgment, specially when it comes to the legal acceptance of the principle of sustainable development, the polluter pays principle and the precautionary principle. In the case of A.P. Pollution control board vs. Prof. M.V. Nayudu,[111] elaborated upon the 'special burden of proof in environmental cases' as referred to in the Vellore Citizens' welfare forum case by Justice Kuldip Singh wherein he put 'onus of proof' on the actor or the

[108] G. Sahu, "Implementation of Environmental Judgments in Context: a Comparative Analysis of Dahanu Thermal Power Plant Pollution Case in Maharashtra and Vellore Leather Industrial Pollution Case in Tamil Nadu," *Law, Environ. Dev. J.*, vol. 6, no. 3, pp. 335–353, 2010.
[109] C. Lakshmi Narain vs. Govt. of Tamil Nadu, MANU / TN / 1197 / 2002
[110] M.C. Mehta vs. Union of india, AIR 1997 SC 734.
[111] , A.P. Pollution Control Board vs. Prof. M.V. Nayudu, AIR 1999 SC 812.

developer/industrialist to show that his action is environmentally benign. In this case, Justice M. Jagannadha Rao said that not only are the principle of Sustainable development, the precautionary principle and the polluter pays principle of the customary international law on environment, but also in the light of Vellore judgment these principles have been adopted in flesh and spirit by Indian courts in view of our constitutional obligations.

In the case of Narmada Bachao Andolan vs. Union of India,[112] Justice B.S. Kirpal, while relying on the Vellore Citizens' welfare forum judgment, observed that it has become a part of our law that any developer or industrialist who seeks to alter the status quo should bear the burden of proof. This onus falls upon them in the light of precautionary principle which suggests that where there is an identifiable risk of serious or irreversible harm, it may be appropriate to place the burden of proof on the person or entity who is proposing the potentially harmful activity. In the case of Bombay Dyeing and Mfg. Co. Ltd. vs. Respondent: Bombay Environmental Action Group and Ors.[113] reliance was placed upon the Vellore Citizens' welfare forum judgment to sanctify the polluter pays and the precautionary principles. In the recent landmark judgment on right to privacy this case was mentioned to establish the right to clean environment as a fundamental right.[114] In Samatha case[115] only meaning and importance of the term sustainable development as well as "the polluter pays principle as a facet thereof" have been briefly mentioned and affirmed by the Supreme Court.

[112] Narmada Bachao Andolan vs. Union of India, AIR 2000 SC 3751.
[113] Bombay Dyeing and Mfg. Co. Ltd. vs. Bombay Environmental Action Group and Ors., AIR
[114] K.S. Puttaswamy vs. Union of India. AIR 2017 SC 4161.
[115] *Samatha*, v. *State of A.P. & others* (1997) 8 SCC 191, 274.

CHAPTER IV

The Shrimp Culture Case and Sustainable Development

S. Jagannath v. Union of India[116]

India is one of the few countries blessed with varied landscapes, cultures and biodiversity. Our vast coastline and the biodiversity, culture and issues associated it with them are a part of this variety. The Indian peninsula is surrounded by the Arabian Sea, the Indian Ocean and the Bay of Bengal in its West, South and East respectively. Nine of India's states namely Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha and West Bengal and two Union territories namely Daman and Diu and Puducherry enjoy the coastline while Andaman and Nicobar Islands and Lakshadweep are islands. It is safe to say that a large number of Indians dwell in the coastal regions and derive their livelihood from there, and in turn affect the coastal ecology a great deal. The coastal zone is a transition area between marine and territorial zones, including shore ecosystems, wetland ecosystems, mangrove ecosystems, mudflat ecosystems, sea grass ecosystems, salt marsh ecosystems and seaweed ecosystems. While the Environment (Protection) Act was decreed in 1986 to protect the environment, it wasn't until 1991 that the coastal regulation zone notification was introduced, for better management of littoral ecology and regulation of coastal area activities, by the Ministry of Environment and Forests (MoEF). However, in the year 1994, an amendment to this notification relaxed the stern provisions of the 1991 notification allowing various activities which would be detrimental to the coastal ecology without much control over it. The coastal regulation zone notification, 2011 was enacted to replace the older notification of 1991, in order to provide reasonable and appropriate environmental management at the coastal line. In the new notification, a major change was brought by segregating the notification to be applied for Indian islands of Andaman and Nicobar Islands and Lakshadweep Islands.

The ever-rising population of India means the ever rising needs to ameliorate activities that ensure economic development and employment for the masses, in this process it is genuine for environment protection to take a back seat in the list of priorities for the custodians of this nations, how much so ever we dread this prospect, it doesn't cease to be the harsh reality. A balance is sought between the Human activities and livelihood security in the coastal zones and

[116] S. Jagannath vs. Union of India, AIR 1997 SC 811.

the protection and conservation of the unique coastal and marine environment in order to promote sustainable development based on scientific principles taking into account the dangers of natural hazards and sea level rise due to global warming. The idea of sustainable development is that human societies must live and meet their needs in a manner that allows us to meet our needs without compromising the needs of the future generations to meet their needs. The case of S. Jagannath v. Union of India, popularly known as the Shrimp Culture case, strikes a chord with this principle of sustainable development vis-à-vis coastal regions in the light of the Coastal regulation zone notification of 1991. In this case, the Hon'ble Supreme Court, through the pen of Hon'ble Justice (retd.) Kuldeep Singh cited the importance of sustainable development and stated that it should be the guiding principle to offer guidance to navigate through most of India's environmental crisis. In this chapter, we shall focus on Justice Singh's remarkable judgment in the Shrimp Culture Case, the Coastal Regulation notification through the years and the principle of Sustainable development.

4.1 Coastal Regulation Zone Notification: 1991 to 2019

It is assessed that about 4,800 billion tonnes domestic waste and 65 million tonnes solid waste are dumped annually in the sea.[117] Due to continuous onslaught on the coastal areas, the extent of mangroves, coral reefs and fish breeding gets diminished adversely impacting the livelihood of 200 million people who live along the 7,517-kilometre-long coastline of our country. The Environment (Protection) Act,1986 was enacted in response to a resolution made at the United Nations Conference on Human Environment in Stockholm in June 1972.[118] It was deemed necessary to adopt broad legislation to address issues of environmental safety. Activities aimed at improving economic conditions have always been on the rise, infiltrating fragile ecosystems and putting people's lives and livelihoods at jeopardy. The coastal ecosystem was no exception to this trend, putting marine species in jeopardy. Resources available in the coastal area must be used to meet the requirements of a growing population. As a result, safeguarding these resources becomes critical. As a result, the Government of India has issued three very important notification, in the course of past two decades, in attempts to regulate its coastal zone by implementing regulatory measures, most notably the Coastal Regulation Zones and control activities in and near coastal areas across India, in accordance with the EPA and Environment (Protection) Rules, 1986. Coastal zones had to be regulated to prevent deterioration and to put

[117] Down to earth, "why we need a coastal zone protection Act" by V. Sundararaju, 18 Jan, 2019.
[118] EPA, 1986, Statement of Objects and Reasons.

the protection of beaches and other water bodies under the Coastal Regulation Zone into the legislative framework.[119]

4.1.1 Coastal Zone Regulation Notification, 1991[120]

In 1991, the first of the Notifications was issued. The Coastal Regulation Zone Notification, 1991 was issued under the authority of Sections 3(1) and 3(2)(v)[2] of the EPA, as well as Rule 5[3] of the Rules. The Central Government has imposed limits on the establishment and extension of industries, the operation of industries or processes, and the operation of industries or processes in certain locations. The 1991 Notification applies to seas, bays, estuaries, creeks, rivers, and backwaters that are influenced by tidal action up to 500 metres from the High Tide Line (HTL) and land between the HTL and the LTL (LTL). It required state governments and union territories to create a Coastal Zone Management Plan to identify and classify the Coastal Regulation Zone within their jurisdictions. The Notification of 1991 also gave state governments, union territories, and local governments the authority to regulate development activities within the CRZ. The Notification required the Ministry of Environment and Forests, Government of India, to grant permission for specific types of projects, such as construction activities related to defense requirements, operational constructions for ports and harbours and lighthouses,[121] thermal power plants,[122] and any other activities[123] with investment over and above rupees ten crores. Coastal areas under the notification were also classified into four zones viz., CRZ-I, CRZ-II, CRZ-III and CRZ-IV.

CRZ-I – Areas that are ecologically sensitive and important such as national parks, marine parks, sanctuaries and other important biologically sensitive areas and of heritage or of historical significance and also included the area between the LTL and HTL. It also laid down prohibition on any construction within the 500 meters of the High Tide Line and allowed[124] for constructions for carrying treated effluents and waste water discharges into sea, facilities for carrying sea water for cooling purposes, oil, gas and similar pipelines and facilities for essential activities.

[119] R. Parthasarthy, V. Gehlot, "Coastal regulation zone: A journey from 1991 till 2019," Nlsenlaw.org, 09-Jun-2020. Available: https://nlsenlaw.org/coastal-regulation-zone-a-journey-from-1991-till-2019/.
[120] Coastal Regulation Zone and Regulating activities in the CRZ, 19th February, 1991, Ministry of Environment and Forests.
[121] CRZ Notifications, 1991, Cl. 3(2)(ii).
[122] CRZ Notifications, 1991, Cl. 3(2)(iii).
[123] CRZ Notifications, 1991, Cl. 3(2)(iv).
[124] CRZ Notifications, 1991, Cl. 2(xii).

CRZ-II – Developed Areas[125] which are developed up to or close to shore line are classified under the second category. CRZ-II however allowed for construction and reconstruction of buildings, subject to respective laws and mandated that the said buildings shall be consistent with surrounding landscape and local architectural style.

CRZ-III – Areas not falling within CRZ-I and CRZ-II are classified under CRZ-III, which are in the rural areas and also those areas which are not substantially built up. Introduced the 'No Development Zone' up to 200 meters from HTL. It permitted activities like agriculture, horticulture, gardening, pasturing, parks, playfields, forestry and salt manufacture. However, no new construction was allowed and only repairs of existing structures were allowed. Between 200 meters and 500 meters of HTL allowed for hotels and resorts for tourists as provided under Annexure – II to the Notification, construction and reconstruction of dwelling units with specified measurements, along with alteration of existing authorised building.

CRZ-IV – Covered the islands of Andaman and Nicobar, Lakshadweep and other small islands except those under CRZ-I, CRZ-II and CRZ-III. Restrictions on construction within the 200 meters of HTL imposed and prohibited the use of corals and sand from beaches and coastal waters, dredging and under water blasting in and around coral formations.

4.1.2 Coastal Zone Regulation Notification, 2011[126]

Three key objectives were codified in the 2011 notification, which focused on the protection of traditional fisherfolk communities' livelihoods, the preservation of coastal ecosystem, and the promotion of economic activities. Several regions, including the Sunderban Mangroves, Chilka, the Gulf of Kutch, Kundapur, and Karwar, were given special consideration. It gave the State Governments and Union Territories the authority to form the Coastal Zone Management Authority,[127] which would have particular powers and functions. The Notification of 1991 did not initially provide for the establishment of CZMA, but an amendment was made to allow CZMA to be established in each state.

The National Coastal Zone Management Authority (NCZMA) and State Coastal Zone Management Authorities collaborated to improve the execution of the 2011 Notification

[125] CRZ Notifications, 1991, CRZ-II defined 'Developed area' as that area within the municipal limits or in other legally designated urban areas which is substantially built up and has been provided with drainage and approach roads and other infrastructural facilities such as water supply and sewerage mains.
[126] Coastal Regulation Zone and Regulating activities in the CRZ, 2011, Ministry of Environment and Forests,
[127] CRZ Notifications, 2011, cl. 4(b).

(SCZMA).[128] The Ministry of Environment Forests has already announced the composition, term, and mandate of NCZMA and SCZMA. The formation of a District Level Committee, chaired by the District Magistrate, with three representatives from local traditional coastal communities, including fishermen, has been proposed.[129] For the protection of fisherfolks, tribals and communities living around the coastal areas, the Notification of 1991 did not provide for a mechanism to obtain formal approval and regularisation of dwelling units and the same have been provided under the present notification with the certain specific conditions.

4.1.3 Coastal Zone Regulation Notification, 2019[130]

The Notification of 2019 has been brought out pursuant to the recommendations of the Committee and laid special focus on creating employment opportunities for the people in the coastal areas. Apart from the conservation and protection of coastal environment, the Notification also leads to enhanced activities in the coastal regions thereby promoting economic growth resulting in employment generation and better standard of living. Salient features of the Notification of 2019 are as follows –

As per the Notification, CRZs have been classified and changes to the existing classification has been brought into. CRZ-I has been further classified as CRZ-I A[23], which are environmentally most critical. Intertidal zone i.e., area between LTL and HTL has been classified as CRZ-I B. Whereas CRZ-II has remained without any classifications, CRZ-III has been classified into two separate categories under CRZ-III (Rural) have been classified as CRZ-IIIA and CRZ-IIIB. Densely populated rural areas are now granted more opportunities for development by reducing the No Development Zone from earlier 200 meters to 50 meters of HTL, which has been prescribed based on the population density of 2161 per square kilometre. CRZ IV is classified as Water area and further classified as CRZ-IV A i.e., area between LTL up to twelve nautical miles on the seaward side and CRZ-IV B water area and the bed area between LTL at the bank of the tidal influenced water body to the LTL on the opposite side of the bank, extending from the mouth of the water body at the sea up to the influence of tide.

[128] CRZ Notification, 2011, Cl. 6(a).
[129] CRZ Notifications, 2011, Cl. 6(c).
[130] Coastal Regulation Zone and Regulating activities in the CRZ, 2019, Ministry of Environment, Forests and Climate Change.

Clearance procedures for projects or activities located in CRZ-I and CRZ-IV to be dealt with by the Ministry of Environment, Forests & Climate Change. Whereas, powers for clearance under CRZ-II and CRZ-III have been delegated to State level with necessary guidance.

Special importance has been granted to all the Ecologically Sensitive Areas. Boost for the tourism industry as temporary tourism facilities like shacks, toilets, change rooms, drinking water facilities have been permitted in the No Development Zone of CRZ-III areas with a minimum distance of 10m from the HTL. As per the 1991 Development Control Regulation, Floor Area Ratio had been frozen. As of now it stands defreezed and Floor Space Index is permitted for construction projects which implies a boost for the real estate sector. Coastal areas treatment facilities have been permitted under CRZ-I B to abate pollution.

The recently notified Regulations has laid more emphasis on the development of coastal areas. The Notification has tried to address several issues regarding the land use. Creation of infrastructure for the development of coastal area has been the focus of the Notification. While provision for the conservation efforts specifically mentioned, opening the coastal areas may threaten the fragile ecosystem for unabated commercial activities jeopardising the ecosystem itself and ultimately leading to its destruction.

The CRZ regulations need to be aligned with the millennium development goal on environmental sustainability by focusing on the long-term impacts of all developmental work in the notified zone. The notification though uses terminologies like sustainable development, sustainable livelihood, ecologically and culturally sensitive costal resources, but fails to detail the implementation strategies for each of them.[131]

4.2 Sustainable Development

Sustainable development (SD) is an economic growth pattern in which resource usage strives to fulfil human needs while protecting the environment, so that these needs may be satisfied not only now, but also in the future. Sustainable development, in particular, is a method of arranging society in such a manner that it can continue to exist in the long run. This entails taking into account both current and future imperatives, such as environmental and natural resource protection, as well as social and economic fairness. The concept of 'Sustainable

[131] R. Krishnamurthy, R. Dasgupta, R. Shaw, and R. Chatterjee, "Managing the Indian coast in the face of disasters & climate change: a review and analysis of India's coastal zone management policies," *Journal of Coastal Conservation*, vol. 18, no. 6, pp. 657–672, Sep. 2014.

Development' is not a new concept. The doctrine had come to be known as early as in 1972 in the Stockholm declaration[132]. It had been stated in the declaration that

" *Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being and he bears a solemn responsibility to protect and improve the environment for present and future generation.*"

Although the word "sustainable development" did not appear in the Declaration, the main theme was the relationship between the development of the present generation and that of future generations. Principle 2 is the clearest reference to this relationship:

"The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate."

On 28 October 1982, the General Assembly adopted the World Charter for Nature.[133] The earth was no longer considered a commodity at this period. The Assembly went on to say that it was "aware that mankind was a part of nature," that "civilization was rooted in nature," that "living in harmony with nature gave man the best opportunities for the development of his creativity," and that "every form of life [was] unique, deserving respect regardless of its worth to man." The World Charter for Nature's first principle stated that "nature should be protected, and its basic processes shall not be harmed." Furthermore, "natural resources should not be wasted," according to the Charter. Instead, they should be utilised in a long-term manner.

But the concept of Sustainable Development was given a definite shape in a report by world commission on environment, which was known as ' our common future'.[134] The commission, which was chaired by the then Norway Prime Minister, Ms. G.H. Brundtland defined 'Sustainable Development' as:

"*Development that meets the needs of the present without compromising the ability of the future generations to meet their own needs*."

The report was popularly known as 'Brundtland report' the concept had been further discussed under agenda 21 of UN conference on environment and development held in June 1992 at Rio

[132] Stockholm Declaration on the Human Environment, in Report of the United Nations Conference on the Human Environment, *United Nations Documents, A/CONF*. 48/14, at 2 and Corr. 1, 1972.
[133] United Nations General Assembly. World Charter for Nature, Annexed to United Nations General Assembly Resolution 37/7, Adopted 28 October 1982; United Nations: New York, NY, USA, 1982.
[134] G. Brundtland, "Report of the World Commission on Environment and Development: Our Common Future", *United Nations General Assembly Document* A/42/427, 1987.

de Janeiro, Brazil. The contemporary notion of sustainable development is mostly based on the Brundtland Report of 1987, but it also has roots in older concepts about sustainable forest management and twentieth-century environmental concerns. A set of Proposed Legal Principles for Environmental Protection and Sustainable Development, adopted by the World Commission on Environment and Development Experts Group on Environmental Law was annexed to the report. As the notion of sustainable development evolved, it turned its attention to future generations' economic progress, social development, and environmental conservation. "The term 'sustainability should be seen as humanity's target aim of human–ecosystem balance, while 'sustainable development' refers to the holistic approach and temporal processes that take us to the endpoint of sustainability," according to one interpretation.[135] Modern economies are endeavouring to reconcile ambitious economic development and obligations of preserving natural resources and ecosystems, as the two are usually seen as of conflicting nature. Instead of holding climate change commitments and other sustainability measures as a remedy to economic development, turning and leveraging them into market opportunities will do greater good.

Social progress and equality, environmental preservation, natural resource conservation, and stable economic growth are the four goals of sustainable development. Every person has the right to live in a healthy, clean, and secure environment. Pollution, poverty, substandard housing, and unemployment may all be reduced to attain this goal. No one should be treated unjustly in this era or in the future. To safeguard human and environmental health, global environmental concerns such as climate change and poor air quality must be minimised. Non-renewable resources, such as fossil fuels, should not be abandoned overnight; rather, they must be utilised wisely, and the development of alternatives should be promoted to aid with their phase-out. Everyone has a right to a decent quality of life and more work possibilities. If our country is to flourish, our firms must provide a high level of products that people across the world desire at rates they are willing to pay. We'll need a workforce with the right skills and education, as well as a structure to assist them. The World Summit on Social Development in 2005 highlighted three key areas that contribute to sustainable development philosophy and social science.[136] In many national standards and certification systems, these "pillars" serve as

[135] R. Shaker, "The spatial distribution of development in Europe and its underlying sustainability correlations". *Applied Geography*. pp. 305. Sept, 2015.
[136] World Summit Outcome, *United Nations General Assembly Document*, A/RES/60/1, 2005.

the backbone for addressing the world's most pressing issues. These are economic development, social development and environment protection.

4.2.1 Inter-generational and Intra-generational Equity

The principle of intergenerational equity states that every generation holds the Earth in common with members of the present generation and with other generations, past and future. Inclusive growth focuses on environmentally responsible economic growth, which is a prerequisite for poverty reduction and long-term development. Intergenerational issues affect multiple generations, so intergenerational equity is the foundation of the concept of sustainability. Intragenerational equity, on the other hand, is an essential component of sustainable development, as it includes the role of virtue ethics and attitudes in changing people's lifestyles and behaviours across generations.[137]

Intergenerational equity is a key idea in sustainability that is often articulated as a concern for future generations. In this review paper, we argue that intergenerational equality can also be a concern for previous generations. Because these injustices do not stop with the past, but are ingrained in the social, economic, and ecological fabrics of our present-day society, substantial attention is devoted to redressing injustices endured by previous generations, which is frequently referred to as "restorative justice." It's a topic that comes up frequently in public economics, particularly in relation to transition economics, social policy, and government budgeting. Environmental issues such as sustainable development, global warming, and climate change are also examined in terms of intergenerational fairness. Future generations will almost certainly be burdened by the ongoing depletion of natural resources that has happened during the last century. Intergenerational equity is also explored in terms of living standards, with an emphasis on disparities in living standards faced by persons of various ages and generations. Issues of intergenerational fairness also emerge in the fields of aged care and social justice. The intergenerational equity was shaped by two different relationships: the relationship of the present generation to other—past and future—generations; and the relationship of present people to "the natural system of which we are a part".[138]

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[137] O. Spijkers, "Intergenerational Equity and the Sustainable Development Goals", *Sustainability*, 10 (3836), 23 October 2018. Available: www.mdpi.com/journals/sustainability.

[138] Brown Weiss, E. Intergenerational equity and rights of future generations. In The Modern World of Human Rights: Essays in Honour of Thomas Buergenthal; Nikken, P., Cançado Trindade, A.A., Eds.; Inter-American Institute of Human Rights: San José, CA, USA, 1996; pp. 601–619.

Intragenerational equity is concerned with equity between people of the same generation and aims to ensure justice among living human beings, as reflected in Rio Principle 6, which mandates special attention to the special situation and needs of developing countries, particularly the least developed and the most environmentally vulnerable, as reflected in Rio Principle 6.

The notion of sustainable development has been and continues to be criticised, particularly the topic of what should be sustained in such development. Because any positive rate of exploitation would eventually lead to the exhaustion of the earth's finite supply, it has been claimed that there is no such thing as a sustainable usage of a non-renewable resource. This viewpoint deems the Industrial Revolution as a whole unsustainable. It has also been claimed that the concept's meaning has been opportunistically extended from "conservation management" to "economic development" and that the Brundtland Report promoted nothing but a business-as-usual strategy for world development, with an ambiguous and insubstantial concept attached as a public relations slogan.

4.3 Shrimp Culture Case

The seashore and beaches are a gift from nature to humanity. The area's scenic attributes and recreational utility must be preserved. Any activity that has the potential to degrade the environment is prohibited. Aside from that, the right of fishermen and farmers living in coastal areas to make a living through fishing and farming cannot be ignored. This case dealt with the intensive and semi-intensive type of Shrimp farming in the ecologically sensitive coastal areas and for the non-implementation of CRZ notifications notified in 1991. In this case, a bench consisting of hon'ble justices Kuldip Singh and Saiyad Saghir Ahmed examined the purpose of CRZ notification in protecting the ecological fragile coastal areas and safeguarding the aesthetic qualities and uses of the sea coast, as well as the hazards in setting up of modern shrimp aquaculture farms right on the sea coast and construction of ponds and other infrastructure thereon which is bound to degrade the marine ecology, coastal environment and the aesthetic uses of the sea coast. They also examined whether the shrimp culture industry is "directly related to water front" or "directly needing foreshore facilities". The setting up of shrimp culture farms within the prohibited areas under the CRZ notification was to be decided upon its nature as an industry directly related to water front or directly needing foreshore facilities.

4.3.1 Background of the case

S. Jagannathan, Chairman, Gram Swaraj Movement, a voluntary organisation working for the upliftment of the weaker sector of society, submitted his plea under Article 32 of the Indian Constitution - in the public interest. The petitioner is seeking the implementation of the Government of India's Coastal Zone Regulation Notification of February 19, 1991, as well as the prohibition of intensive and semi-intensive prawn farming in ecologically sensitive coastal areas, as well as the establishment of a National Coastal Management Authority to protect the marine environment. In India, the shrimp (prawn) culture industry was gaining traction at the time. The traditional rice/shrimp rotating aquaculture technique was used by Indian fisherman for a long time. During some part of the year, rice is cultivated, while the rest of the year, shrimp and other fish species are cultured. However, over the previous decade, the traditional technique, which produced 140 kg of shrimp per hectare of land in addition to rice, began to give way to more intense shrimp culture systems that could generate thousands of kilogrammes per hectare. Shrimp farms have attracted a great number of individual firms and multinational corporations. In the last few years more than eighty thousand hectares of land have been converted to shrimp farming. India's Marine export weighed in at 70,000 tonnes in 1993 and these exports were projected to reach 200 thousand tonnes by the year 2000. Because aquaculture is a short-duration crop with a high investment return and a growing market, proponents of shrimp farming saw it as a possible saviour for poor countries. The stated goal was to be realised by using semi-intensive and intensive approaches to replace the conventional ecologically friendly style of cultivation. Shrimp farming in semi-intensive and intense forms was gaining popularity, at that time, in more and more places. Shrimp aquaculture's environmental impact is mostly determined by the shrimp growing method used. The newer trends of more intensive shrimp farming in certain parts of the country - without much control over feeds, seeds, and other inputs, as well as water management practises - brought to the fore a serious threat to the environment and ecology, which was highlighted in this petition before the Hon'ble court. This Public Interest Petition was filed to stop prawn farms from being built along the coasts of Andhra Pradesh, Tamil Nadu, and other coastal states. It was claimed that coastal states are permitting huge corporate houses to build large-scale prawn farms in ecologically sensitive coastal regions, in contravention of the Environment Protection Act, 1986, and the laws enacted thereunder, as well as many other legal restrictions. It was also claimed that the construction of prawn farms on rural cultivable areas is causing severe

environmental, social, and economic difficulties for rural residents living near the shore, particularly on the east coast.

4.3.2 Arguments and Observations

Mr. M.C. Mehta, counsel on behalf of the petitioner argued that Shrimp production is neither "directly connected to water from" or "directly requiring fore-shore facility," and so is a banned activity under Paragraph 2(1) of the CRZ Notification. He has strongly argued that contemporary - as opposed to traditional - shrimp farming practises are very polluting and harmful to the coastal ecosystem and marine ecology. Only conventional and enhanced traditional shrimp farming techniques that are ecologically beneficial should be authorised, according to him. Mr. Mehta has argued in court that setting up shrimp farms on coastal stretches of seas, bays, estuaries, creeks, rivers, and backwaters up to 500 metres from the High Tide Line is illegal under the CRZ Notification dated February 19, 1991 issued by the Government of India under Section 3 of the EPA, 1986. While relying on the NEERI reports, Mr. Mehta vehemently argued that the Shrimp industry was discharging highly polluting affluent into the sea which amounted to hazardous waste. Mr. Kapil Sibal, on behalf of farmers of Tamil Nadu, maintained that a shrimp farm is a water-based enterprise that cannot function without fore-shore infrastructure. Mr. Sibal asserted that "water front" refers to territory next to the sea or the section of a town that front a body of water, citing the Oxford English Dictionary. "The portion of the beach that lies between the High Tide and the Low Tide," he says, "in terms of the aforementioned lexicon implies the part of the shore that lies between the High Tide and the Low Tide."

The hon’ble Supreme Court observed Coastal Pollution, universally, is an emerging problem. So far as India is concerned it has already become a serious environmental problem. Besides direct dumping of waste materials in the seas, discharge through marine outfalls, large volumes of untreated of semi-treated waste generated in various land-based sources/activities ultimately find way to the seas. The coastal waters directly receive the inland waters, by way of surface run-off and land-drainage, laden with myriad of refuse materials – the rejects or wastes of the civilisation. Apart from inputs from rivers and effluent-outfalls, the coastal areas are subject to intensive fishing, navigational activities, recreations, ports, industrial discharge and harbours which are causative factors of water quality degradation to varying degrees.

In contrast to the open sea, river discharges under tidal circumstances cause significantly larger variations in the quality of coastal waters. With a noticeable increase in marine pollution and

the resulting decline in marine resources, the United Nations Conference on Human Environments in Stockholm (1972) expressed grave concern, drawing global attention to the urgent need to identify the critically polluted areas of the marine environments, particularly in coastal waters, for immediate remedial action. The Conference unanimously resolved that the littoral States should take early action at their national level for assessment and control of marine pollution from all sources and carry out systematic monitoring to ascertain the efficacy of the pollution regulatory actions taken by them. In the background of the Stockholm Conference and in view of 1982 Convention on the "Law of the Sea" defining jurisdiction of territorial waters, a model comprehensive Action Plan has been evolved under the United Nations' Environment Programme (UNEP). The Government of India and the Governments of the coastal States have a legal duty to manage marine pollution and safeguard coastal ecosystems in accordance with international obligations and in the larger national interest.

According to the facts placed on record by the Central Pollution Control Board the Board the coastline of India's mainland is about 6000 km long. But or the total landmass of about 3.28 million sq. kms nearly 0.15 million sq. kms of coastal land-belt (considering 25 km landward distance) girdles three sides of the Country's sea front which in turn underlays about 3.13 million sq. km sea-bed upto the territorial limit. The Country being riverine, has 14 major, 44 medium and 55 minor rivers which discharge annually about 1566 thousand million cubic meters of water through land drainage into the seas transporting a wide range of pollutants generated by land-based activities. Nine out of fourteen major rivers meet the sea in the east coast (Brahmaputra through Bangladesh) and the remaining five in the west coast (Indus through Pakistan). Besides land drainage, there are large number or marine coastal out falls discharging directly or indirectly industrial and municipal effluents into seas. Uncontrolled disposal of land-based waste into the seas, through rivers and effluent outfalls, is a major cause of pollution of coastal waters. There are nine coastal States and one Union Territory (UT) in India namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Pondicherry (UT), Andhra Pradesh, Orissa and West Bengal, more than one-fourth of the total population of the country is settled in the coastal areas.

4.3.3 Orders and Directions

In light of the aforementioned observations, the court through order authored by Justice Kuldip Singh directed the Central Government to constitute an authority under Section 8(3) of the Environment (Protection) Act, 1986 and confer on the said authority, headed by a retired Judge

of the High Court, all the powers under Section 5 of the EPA, 1986 to issue direction and for taking measures with respect to the matter referred to in Clauses (v), (vi), (vii), (viii), (ix), (x) and (xii) of Sub-section (2) of Section 3 and to protect the ecologically fragile coastal areas, sea shore, water front and other coastal areas and specially to deal with the situation created by the shrimp culture industry in coastal States Union Territories. Other members of the authority, preferably with expertise in the field of aquaculture, pollution control and environment protection, would be appointed by the Central Government. The authority so constituted by the Central Government had to implement "the Precautionary principle" and "the Polluter Pays" principle as part of the Sustainable development regime. The shrimp culture industry/the shrimp ponds were to be covered by the prohibition contained in para 2(i) of the CRZ Notification. Within the coastal regulatory zone as stated in the CRZ notice, no shrimp cultivation ponds could be built or established. All oceans, bays, estuaries, streams, rivers, and backwaters had to be covered. Traditional and enhanced traditional types of technology used in coastal low-lying areas would be exempt from this directive. Before March 31, 1997, any aquaculture/shrimp culture industries/shrimp culture ponds operating/set up in the coastal control zone as outlined by the CRZ Notification were to be dismantled and removed from the region. The court directed the Superintendent of Police/Deputy Commissioner of Police and the District Magistrate/Collector of the area to enforce this direction and close/demolish all aquaculture industries/shrimp culture industries, shrimp culture ponds on or before March 31, 1997 and file a compliance report.

Farmers with traditional and improved traditional aquaculture systems were required to use better technology in order to boost production output and return with prior consent from the "authority" established by this order. Agricultural areas, salt pan lands, mangroves, wet lands, forest lands, village common land, and property set aside for public use will not be utilised or converted for the building of shrimp culture ponds. Within 1000 metres of Chilka and Pulicat lakes, no aquaculture industry, shrimp culture industry, or shrimp culture ponds would be built or established (including Bird Sanctuaries namely Yadurapattu and Nelapattu). A total of 1,000 metres had to be blocked and demolished before March 31, 1997. The Superintendent of Police/Deputy Commissioner of Police and the District Magistrate/Collector of the area were directed to enforce this Direction and close/demolish all aquaculture industries/shrimp culture industries, shrimp culture ponds on or before March 1997. A compliance report in this respect had to be filed in this Court by these authorities before April 15, 1997.

Aquaculture industry/shrimp culture industry/shrimp culture ponds other than traditional and improved traditional may be set up/constructed outside the coastal regulation zone as defined by the CRZ notification and outside 1000 meter of Chilka and Pulicat lakes with the prior approval of the "authority" as constituted by this Court. Such industries which are already operating in the said areas would contain authorisation from the "Authority" before April 30, 1997 failing which the industry concerned would stop functioning with effect from the said date. We further direct that any aquaculture activity including intensive and semi-intensive which has the effect of causing salinity of soil, or the drinking water or wells and/or by the use of chemical reeds increases shrimp or prawn production with consequent increase in sedimentation which, on putrefaction is a potential health hazard, apart from causing siltation turbidity of water courses and estuaries with detrimental implication on local fauna and flora would not be allowed by the aforesaid Authority.

Within the coastal regulation zone as specified by the CRZ Notification and within 1000 metres of Chilka and Pulicat Lakes, the aquaculture industry/shrimp culture industry/shrimp culture ponds would be obliged to compensate the affected individuals under the "polluter pays" concept. The authority would assess the loss to the ecology/environment of the affected areas and of the individuals/families who have suffered as a result of the pollution, with the help of expert opinion and after giving the concerned polluters the opportunity to comment, and would determine the compensation to be paid to the said individuals/families. The authority would further determine the compensation to be recovered from the polluters as cost of reversing the damaged environment. The authority would lay down just and fair procedure for completing the exercise. The authority would compute the compensation under two heads namely, for reversing the ecology and for payment to individuals. A statement containing the total amount to be recovered, the names of the polluters from whom the amount is to be recovered, the amount recovered from each polluter, the persons to whom the compensation is to be paid, and the amount payable to each of them would be sent to the Collector/District Magistrate of the area in question. If required, the Collector/District Magistrate will reclaim the money from the polluters as land revenue arrears. He would pay the affected individuals/families the compensation determined by the authority. The compensation amount recovered from the polluters had to be deposited under a separate head called "Environment Protection Fund" and would be utilised for compensating the affected persons as identified by the authority and also for restoring the damaged environment.

The authority was to develop scheme/schemes for reversing the harm caused to the ecology and environment by pollutions in the coastal States/Union Territories, in conjunction with professional organisations such as NEERI, the Central Pollution Control Board, and the relevant State Pollution Control Boards. The various State Governments/Union Territory Governments have to carry out the scheme/schemes under the supervision of the Central Government. The costs were to be covered by the "Environmental Protection Board" as well as other funds supplied by the state/union territory governments and the federal government. Workmen employed in the shrimp culture industries that are to be closed as a result of this order were deemed to have been retrenched with effect from April 30, 1997, if they had been in continuous service (as defined in Section 25B of the Industrial Disputes Act, 1947) in the industry for at least one year prior to that date. They were entitled to compensation under Section 25B of the 1947 Industrial Disputes Act. In addition, six years' salary had to be provided to these workers as extra compensation. Workmen's compensation had to be paid before May 31, 1997. The sum due as a gratuity to the workers had to be paid on top of that.

4.4 Environment and Development: Supreme Court's perspective on the never-ending debate

Right to wholesome environment is a fundamental right protected under Article 21 of the Constitution of India. But the question is, can the environment be protected at present times when almost all the countries in South-East Asia are still at their developing stages? Development comes through industrialization, which in turn the main factor behind the degradation of environment. To resolve the issue, the experts worldwide have come up with a doctrine called 'Sustainable Development', i.e. there must be balance between development and ecology. India being a growing economy has seen rampant industrialisation and development in recent past, which resulted in adverse impact on the environment. Witnessing such degradation, the Supreme Court of India in a bid to protect the environment, played a significant role in shaping and adopting the doctrine of Sustainable Development. This crusade for safeguarding the environment was led by Justice Kuldip Singh, who famously came to be known as the 'Green Judge'.

The doctrine of Sustainable Development was implemented by the Supreme Court in the case of *Vellore Citizen Welfare Forum vs. Union of India*[2]. The Petitioners therein had filed a petition in public interest under Article 32 of the Constitution of India against the pollution caused by discharge of untreated effluent by the tanneries and other industries in the river Palar

in the State of Tamil Nadu. In the instant case, the Supreme Court held that the precautionary principle and polluter pays principle are a part of the environmental law of India. The court also held that: "*Remediation of the damaged environment is part of the process of 'Sustainable Development' and as such polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology.*"

Thereafter in a number of judgments, the Apex Court explained and implemented the doctrine of Sustainable Development. The Hon'ble Supreme Court of India in Narmada Bachao Andolan vs. Union of India observed that "Sustainable Development means what type or extent of development can take place, which can be sustained by nature or ecology with or without mitigation".

In T.N. Godavaraman Thirumulpad vs. Union of India,[139] the Hon'ble Supreme Court said ″

as a matter of preface, we may state that adherence to the principle of Sustainable Development is now a constitutional requirement. How much damage to the environment and ecology has got to be decided on the facts of each case"? In *Indian Council of Enviro-Legal Action vs. Union of India* [5], the Apex Court held: "*while economic development should not be allowed to take place at the cost of ecology or by causing widespread environment destruction and violation; at the same time, the necessity to preserve ecology and environment should not hamper economic and other developments*".

In the landmark case, Tarun Bharat Singh vs. Union of India[140], the petitioner through a PIL brought to the notice of the supreme court that the state government of Rajasthan though empowered to make rules to protect environment, failed to do so and in contrary allowed mining work to continue within the forest area. Consequently, the Supreme Court issued directions that no mining work or operation could be continued within the protected area.

In the case of A.P. pollution control board vs. M.V. Nayudu[141], the Pollution Control Board listed vegetable oils including solved extracted oils' the 'RED' hazardous category. The Municipal Administration and Urban Development, Government of Andhra Pradesh prohibited various types of development within 10 km radius of two lakes, Himayat Sagar and Osman

[139] T.N. Godavaraman Thirumulpad vs. Union of India, AIR 2005 SC 4256.
[140] Tarun Bharat Gingh vs. Union of India, AIR 1992 SC 514.
[141] Supra, A.P. pollution control board vs. M.V. Nayudu.

Sagar, in order to monitor the quality of water in these reservoirs which supplied water to the twin cities of Hyderabad and Secunderabad. The respondent company was incorporated as public limited company with the object of setting up an industry for production of B.S.S. Castor oil derivatives and purchased 12 acres of land in Peddashpur village. The application of the industry was rejected by the A.P. Pollution Control Board since the proposed site fell within the 10 km radius and such a location was not permissible. The Hon'ble Supreme Court examined whether the proposed project would indeed be polluting, and thereby pointed out the difficulties faced by environmental courts in dealing with technological or scientific matters. The Courts did not possess the expertise in all technical and scientific matters of extreme complexity. The Tribunals or the appellate authorities dealing with such matters had to be manned by technical personnel well versed in environmental laws in addition to judicial members. Such defects in the constitution of these bodies could undermine the very purpose of the legislations. It held that when dealing with environmental matters the Supreme Court and the High Courts could make a reference to the expert bodies/Tribunals having expertise in scientific and technical aspects for investigation and opinion. Any opinion rendered by such bodies would be subject to the approval of the Court. Therefore, the Supreme Court referred the matter to the Appellate Authority under the National Environmental Appellate Authority Act, 1997. The Supreme Court in this case was ready to rely on scientific and technical experts with right knowledge on the subject to decide between development and ecology. The Apex court was cautious enough to neither diss development nor overlook ecology but to find the correct middle way to go about such issues.

In the Rural Litigation and Entitlement Kendra vs. State of U.P.[142] case of 1991, the Supreme Court allowed a mine to operate until the expiry of lease as exceptional case on condition that land taken on lease would be subjected to afforestation by the developer. But as soon as the notice was brought before the court that they have breached the condition and mining was done in most unscientific way, the Supreme Court directed the lessee to pay a compensation of three lacs to the fund of the monitoring committee. This has been directed on the principle of 'polluter pays'.

While in the case of Goa Foundation vs. Diksha Holdings Pvt. Ltd.143, the court pondered Whether the plot of land given to Diksha Holdings (respondents) is within CRZ-I area and has

[142] Rural Litigation and Entitlement Kendra vs. State of U.P., AIR 1982 SC 652.
[143] Goa Foundation vs. Diksha Holdings pvt ltd., AIR 2001 SC 184.

the appropriate authority erred in classifying the plot under consideration to be CRZ-III? Also, will there be an irreversible ecological damage to the sand dunes as well as the coastline as a result of the construction of the hotel and has there been a non-application of mind by the concerned authorities? The Hon'ble Court laid down a test for determining whether a land is CRZ I or CRZ III, the test is to check whether the place itself is or is close to a settlement area. If yes, it is to be termed as CRZ III. In this case, the plot in dispute was a part of Nagorcem settlement area, there were schools, temples, houses etc. Therefore, the plot was rightfully categorized CRZ III by the concerned authorities and there was no arbitrariness. As far as the restriction within CRZ III was concerned, the plot was beyond 200 metres and there was no dispute in this regard. But more importantly while answering to the issue of irreversible ecological damage to the sand dunes as well as the coastline as a result of the construction of the hotel, relying on various reports of the Nation Institute of Oceanography, the court concluded that the sand dunes existed only till 200 meters from the High Tide line. The proposed hotel was beyond that point and hence the dunes would remain unaffected. The Court also ruled out the possibility of non-application of mind and arbitrariness on the part of the authorities. While deciding upon the afore mentioned issues, the Court reiterated the principle laid down in Indian Council for Enviro Legal Action V Union Of India, which is –

"…*that there should be a proper balance between the protection of environment and the development process: The society shall have to prosper, but not at the cost of the environment and in the similar vein, the environment shall have to be protected but not at the cost of the development of the society there shall have to be both development and proper environment and as such, a balance has to be found out and administrative actions ought to proceed in accordance therewith and not the same*"

Hence, importance has been given both to development and environment and the quest is to maintain a fine balance between environment and economic development. The Supreme Court of India emphasised on the need to set up specialised environment courts for the effective and expeditious disposal of cases involving environmental issues, since the right to healthy environment has been construed as a part of right to life under Article 21 of the Constitution.

Judicial Activism has had good consequences on matters of environmental concerns, some say. The Supreme Court is claimed to have become a symbol of hope for the people of India via intensive judicial activism. The Apex Court has, in the wake of judicial activism, introduced a new normative system for the rights of the Indian state and emphasised that the Indian state

should not act arbitrarily but rather operate in a reasonable manner and in the public good. This judicial intervention has had harmful effects on environmental concerns, others say. In addition to blocking infrastructure projects to address ecological problems in India, public interest litigations are regularly lodged, including but not limited to water, expressways, land procurement for projects and projects on energy production. The proceedings frequently delay such projects, often for years, with severe pollution in India continuing, while the unintended impacts of pollution kill tens of thousands.

The Shrimp culture case was discussed in the Gopi Aqua farms vs. Union of India and others[144]. A large number of review petitions were filed against that as it was not binding on them on ground that they were not parties to proceedings. Hence, this Appeal as to whether, Petitioners were not party to judgment. It was held that there was no question of invoking principle of Order 1, Rule 8 of CPC as it was public interest litigation. There were Aqua Culture Farms all over India along coast-line - Therefore, persons affected were directed to appear in Court to place their case - Public Notices were also issued in large number of newspapers all over India in English and also in local language informing aqua farms about pendency of litigation and date of next hearing - However, there was no explanation why validity of notification was not challenged at time when Jagannath's case was heard - Hence, it was difficult to believe that petitioners were unaware of pendency of case of Jagannath - Thus, Petitions were not maintainable. Later in the case of Balwant Singh Chaufal[145] the order passed in Shrimp Culture case were extensively discussed.

[144] Gopi Aqua Farms and Ors. vs. Union of India (UOI) and Ors., AIR1997SC3519.
[145] State of Uttaranchal vs. Balwant Singh Chaufal and ors., AIR 2010 SC 2550.

CHAPTER V

The Span Motels Case and Public Trust Doctrine

M.C. Mehta vs. Kamal Nath[146]

Natural resources provide fundamental life support, in the form of both consumptive and public-good services. Ecological processes maintain soil productivity, nutrient recycling, the cleansing of air and water, and climatic cycles. Man must evolve and develop in order to retain a reasonable quality of life. Such progress necessitates the sensible use of natural resources, with an emphasis on avoiding waste, which can occur in both production and consumption. The goal of development is to help individuals live long, healthy, and satisfying lives. The development should be both people-centered and environmentally conscious. Otherwise, it will not achieve its goal, and the money would be squandered. Development will only be successful if the environment's productivity, resilience, and diversity are preserved. Conservation, on the other hand, will only bring long-term advantages if it is combined with the proper sorts of development. Any irrational exploitation of natural resources will lead to an environmental disaster. Hence, man must guarantee that in his pursuit of material growth, he does not overstep his bounds and works within the parameters of what has been dubbed "Sustainable development." India is blessed with immense natural resources and biological diversity. With such scale of abundance, the prospects of employing these gifts of nature to extract the optimum benefits commercially becomes an obvious opportunity. Nature’s bounty and diversity automatically call for potential commercial viability. One of the major reasons of India’s colonization was its rich natural resources and unexplored market potentials.

The deterioration of the ecosystem is a result of both plenty and shortage. Scarcity is the result of a lack of fundamental necessities, whereas abundance is the result of technological and economic development. The wealth, which is clearly evident in the West, has given rise to a number of anti-environmental movements. Concerned citizens and institutions are stepping outside of their specialties and political connections to oppose the current abundant tendencies. The notion of property rights in connection to the natural resources, as well as its operationalization in economic theory has been a hot topic for quite some time now. The case in question here and the public trust doctrine are a part of this discussion.

[146] M.C. Mehta vs. Kamal Nath, (1997) 1 SCC 388.

5.1 Ownership and Management of Natural Resources

It has long been known that ownership of a resource has a significant impact on how the resource is utilized and managed for future usage. The underlying principle is simple: when an individual owns a resource and expects to possess and profit from it in the future, the individual has an incentive to invest in the resource through protective measures, limited usage, and careful management. If more than one individual has access to the particular resource, these investments are characterized as public goods, is the returns from the investment of one user may be cashed by others. This kind of ownership provides incentive for free-ridings, resulting in overutilization of the natural resources.

The unconscious growth in economic activity driven by the strength of the capitalist accumulation has abundant evidence for the detrimental consequences on the environmental balance. Too much balance tilting may be a cause of ecosystems moving away from the present local stable balance, which might define a new eco-regime with unknown features that entail enormous uncertainty. The sustainability of the current global pattern of growth is particularly concerned with the uncertainty of humanity's capacity to adjust to changing environmental conditions at a lower cost in the future. Our culture is endangered because we misuse natural resources and disruptive natural systems. We push the Earth to its capacity limitations. Human populations have risen eightfold since the industrial resolution. This enormous rise in the number and activities of humans has had severe environmental effects. We have put our environment at risk because we misuse natural resources and disrupt the natural system. We strain the world to its capacity limitations. Human populations have increased eight times since the industrial resolution. Over a hundred years, manufacturing has increased. This enormous rise in the number and activity of people has severe environmental effects.

India has some of the most important laws that recognize people's rights to and involvement in the governance of natural resources. In legislation relating to forest and mineral resources, this was strongly addressed. The primary concept underlying these policies is that the protection and utilization of natural resources in India is closely connected to people's lives and livelihoods. The country's wealthiest forestry, mineral areas and some of the poorest, most impoverished and excluded populations are critically overlapping. Mechanisms have to be put in place to balance development demands, conservation of natural resources and human rights. In case of forests, the flagship people-centric law is the Scheduled Tribes and Other Traditional

Forest Dwellers (Recognition of Forest Rights) Act, 2006,[147] simply known as the Forest Rights Act (FRA). It 'recognizes' the rights of forest-dwelling communities to use and manage forest resources.[148] They are vested with three kinds of rights — individual rights (for occupation and cultivation); community rights (for grazing, fuel wood collection, fishing, ownership and disposal of non-timber forest produce or NTFP); and the rights to protect, regenerate, conserve and manage community forest resource (CFR) areas.[149] With more than 150 million forest dwellers, the scope of FRA is thus immense to protect their livelihoods, as well as to manage forestlands in a sustainable manner.

For minerals, the vision of people-centric resource governance and their right to benefit from such resource extraction has been emphasised through India's central mining law. The Mines and Minerals (Development and Regulation) Act[150] was amended in 2015 to institute District Mineral Foundation as a mechanism of benefit-sharing with local communities.[151] The precise objective of the DMF is to 'work for the interest and benefit' of people and areas affected by mining. To ensure that people are appropriately served, DMFs are required to function in an inclusive and participatory manner. With mandatory contribution from mining companies, currently there is more than Rs 27,000 crores in DMFs across all mining districts.[152] The scope of this fund is huge to address some of the key issues ailing mining-affected people, such as livelihood and income security, clean drinking water supply, nutrition status, healthcare services, education, welfare of women, aged and disabled, etc. Forest-dependent communities, whose livelihood has been affected by mining, constitute a key section of the beneficiaries, and DMF is required to serve them in the spirit of FRA.[153] However, the amendments of 2020[154] putting DMFs under control of the central government seems to be bypassing the constitutional mandate of federalism. Moreover, the funds under DMF are meant to be utilized for the betterment of the districts affected by mining activities and it is in best interest of the people

[147] The Scheduled tribes and other traditional forest dwellers (Recognition of Forest Rights) Act, No. 2, Acts of Parliament, 2006.
[148] FRA, 2006. Preamble.
[149] FRA, 2006, Sec. 3.
[150] The Mines and Minerals (Development and Regulation) Act, No. 10, Acts of Parliament, 2015.
[151] MMDR Act, 2015, Sec. 9B, Sec 15.
[152] S. Bannerjee, "Let people-centric natural resource governance be the new regime's agenda", *Down to Earth*, May 24, 2019. Available: https://www.downtoearth.org.in/blog/forests/let-people-centric-natural-resource-governance-be-the-new-regime-s-agenda-64740
[153] Ibid.
[154] The Mines and Minerals (Development and Regulation) Amendment Act, 2021, Sec 8A(7A), No. 13, Acts of Parliament, 2021.

that such trusts should remain decentralized for the concerns in every affected district would be unique and so has to be the usage of funds for their benefits.[155]

In addition, the Panchayats (Extension to the Scheduled Areas) Act,[156] emphasizes engagement of people for governing natural resources, and specifies the role of local level institutions, such as the Gram Sabhas, in such processes. Implementation of FRA and DMF is also tied to PESA, requiring engagement of Gram Sabhas. At the same time, poor settlement of individual forest rights is making people encroachers on their own land and alienating communities. The Supreme Court order of February 2019, that sparked a huge row over eviction of forest dwellers, is the latest testament to this. Also, there has been no serious effort to strengthen the local level institutions and engage them meaningfully in resource governance as PESA envisages.[157]

5.2 Public Trust Doctrine

The Public Trust Doctrine is a powerful weapon for safeguarding our environment from arbitrary decisions made by government authorities. This philosophy lays down the relationship between the state and the natural resources within its territory in place to protect the environment and promote sustainable growth is crucial. The Public Trust Doctrine is based on the idea that some resources, including as the air, sea, and waterways, are so important to the people as a whole that making them a subject of private ownership would be completely unjustifiable. Because the aforementioned resources are a gift from nature, they should be made freely available to everyone, regardless of social standing. The theory requires the government to safeguard resources for the general public's enjoyment rather than allowing them to be used for individual gain or commercial profits.

The origins of the Doctrine of Public Trust can be traced back to the Roman Empire wherein the Byzantine Emperor Justinian in about sixth century while codifying the Roman Law documented the principle of Jus Publicum that the air, the water, and the sea are all common to the public and is entitled to be used by anyone due to the law of nature.[158] Some *Jus Publicum* principles were later incorporated into early British law, beginning with the Magna Carta. In

[155] T. Misra & A.F. Hakim, "Decoding the Mines and mineral (Development and Regulation) Amendment Act, 2021", *International Journal of Law management and Humanities*, Vol. 4(3), pp 2609-2612, Apr-Jun, 2021.
[156] Panchayats (Extension to the Scheduled Areas) Act, No. 40, Acts of Parliament, 1996.
[157] *Supra*, Bannerjee.
158 E. Ryan, A Short History of the Public Trust Doctrine and its Intersection with Private Water Law, *Virginia Environmental Law Journal*, Vol. 38(2).

1215, a few decades before Marco Polo set sail for Asia and shortly after the sack of Constantinople during the Fourth Crusade, King John of England issued the Magna Carta ("Great Charter"), promising his rebellious barons that he and all future sovereigns would operate within the rule of law.[159] It also incorporated into English law certain principles of Roman common law, including elements of the Jus Publicum. The Charter of the Forest, added to the Magna Carta in 1217 by King Henry III, further protected public rights to access natural resources on certain undeveloped royal lands (not just forests), and it remained in effect for centuries thereafter.[160] The concept is part of the jurisprudence of Indian legal system, which is founded on English Common Law. In English common law, the Sovereign may possess the natural resources, but only to a limited extent; the Crown could not give these rights to private owners if doing so would jeopardize public interests in fishing navigation. The Crown was judged to be holding resources appropriate for these purposes in trust for the benefit of the people. The Public Trust Doctrine is based on the idea that some resources, including as the air, sea, and waterways, are so important to the people as a whole that making them a subject of private ownership would be completely unjustifiable. The resources in question are a natural gift. They should be made freely available to everyone, regardless of their socioeconomic situation. The theory requires the government to safeguard resources for the general public's enjoyment rather than allowing them to be used for individual gain or commercial gain. The public trust is thought to impose three types of restrictions on governmental authority: first, the property subject to the trust must not only be used for a public purpose, but it must also be kept available for public use; second, the property may not be sold, even for a fair cash equivalent; and third, the property must be maintained for specific types of uses. Similarly, the state, in our modern democratic structure, is the custodian of all the natural resources that are intended for public use and pleasure by their very nature. The state has a legal obligation to safeguard natural resources as a trustee. These resources, which are intended for public use, cannot be turned into private property. The pristine splendor of our country's natural resources, environment, and eco-systems cannot be degraded for private, commercial, or any other purpose unless the courts judge it essential to trespass upon the aforementioned resources in good faith, for the public benefit, and in the public interest.

[159] Ibid.
[160] Ibid.

As much as the Kamal Nath case drives the public trust doctrine into Indian jurisprudence, so does the Case of Lake Mono, situated in California, U.S.A., in their environmental justice system. In the Lake Mono case,[161] the California Supreme Court stated,

"....the public trust is more than a declaration of the government's authority to utilize public land for public purposes."

The court held that the public trust doctrine2 applied to the City of Los Angeles's rights to divert water from several streams flowing into Mono Lake. More broadly, the court held that the doctrine operated as a potential limitation on both new and established water rights, and that, "whenever feasible," state agencies and courts were obliged to consider and protect public trust resources when allocating water[162]. This is a declaration of the state's responsibility to safeguard the people's common heritage of streams, lakes, marshlands, and tidelands, relinquishing that right only in exceptional circumstances wherein doing so is compatible with the trust's goals. The Mono Lake decision, of course, represents far more than appealing logic. It represents a step in the evolving policy of source protection so as to achieve fairness between out-of-stream and instream uses of water or any other natural resource in the longer run.

The concept that the state holds certain natural resources in trust for the benefit of its citizens is at the heart of the public trust doctrine. Private use of trust resources may be permitted by the state, and this is occasionally the case. It may make it possible for private companies to gain property rights in certain areas. Nonetheless, it may infringe on such rights even as it enables them. Some variants of the concept require that the underlying assumptions are met. The public trust concept serves two purposes: it requires affirmative governmental action for effective resource management and it enables individuals to criticize inefficient resource management. Although the public trusts doctrine is not without its fair share of criticism it is being increasingly related to sustainable development, the precautionary principle and bio-diversity protection. The doctrine combines the guarantee of public access to public trust resources with a requirement of public accountability in respect of decision-making regarding such resources. Moreover, not only can it be used to protect the public from poor application of planning law or environmental impact assessment, it also has an intergenerational dimension.

[161] National Audubon Society v. Superior Court, 658 P.2d.
[162] D. Owen, "The Mono Lake Case, the Public Trust Doctrine, and the Administrative State", *University of California*, Vol. 45(1099), pp 1101-1150, 2012.

In India, this doctrine evolved in the courts and it also has its significance in the constitution. There are various landmark judgments through which this doctrine was evolved. Indian judiciary have used the public trust concept expressly in three recent instances, the first in 1997 vide the case of M.C. Mehta vs. Kamal Nath, which we will discuss in detail in the course of this chapter, and the cases of Th. Majra Singh v Indian Oil Corporation and M.I. Builders v Radhey Shyam Sahu in 1999, after accepting it as a component of common law. The principles of jurisprudence are also set down in Articles 48A and 51A of the Indian Constitution. According to this concept, the state has a responsibility as a trustee under Art 48A to conserve and develop the environment, as well as the country's forests and animals. Article 21 of the Indian Constitution gave rise to the idea of public trust.

5.3 The Span Motel Case

In this case, Span Motel Pvt Ltd encroached substantially on the land and the Beas River. The application of the Public Trust Doctrine and the Polluter Pays Principle in this case is considered a watershed moment in Indian environmental law. In this landmark judgement, the Supreme Court of India upheld the Public Trust Doctrine and the Polluter Pays Principle while also setting a precedent for future cases. They argued that these principles applied to Indian laws and that they addressed the absence and necessity for suitable legislation on the issue. Span Motels was later determined to be at fault for the destruction and forced to make amends.

5.3.1 Background of the case

The Indian Express published an article stating that Span Motels Private Limited, which owns Span Resorts, had floated another ambitious enterprise, Span Club. Indian politician Kamal Nath's family has direct connections with this business. The club was constructed in 1990 after occupying 27.12 bighas of land, including extensive forestland. On 11 April 1994, the land was later regularized and leased out to the company.

The regularization was carried out during Kamal Nath's tenure as Minister of Environment and Forests. The Beas River swelled as a result of the occupation and encroachment, and the swollen river reversed its course and swept it downstream, swallowing the Span Club and the surrounding grounds. For the second time in five months, the management of Span Resorts sent earth movers and bulldozers to modify the Beas River's flow in order to rescue the Motel from future floods by establishing a new channel. Three private firms were hired to recover vast swaths of land surrounding the Motel. Given the gravity of the offence of environmental

degradation on the part of the motel, the Supreme Court took note of the news article and the facts revealed thereafter before the court.

5.3.2 Arguments and Observations

It was argued that the construction activities and the act of attempted diversion of the river flow which were taking place was illegal and went directly against the lease. Mr. Kamal Nath of the respondent's side has firstly declared that he has been wronged in the above petition as he has no right, title or interest in 'Span Resorts'. He also further stated that the allegations made in the press reports are exaggerated and mala fide in nature and have been published to harm his reputation. Mr. Banwari Lal Mathur, the Executive Director of Span Motels also disclosed the shareholding of Span Motels Pvt. Ltd, wherein, almost all the shares in the Motel are owned by the family of Mr. Kamal Nath. The Court, however, chose not to comment on this issue.

Mr. S. Mukerji, President of the Span Motels Pvt Ltd. tried to defend the actions of the Motel by stating that the act of restoring the river to its original course was done in the view of good faith towards the environment and in the interest of the community living in the nearby villages. The Motel had also stated that they had taken actions which protected the land from erosion such as constructing crated, retaining walls and embankments along the river, but were unable to finish the work due to the allegations against them.

The issue focuses around the Public Trust Doctrine and whether or not Span Motels Private Limited violated it. Because of the current situation, the case believes the "Polluter Pays Principle" to be extremely important. A vast number of nations have incorporated "The Public Trust Doctrine" into their national legislation. In India, there isn't a lot of recognised precedence when it comes to this subject. In this decision, the court relied heavily on American cases to establish the necessary facts.

In the case of Illinois Central Railroad Co. v. People of the State of Illinois,[163]

"When a State holds a resource, which is available for the free use of the general public, a court will look with considerable skepticism upon any governmental conduct which is calculated either to relocate that resource to more restricted uses or to subject public uses to the self-interest of private parties."

[163]Illinois Central Railroad Co. v. People of the State of Illinois146 US 387.

In the case of Gould v. Greylock Reservation Commission,[164] The Supreme Court of Massachusetts took the first major step in developing the doctrine applicable to changes in the use of lands dedicated to the public interest.

In the case of Sacco v. Development of Public Works,[165] the Massachusetts Court restrained the Department of Public Works from filling a great pond as part of its plan to relocate part of State Highway. The Department purported to act under the legislative authority. The court found the statutory power inadequate and held as under:

"The improvement of public lands contemplated by this section does not include the widening of a State Highway. It seems rather that the improvement of public lands which the legislature provided for…. is to preserve such lands so that they may be enjoyed by the people for recreational purposes."

In the case of Robbins v. Deptt. of Public Works,[166] the Supreme Judicial Court of Massachusetts restrained the Public Works Department from acquiring Fowl Meadows, "wetlands of considerable natural beauty…. Often used for nature study and recreation" for highway use.

In the case of National Audubon Society v. Superior Court of Alpine County,[167] the Supreme Court of California said that public trust is an affirmation of the duty of the state to protect the people's common heritage and is much more than an affirmation of state power to use public property for public purposes. The state is the custodian of all the natural resources, which are by definition intended for public use and pleasure. The state, as trustee, has a legal obligation to safeguard natural resources. These public resources cannot be turned into private property. The aesthetic usage and pure splendor of our country's natural resources, environment, and eco-systems cannot be degraded for private, commercial, or any other purpose unless the courts judge it essential to infringe upon the aforementioned resources in good faith, for the public benefit, and in the public interest.

In the case of Vellore Citizens' Welfare Forum v. Union of India,[168] the court explained the "Precautionary Principle" and "Polluter Pays Principle". They have also declared that these principles are essential features of 'Sustainable Development. In the case of Indian Council for

[164]Gould v. Greylock Reservation Commission350 Mass 410 (1996).
[165]Sacco v. Development of Public Works 532 Mass 670.
[166]Robbins v. Deptt. of Public Works 244 NE 2d 577.
[167]National Audubon Society v. Superior Court of Alpine County33 Cal 3d 419.
[168]Supra, Vellore Citizens' Welfare Forum Case.

Enviro-Legal Action v. Union of India,[169] the court held that 'The Polluter Pays Principle' and the "Precautionary Principle" have been accepted as the law of the land in India. The court decided that if the action being carried out is hazardous or intrinsically dangerous, the person carrying it out is responsible to make good any damage caused to any other person by his conduct, regardless of whether he used reasonable care while carrying it out. The court understood the concept to indicate that absolute culpability for environmental harm extends not only to compensating pollution victims, but also to the expense of repairing environmental deterioration. The court also decided that anyone who pollutes the environment must pay to compensate for the harm created by his actions.

5.3.3 Orders and Directions

In this case, the Supreme Court examined the construction operations and interference with the natural flow of the river and determined that this activity, which is harmful to the environment, is illegal in nature. The Himachal Pradesh government violated the Public Trust Doctrine since the property provided through lease was ecologically vulnerable and was used for commercial reasons. The Court invalidated the lease agreement that leased the wooded property to the Motel and ruled that the Motel's building activities was not warranted. The Motel was ordered to pay cost compensation for the restoration of the area's environment and ecosystem. The Hotel was required to create a boundary wall at a distance of no more than 4 metres for the construction of the motel, beyond which they were not permitted to utilise the river basin's land. The Motel was barred from dumping untreated wastewater into the river by the Court. The Himachal Pradesh Pollution Control Board was tasked with inspecting and monitoring the Motel.

The Supreme Court, in this case, analysed the construction activities and the interference with the natural flow of the river and has declared that this activity, being degrading to the environment, is illegal in nature. The Himachal Pradesh government violated the Public Trust Doctrine since the property provided through lease was ecologically vulnerable and was used for commercial reasons. The Court invalidated the lease agreement that leased the wooded property to the Motel and ruled that the Motel's building activities was not warranted. The Motel was ordered to pay cost compensation for the restoration of the area's environment and ecosystem. The Hotel was required to create a boundary wall at a distance of no more than 4 metres for the construction of the motel, beyond which they were not permitted to utilise the

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

river basin's land. The Motel was barred from dumping untreated wastewater into the river by the Court. The Himachal Pradesh Pollution Control Board was tasked with inspecting and monitoring the Motel. The Court ruled that attempts to reroute the river stream and building operations were harmful to the environment, leading to the implementation of the "Public Trust Doctrine" and the "Polluter Pays Principle" in India. The Court invalidated the lease-deed that leased the wooded property and ordered the Motel to pay cost compensation for the recovery of the area's environment and ecology.[170]

Earlier in this chapter we have followed the internationally accepted doctrine of Public Trust, which has been in practice for centuries now, as well as India's legislative position on the issue of ownership of Natural resources. The case of M.C. Mehta vs. Kamal Nath confirmed our judiciary's stance on the issue. Through this case, brilliantly authored by Justice Kuldip Singh, the spirit of our position on the terms and conditions of usage of natural resources has been accurately put together.[171] This case comprehensively talks about the concept of trusteeship of our natural abundance in the hands of the political masters (nee servants), who feel entitled enough to not only hijack what belongs to not only all of us but all those who passed before us and all those who have yet to arrive here. Generally, natural resources are elements having intrinsic utility to mankind. They may be renewable or non-renewable. For example, Spectrum has been accepted as a scarce, finite and renewable natural resource. Value of natural resources rest in the amount of the material available and the demand for it. The legal position, as to ownership of natural resources, has been well settled vide this case. it establishes that State legally owns all the natural resources, which actually belong to its people and accordingly, these are considered as natural assets.[172]

It is evident that while authoring the judgement Justice Singh has carefully laid down how would the Public Trust Doctrine be treated in the future by our judiciary and executive, alike. He has traced the journey of the doctrine from the ancient Roman law and English Common law to its implementation by the American judicial System in cases of encroachment of water bodies by private entities. The Indian judiciary has time and again placed reliance on this case. In the case of Bombay dyeing and Mfg. co. ltd.,[173] Justice S.B. Sinha quoted,

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[170] P. Gowswami, "Public Trust Doctrine: Implications for Democratisation of Water Governance", *NUJS L. Rev.,* Vol. 9(67), pp. 67-91, 2016.
[171] A. Verma, "Public Trust Doctrine in India", *iPleaders,* May 20, 2020. Available: https://blog.ipleaders.in/public-trust-doctrine-india/
[172] Supra, P. Gowswami.
[173] Supra, Bombay Dyeing and Mfg. Co. Ltd. vs. Bombay Environmental Action Group and Ors.

"*The resolution of this conflict in any given case is for the legislature and not the courts. If there is a law made by Parliament or the State Legislatures the courts can serve as an instrument of determining legislative intent in the exercise of its powers of judicial review under the Constitution. But in the absence of any legislation, the executive acting under the doctrine of public trust cannot abdicate the natural resources and convert them into private ownership, or for commercial use. The aesthetic use and the pristine glory of the natural resources, the environment and the ecosystems of our country cannot be permitted to be eroded for private, commercial or any other use unless the courts find it necessary, in good faith, for the public good and in public interest to encroach upon the said resources*."

In the case of M.I. builder vs. Radhey Shyam Sahu, [174] the court covered Public trust doctrine under the right to life and stopped the construction of the shopping complex in the place of a public garden stating the garden as a public resource. The court observed that the park is a public place with historical importance. The court cited public trust doctrine and M.C. Mehta case as a precedent. The court stated that allowing the construction will deprive the public of the quality of life as stated under Article 21 of the constitution. The court put the government under the obligation to maintain the public park for the citizens as the government has obligatory duties under public trust doctrine which is applicable in India. In Reliance Natural Resources Ltd. v. Reliance Industries Ltd.,[175] the Supreme Court interpreted Article 297[176] of the Indian Constitution,26 to find that the people of India as a nation are the true owners of the natural gas. The Court also relied on Article 39[177] included in Part IV of the Constitution which calls for an equitable distribution of India's material resources to best serve the common good which includes fairness to future generations.

A shift in the approach of our Judiciary was observed when in the case of Shailesh R. Shah v. State of Gujarat,[178] the Gujrat High Court observed the public trust upon state in a positive context, i.e., earlier the judgments quoted what the state was not supposed to do while in this judgment a viewpoint was presented with what the state ought to do. The Gujarat High Court has ruled that:

[174] M.I. builder vs. Radhey Shyam Sahu, (1996) 6 SCC 464.
[175] Reliance Natural Resources Ltd. v. Reliance Industries Ltd., (2010) 7 SCC 1.
[176] The Constitution of India, Art. 297.
[177] The Constitution of India, Art. 39.
[178] Shailesh R. Shah v. State of Gujarat, 2002 SCC OnLine Guj 164.

"The State as the trustee of all-natural resources meant for public use, including lakes and ponds, in under a legal duty to protect them. This duty is of a positive nature requiring the State ...not only to protect the peoples' common heritage of lakes, ponds, reservoirs and streams but to prevent them from becoming extinct and to rejuvenate and preserve them quantitatively... and qualitatively..."

The very nature of a trust is that it imposes positive obligations on the trustee such that they are bound to use the property rights for the benefit of the cestui que trust.[179] The higher judiciary has extrapolated this understanding to the PTD, such that not only should the state abstain from certain actions, but the state is also expected to perform positive duties while using water resources to ensure the benefit of the public at large. Although, the higher courts have invoked the PTD to restrict government actions with an eye towards the common good - protection of the environment, a fair distribution of and equitable access to natural resources and concerns for intergenerational equity – in the absence of legislation, the interpretation and enforcement of the doctrine remains doubtful.[180]

[179] B.M.Gandhi, Equity, Trusts And Specific Relief13, 208-209 (2001).
[180] Supra, P. Gowswami.

CHAPTER VI

The Taj Trapezium Case and Precautionary Principle

M.C. Mehta vs. Union of India[181]

The case we ought to discuss in this chapter is a historical one, it is historical not only because it is about one of the marvels belonging to Indian medieval era but also because it was the final judgment authored and pronounced by Hon'ble Justice (retd.) Kuldip Singh before he retired on 30th December, 1996. The Taj Mahal is what is represents India on the globe. Situated at the south bank of the Yamuna River in Agra, Uttar Pradesh, the Taj Mahal, also known as the *Rauza-i-munawwara* is an ivory-white marble mausoleum. The mausoleum of Fifth Mughal emperor's favourite wife, Mumtaz Mahal, was commissioned in 1632. Shah Jahan himself was also buried in the same complex on his death in the year 1666. The Taj Mahal was named UNESCO World Heritage Site in 1983, it is truly the jewel of Muslim art in India and one of the world's most famous masterpieces. Many consider it the greatest example of Mughal architecture and the emblem of the rich heritage of India. Millions of tourists come year after year to the Taj-Mahal.

The Taj Mahal is one of the most valuable national monuments, a magnificent homage to man's skill in architecture and engineering. However, the Taj is under threat of degradation and destruction not just from conventional sources of disintegration, but also from changing social and economic situations, which aggravate the problem. The Taj Mahal, a world-renowned landmark, is deteriorating as a result of air pollution, considering which the Taj Trapezium zone was notified, by the Ministry of Environment and Forest (now Ministry of Environment, Forest and Climate Change) under the Government of India, to monitor the progress of implementation of various schemes for protection of the Taj Mahal and programmes for protection and improvement of the environment. The TTZ is a defined area of 10,400 square km around the Taj Mahal to protect the monument from pollution. The TTZ comprises monuments including three World Heritage Sites the Taj Mahal, Agra Fort and Fatehpur Sikri. TTZ is so named since it is located around the Taj Mahal and is shaped like a trapezoid. It has four-zone which named ad Red, Green, Orange and White.

[181] Supra, M.C. Mehta vs. Union of India.

6.1 Air Pollution and its impact on heritage

The atmosphere is a thin layer of gas around the Earth. Atmospheric pollutants may be defined as those substances present in the atmosphere that can have adverse effects on health or the environment. The magnitude of the effect is normally closely related to the type and concentration of pollutants to which the systems (humans, ecosystems, buildings, etc.) are exposed. This exposure is a consequence of the location and characteristics of the emitting sources and the prevailing weather conditions.[182]

Gaseous pollutants in the air, mainly oxides of sulphur and nitrogen, have similar effects as the natural atmospheric gases but the effect can be more severe. Gaseous pollution disperses in a shape of a cloud which contains aerosol, salts, acids and alkalis soluble in water[183]. The solid phase particles create an important component of the air pollution, e.g., sand, dust, soot. Normal gases present in the air (oxygen, ozone and carbon dioxide) react with some materials and may cause their degradation.[184] In recent years the ozone concentration has increased in some locations due to unfavorable factors caused by human impact, and this trend should be stopped if possible. But in many urban areas, ozone concentrations are reduced by reactions between the ozone and nitrogen oxide.[185]

Air Pollution in India and around the world creates complicated cultural and environmental problems with scientific ambiguity and health hazards. Incomplete information, unclear evidence, uncertain values and public disagreement are influencing these pollution issues. The interaction of pollutants with Cultural Heritage materials leads to artworks and materials degradation and loss, causing a priceless damage. The measures and policies for atmospheric pollution reduction have cut off the SO2 concentration and consequently its impact on materials is drastically reduced. Indeed, in 1980 the number of UNESCO sites in danger was extremely high (94% for limestone, 54% for copper and 1% for bronze) while in 2010 these sites did not exceed the tolerable value of surface recession and corrosion[186]. However, some problem related to air pollution persists. In particular, PM10 has been identified as the main culprit responsible for materials corrosion, in 2010.

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[182] R. Hamilton and H. Crabbe, "Environment, Pollution and Effects", *The effects of Air Pollution on Cultural Heritage*, Hamilton R., Kucera V., Tidblad J., Watt J. (eds), Springer, Boston, MA., pp 1-27, 2009.
[183] Ibid.
[184] Ibid.
[185] Ibid.
[186] Ibid.

6.1.1 Air Pollution in India

Ambient air pollution offers a serious, multidisciplinary danger to India's development objectives: it leads to a quick increase in expenditure on public health, lower labour productivity and a reduction in farm yields.[187] Air quality in India has deteriorated significantly over the past two decades; today, air pollution is the second largest risk factor contributing to the country's disease burden. In 2017, around 97 percent of the country's population were exposed to particulate matter (PM2.5).[188] Long-term exposure to particulate pollution can result in significant health problems including increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; and development of chronic respiratory disease in children.[189]

The majority of the most polluted cities and countries are located in the South Asia region. The region includes 30 of the top 40 most polluted cities and four of the five most polluted countries.[190] Only one city in this region (Sanandaj, Iran), out of 147 cities with monitoring data in 2019, met WHO targets for PM2.5 levels.[191] While sources of contamination vary throughout the region, typical factors include transport emissions, domestic cooking biomass burning, open agricultural burning, industrial and coal combustion.[192] Between 2018 and 2019 there have been improvements in PM 2.5 levels in several cities in the area, notably in Pakistan and India. This resulted in an overall decrease in PM2.5 levels by 14.8% across the region, among cities with comparable PM 2.5 data in 2018 and 2019[193]. Much of this can be attributed to increased monitoring data, economic slowdown, favorable meteorological conditions and government action. 2019 marked the start of India's National Clean Air Program, which set ambitious PM 2.5 targets and outlined new strategies for meeting these goals.[194] This marked a shift in India's commitment to tackling air pollution. The NCAP aims to reduce PM2.5 and PM10 air pollution in 102 cities by 20-30% by 2024 compared to 2017 levels, by working directly with local governments to create more customized regulations and targets

[187] A. Roy, T. Chandra and A. Ratho, "Finding Solutions to Air Pollution in India: The Role of Policy, Finance, and Communities", *Observer Research Foundation,* Sept 29, 2020.
[188] Ibid.
[189] "Burden of Disease Attributable to Major Air Pollution Sources in India,", Available: https://www.healtheffects.org/publication/gbd-air-pollution-indiaGBD MAPS Working Group
[190] World Air Quality Map, 2019, IQ Air.
[191] Ibid.
[192] Ibid.
[193] Ibid.
[194] National Clean Air Programme, Ministry of Environment, Forest and Climate Change, Government of India, 2019.

(Government of India, 2019). In July 2019, India additionally joined the UN's Climate & Clean Air Coalition (CCAC) as the 65th member to collaborate with global leaders on air pollution solutions. While the long-term impacts of these activities are yet to be seen, India saw widespread improvements in PM2.5 levels in 2019, compared to the year prior as a result of economic slowdown, favorable meteorological conditions, as well as more dedicated efforts towards cleaning the air.

Apart from these recent actions India's 1981 legislation on prevention and control of air pollution also plays a very significant role in keeping pollution in check.[195] The Act attempts to provide for the prevention, control and abatement of air pollution, to provide for the establishment of central and State Boards with a view to implement the Act, to confer on the Boards the powers to implement the provisions of the Act and assign to the Boards functions relating to pollution. The Central Pollution Control Board constituted under Section 3 of the Water (Prevention and Control of Pollution) Act, 1974 has the powers to perform the functions of the Central Pollution Control Board for the prevention control of air pollution under this Act[196]. This extension of the jurisdiction of Central Board under the Water Act to the Air Act does not affect in any way the exercise of power and performance of a function under that Act. The purpose of extension of jurisdiction is to prevent the multiplicity of Boards and members relating to prevention control and abatement of pollution. The Central Board has the authority to establish or recognise a laboratory or laboratories as it may deem fit[197]. It may also Delegate any of its functions under the Air Act generally or especially to any of the committees appointed by it or do such other things and perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purposes of carrying into effect the purposes of the Air Act[198]. The functions of State pollution control board with respect to prevention and control of air pollution are also extensively laid down under this Act.[199] It is pertinent to observe that while the Water Act, 1974 in the first instance, applies to only those States in which it has been given effect but the Air Act, 1981 applies to the whole of India in the first instance. Under Section 37, whoever fails to comply with the provisions of Section 21, 22 and the directions issued under Section 31A, can be sentenced to imprisonment for a term of one year and six months. Under Section 38, penalties for certain acts are laid down.

[195] Air (Prevention and control of Pollution) Act, No. 14, Acts of Parliament, 1981.
[196] Ibid. Sec. 3.
[197] Ibid. Sec 16 (3).
[198] Ibid. Sec. 14(4).
[199] Ibid. Sec 17 (1).

6.1.2 Impact of Air Pollution on heritage across the world

Air pollution is a key factor in the degradation of surfaces of historical buildings and monuments. The impact of pollutants emitted into the atmosphere on materials is enormous and often irreversible. Corrosion caused by chemicals and soiling caused by particles can lead to economic losses but, more importantly, to the destruction of our cultural heritage, an important component of our individual and collective identity. Natural weathering effects are usually added to by pollution and, as we shall see later, this lack of a pollution threshold below which there are no discernable effects has important implications for the establishment of "tolerable" levels of damage and therefore of air quality.

A recent study led by the Italian Institute for Environmental Protection and Research (ISPRA) and the Institute for Conservation and Restoration of Heritage (ISCR) shows that in Rome about 3600 cultural heritage made of calcareous stone (limestone) and 60 cultural heritage objects made of bronze are at risk of deterioration. As a response to this threat, Italy has been engaged in the development of strategies and technologies to safeguard cultural heritage assets for many years[200].

The study finds that loss of material as a result of air pollution in Rome is estimated to be between 5.2 and 5.9 microns per year for marble and between 0.30 and 0.35 microns per year for bronze[201]. Evaluations were made using the dose-response functions for corrosion developed in the frame of the International Cooperative Programme on Effects of Air Pollution on Materials, including Historic and Cultural Monuments (ICP Materials) under the UNECE Convention on Long-range Transboundary Air Pollution (LRTAP Convention)[202]. Recently, a study on five cultural monuments included in the UNESCO World Heritage List located in different European cities shed some more light on corrosion of materials[203]. While there has been an overall decrease by 50 per cent since 1987 as a result of improved air quality facilitated by the LRTAP Convention, changes over the most recent years have only been minor. In addition, with sulphur dioxide emissions having been reduced significantly, other pollutants such as nitrogen oxides and particulate matter are playing a relatively more important role in determining current corrosion damage[204].

[200] "Air pollution puts cultural heritage at risk," *Unece.org*. Available: https://unece.org/environment/news/air-pollution-puts-cultural-heritage-risk.
[201] Ibid.
[202] Ibid.
[203] Ibid.
[204] Ibid.

6.2 The Precautionary Principle

Human life is filled with the hazards we face. Science and technology can, like with life expectancy for instance, help to reduce some hazards of nature. Science and technology have, on the other hand, contributed to new risks and dangers to the lives or quality of life of people. In order to safeguard human beings and the environment from these unclear hazards of human activity, society has faced the development of increasingly unexpected, uncertain but perhaps catastrophic risk.

The precautionary principle originated in Sweden, a domestic statute when the Environmental Protection Act, 1969 was introduced the concept of environmentally hazardous activities for which the burden of proof was reversed.[205] Consequently, the mere risk of an environmental hazard was sufficient basis for Swedish authorities to take preventive measures or to even ban the activity in question. Other countries followed the Swedish example and "precautionary action" became a core principle in Europe. The concept of the precautionary principle further emerged in the 1970s–80s in German environmental law, as a response to forest degradation and sea pollution, where it was known by the term '*Vorsorgeprinzip*'.[206] Today, it is part of European Union law, as established in the Maastricht Treaty, which dictates that community policy on the environment shall be based, among others, on the precautionary principle.[207]

A large number of international treaties and statements in the fields of sustainable development, environmental, health, trade and food safety have been based on the principle, although at times there is debate as to how they are accurately defined and applied to complex and multiple-risk scenarios. The use of the precautionary principle has been set a legislative obligation in some areas of law in various legal systems, as is the case in European Union legislation. At national level, numerous nations have utilized their environmental and public health policies in accordance with the precautionary principle. The precautionary concept, for example, is not specifically stated in the United States in law or policy. However, many regulations are cautious in nature and in certain nations the idea supports much of the early environmental legislation. The precautionary principle appeared at the international level in the mid-1980s. The principle was first formally acknowledged internationally in the Preamble to the 1985 Vienna Convention for the Protection of the Ozone Layer, in which the Parties acknowledged

[205] J.F. Pinto-Bazurco, "The Precautionary Principle", *Still Only One Earth: Lessons from 50 years of UN sustainable development policy*, IISD, Oct 23, 2020.
[206] Ibid.
[207] Ibid.

the 'precautionary measures' which had already been undertaken at both the national and international levels in relation to the protection of the ozone layer.[208] In 1987, the precautionary principle was incorporated into international law at the International Conference on the Protection of the North Sea[209]. The precautionary principle is accepted as a fundamental tool to promote sustainable development and has an important function at both international and national levels. It provides for action to avert risks of serious or irreversible harm to the environment or human health in the absence of scientific certainty about that harm and offers the 'authority to take public policy decisions covering environmental protection in the face of uncertainty'.[210] Where there is no uncertainty in the calculation of risks, there is no justification for the employment of the precautionary principle. Thus, scientific uncertainty is at the core of the precautionary principle.[211]

If the consequences of a certain action – such as the emission of hazardous chemicals – are not fully understood, the general presumption is that activity can continue until the incertitude is fully resolved. This common notion is countered by the precautionary principle. If the effects of an activity are unclear, the Precautionary Principle promotes measures to foresee and prevent environmental damage. This promotes the monitoring, prevention and/or mitigation of unknown future hazards. The principle intends to prevent harm to humans, environment, and eco-system at large. Before looking at some of the widely used definitions of the Precautionary Principle, it would be helpful to understand the context and rationale. The precautionary principle is based on the maxim that 'it is better to be safe than sorry'. However, there is no universally accepted definition of the principle. The Rio Declaration[212] states:

"*In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation*."

[208] Preamble, Vienna Convention for the Protection of the Ozone Layer, 1986.
[209] G. Gill, "Precautionary principle, its interpretation and application by the Indian judiciary", *Sage Journals*, Vol. 21(4), pp. 292-308.
[210] J. Cameron, 'The Precautionary Principle: Core Meaning, Constitutional Framework and Procedures for Implementation' in R. Harding and E. Fisher (eds), *Perspectives on the Precautionary Principle,* Sydney, NSW: Federation Press, 1999.
[211] R. von Schomberg, "The Precautionary Principle: Its Use Within Hard and Soft Law", *European Journal of Risk Regulation*, Vol. 3(2), pp. 147–156, 2012.
[212] Supra, UNCED 1992.

A stronger definition can be found in an EU communication[213]:

"*The precautionary principle applies where scientific evidence is insufficient, inconclusive or uncertain and preliminary scientific evaluation indicates that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection chosen by the EU.*"

The general prescription that scientific assurance is not necessary prior to prevention actions is shared by every wording of the precautionary principle. In addition, most versions entail a certain amount of the load transferring to an activity or product promoter. However, the topic of the level of precaution to be taken under a specific scenario should not be addressed by any definition[214]. As the above stated definition indicates, although significant scientific advances have been made, science is, as yet, incapable of addressing ever-growing global threats to human health and the environment[215]. The precautionary principle is intended to take into account these limits of science in addressing grave or irreversible risks. More importantly, however, it addresses the temptation for decision makers to rely on scientific expertise in order to avoid taking responsibility for their policies, requiring experts to recognize the imperfection of their science and placing the burden on policymakers to decide what level of risk is acceptable. The plausibility assessment should be based on scientific study. Analysis should be continuous in order to examine the measures used. There may be uncertainty, but it does not need to be confined to, causative or limitable damage. Precautionary Actions are practices that aim at avoiding or reducing harm before harm happens. Actions which are commensurate with the gravity of the possible harm, taking into account their positive and negative impact, as well as the moral implications of action and inactivity should be chosen. A participative approach should result in the decision of action[216].

However, there has been some disagreement about whether the precautionary principle should be regarded a principle of international environmental law or just a strategy and a guide to policy making. The precautionary principle has been criticized for encouraging a risk-averse approach to policymaking and resource management in situations when risk is a factor in decision making and scientific uncertainty is particularly severe. The course of management in

[213] EU Communication from the commission on the precautionary principle, COM1, Brussels: Commission of the European Communities, 2000.
[214] "The precautionary principle," *Precautionaryprinciple.eu*. Available: http://www.precautionaryprinciple.eu/.
[215] Ibid.
[216] J. Paterson, "Sustainable development", *Sustainable decision and the precautionary principle*, Nat Hazards, vol. 42, 515-528, 2007.

natural resource management is frequently decided upon amid persistent ambiguity; in such circumstances, the cautious approach risks paralyzing management entirely. Critiques also point to the potentially negative consequences of its application; for instance, a technology which brings advantages may be banned because of its potential for negative impacts, leaving the positive benefits unrealized. Some say that the precautionary principle is impractical, since every implementation of a new technology carries some risk of negative consequence. When applying the principle, society should establish a threshold of plausibility or scientific uncertainty before undertaking precautions. Indeed, no minimum threshold is specified across the definitions so that any indication of potential harm could be sufficient to invoke the principle. Most times, a ban on the product or activity is the only precaution taken.[217]

6.3 The Taj Trapezium Case

This PIL was filed by Mr. M.C. Mehta against the government for failing to protect the Taj Mahal from airborne pollutants being released by industries and vehicles in the area around. Grim reports by various committees/agencies, such as the S. Varadarajan Committee (1978), the New Delhi-based Central Board for the Prevention and Control of Water Pollution (1981-1982) and the Nagpur-based National Environmental Engineering Research Institute (NEERI, 1990 and 1993), recommended, among other things, the reduction of Sulphur emissions from the Mathura refinery, the use of natural gas as an alternative fuel, the setting up of a green belt and the shifting of polluting industries outside the TTZ.[218] A bench comprising Justice Kuldip Singh and Justice Faizanuddin passed the landmark judgment of the Supreme Court of India. Responding to Mehta's writ petition, the apex court banned the use of coal and coke in industries located within the TTZ and ordered a switch to clean compressed natural gas (CNG). Industries which failed to meet this criterion were to be relocated or shut down.

6.3.1 Background of the case

The notion that air pollution posed a serious threat to the Taj Mahal originally gained traction in the 1970s, when the Indian Oil Corporation established an oil refinery in Mathura, 40 kilometres from Agra. Environmental groups and environmentalists claimed that the refinery's Sulphur dioxide emissions and the resulting acid rain were discolouring and corroding the

[217] M. Hanson, 'The precautionary principle", *Journal of Environmental Thought*, Cheltenham (UK), Edward Elgar, pp. 125-143, 2003.
[218] A. Jojan, "SC's tryst with protection of history and culture through Taj Trapezium case," *Live Law*, 20-Aug-2019. Available: https://www.livelaw.in/environment/supreme-courts-taj-trapezium-case-147307.

monument's marble surface. The Taj Trapezium Zone (TTZ) was established in 1982 by the Indian government as a trapezoid-shaped region of 10,400 square kilometres around the monument where the establishment or development of polluting businesses was forbidden. Meanwhile, various committees/agencies, including the S. Varadarajan Committee, the Central Board for the Prevention and Control of Water Pollution, and the NEERI, recommended, among other things, reducing sulphur emissions from the Mathura refinery, using natural gas as an alternative fuel, establishing a green belt, and relocating polluting industries outside the TTZ. The dispute about the source of pollution switched from the Mathura refinery and thermal plants to the small-scale industries in Agra and Firozabad in the 1990s, industries such as foundries, glass units, ferro-alloy industries, as well as rubber processing, lime processing, engineering, and brick manufacturers. Meanwhile, the Uttar Pradesh Pollution Control Board stated that levels of SPM had resumed to climb after 1994, following a reduction in 1991-1994 due to the closure of coal-based industrial units and the relocation of a thermal power plant. According to the Board, this was due to emissions from the Mathura Oil Refinery, a rise in the number of cars, and the usage of diesel-powered generators during power outages caused by the thermal power plant's shutdown.

The Supreme Court examined several reports presented by different stakeholders. The report by the Varadharajan Committee called “Report on Environmental Impact of Mathura Refinery” published in 1978 was examined. The report concluded that the sources of pollution in the Agra region were all coal users. The Committee recommended the relocation of existing small industries and underscored the use of clean technologies. NEERI gave an “Overview Report” in 1990 observing that there was high impact of the air quality on the Taj Mahal due to the rapid industrial development of Agra-Mathura region resulting in acidic emissions into the atmosphere at an alarming rate. As a result of this petition, the Hon’ble Supreme Court of India passed a series of orders from 1993. On 8-1-1993, the Supreme court directed the U.P.P.C.B. to get a survey done of the area and prepare a list of all the industries and foundries which are the sources of pollution in the area. The Board accordingly filed an affidavit dated 3-5-1993 reporting the findings of its survey. It categorized the industries and reported that there were total of 511 industries in the given area. Pursuant to the Court’s order dated 8-1-1993, notices were issued to all these industries to install anti-pollution mechanisms.

The Court on 11-4-1994 examined the NEERI Report dated July 1993 which found that the industries in the TTZ were the main sources of pollution causing damage to the Taj. Pursuant to the Order dated 11-4-1994, the MoEF (now MoEFCC) appointed Varadharajan Committee

submitted its report regarding preservation of Taj Mahal and Agra monuments in two volumes. The Supreme Court examined the NEERI Report dated July 1993 and the Varadharajan Committee Report, both of which, suggested the relocation of the polluting industries situated in the Taj Trapezium to an area outside the TTZ. The Supreme Court directed the MoEF to examine both the reports and indicate the measures the Ministry intended to take to preserve the Taj Mahal. The Court subsequently passed an order indicating that in a phased manner, the industries located in Agra be relocated out of TTZ.

The Supreme Court on 14-3-1996 directed the GAIL, Indian Oil Corporation (IOC) and the U.P. State Industrial Development Corporation to identify industrial areas outside the TTZ which would be connected with the gas supply network. The Court held that those industries which were not in a position to get gas connections or which were otherwise polluting may have to be relocated outside the TTZ. There were four NEERI reports, two Varadharajan reports and several reports by the Board which were placed on record before the Hon'ble Court. After examining all the reports and taking into consideration other material on the record, the Supreme Court held that the industries in the TTZ were active contributors to the air pollution in the said area. NEERI and Varadharajan Reports had specifically recommended the relocation of industries from the TTZ.

6.3.2 Arguments and Observations

The Court applied the principle of Sustainable Development in this case observing that there needs to be a balance between economic development and environmental protection. The Court indicated that relocation of the industries from TTZ was to be resorted to only if Natural Gas was not acceptable/available by/to the industries as a substitute for coke/coal. The Court reaffirmed the "Precautionary Principle" and "Polluter Pays Principle" laid down in Vellore Citizens Welfare Forum v. Union of India. The 'Polluter Pays Principle' has been held to be a sound principle by the Supreme Court in Indian Council for Enviro-Legal Action vs. Union of India. Remediation of the damaged environment is a part of the procedure of 'Sustainable Development' and as such the polluter would be liable to compensate the individual sufferers as well as the cost of reversing the damaged ecology.

The Court relied upon Article 21 of the Constitution of India which guarantees protection of life and personal liberty and also upon directive principles of state policy and fundamental duties enshrined under Articles 47, 48-A and 51-A (g) of the Constitution. Apart from the constitutional mandate to protect and improve the environment, the Court also relied upon

several statutory enactments such as The Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986. In view of the above-mentioned constitutional and statutory provisions, the Court was of the view that the Precautionary Principle and the Polluter Pays Principle are part of the environmental law of the land. Based on the reports of various authorities mentioned in this judgment, Supreme Court had reached the finding that the emissions generated by the coke/coal consuming industries were air-pollutants and had damaging effect on the Taj and also to the people living in the TTZ.

In view of the precautionary principle relied upon by the Court, the environmental measures should anticipate, avert and attack the causes of environmental degradation. The "onus of proof" was on an industry to show that its operation with the aid of coke or coal was environmentally benign. It was, rather, proved beyond uncertainty that the emissions generated by the use of coke/coal by the industries in TTZ were the main polluters of the ambient air.

6.3.3 Orders and Directions

In this historic decision, the Supreme Court advocated for the preservation of national treasures such as the Taj Mahal from degradation and harm caused by air and environmental pollution. The Court based its decision on the Precautionary Principle and the Polluter Pays Principle, therefore incorporating them into our country's environmental legislation. The Supreme Court has taken a proactive role in defending core environmental interests, making liberal use of public interest lawsuits. The Supreme Court's judicial activism for environmental preservation in this case illustrates the growing importance of environmental litigation. The court held that the above-mentioned 292 industries shall as per the schedule indicated change-over to natural gas as an industrial-fuel and the industries which were not in a position to get gas connections for any reason would stop functioning with the aid of coke/coal in the TTZ and may relocate themselves as per the orders given by the Supreme Court.

This judgment was relied upon by the Supreme Court in M.C. Mehta vs. Union of India and ors.,[219] while observing that public health and ecology has priority over unemployment and loss of revenue. The definition of 'sustainable development' which Brundtland gave more than 3 decades back still holds good. The phrase covers the development that meets the needs of the present without compromising the ability of the future generation to meet their own needs.

[219] M.C. Mehta vs. Union of India and ors, AIR 2004 SC 4016.

CHAPTER VII

Conclusion

This research work aimed to analyze the Judgments and orders authored by Hon'ble Justice (retd.) Kuldip Singh and investigate the journey of environmental jurisprudence in India along with the application of International Environmental Law principles. Any study of environmental jurisprudence in India is inadequate unless the contributions of the Indian judiciary are examined thoroughly. At the beginning of this dissertation, we tasked ourselves with four central investigations, they were to trace the evolution of Indian environmental jurisprudence, Justice Kuldip Singh's contributions to Indian environmental jurisprudence, the adaptation of international environmental law principles in the Indian context and the precedential value of Justice Singh's Judgment. In the final leg of this study, we shall endeavor to assimilate our conclusions.

Since 1972, India has painstakingly built a vast corpus of environmental law. The relevance of environmental preservation is being recognized in all parts of the legislation via the work of the legislature and the court. The court, in particular, has played a significant role in the development of this concept. The Indian Judiciary, with avant-gardists like Justice Singh, has played a unique role in the development of environmental rights in India in the presence of several environmental legislation and of numerous administrative initiatives to preserve the environment. The 1980s marked the beginning of a new chapter in the history of environmental case law development in India. The Indian judiciary's adherence to constitutionalism resulted in environmental justice being guaranteed in India. An environment friendly interpretation of constitutional environmental protection laws, judicial ingenuity and skill reached its peak during the tenure of the Green Judge of India. The forty second constitutional amendment has inserted Article 48 A (DPSP) and 51 A (g) (fundamental duties of citizens) in the constitution in the year 1976. The judiciary has resorted to fundamental rights, directive principle of state policy and the fundamental duties of citizens in the constitution for the development of environmental jurisprudence. The new interpretation of these provisions has developed a judge made law in the field of environmental law in India. The expansive interpretation of Article 21 is the remarkable development in the human rights to clean and whole some environment in India.

The Apex Court of India has proclaimed pollution-free environment to be a basic right under Article 21 of the Constitution. Both the right to growth and the right to the environment are

aspects of the right to live under Article 21. The judicial interpretation that brings both of these aspects into harmony deserves to be praised. The judiciary understood development as sustainable development, balancing the two distinct criteria of development and the right to growth. The broad interpretation of the right to life under Article 21 has made significant contributions to the development of environmental law in India. Article 48 A and 51 A (g) have been interpreted to substantiate this development. The liberal interpretation of Article 32 and 226 have further added to this development by expanding the scope of locus standi, welcoming public interest litigations and paving way for judicial activism. The widening of the locus standi and entertaining public Interest Litigation under Article 32 and 226 of the Constitution has provided a proper canvas to the judiciary to draw a new pattern of environmental protection in India. The analysis of the judgments of the Supreme Court in various public interest litigation filed clearly indicates that the judiciary has developed an environmental law through the tool of PIL. Even if one is not an aggrieved party, the liberty of standing rules allows concerned citizens or groups to file environmental lawsuits in India's top courts. Constitutional issues, in particular, were being presented under the cover of public interest litigation in order to maintain them in the judicial system. Furthermore, PIL provides petitioners with extra benefits such as non-adversarial processes and judicial aid with certain forms of discovery. It went a step farther from the usual duty of adjudication and proclaimed law and commanded that such a law be enforced. In addition, Article 141 and 142 have added to this the power granted on the Supreme Court. The Supreme Court's ruling would amount to law as is clearly stated in Article 141 and Article 142 gives the judicial authority to order any competition in law. The legal interference in legislative and executive offices has resulted. The judiciary has strongly condemned legislative and executive inactivity. This outburst of judicial activism has increased environmental case law in India.

As a constitutional obligation, the judiciary has taken on the job of environmental protection. The Supreme Court has emphasized in numerous rulings that it is the Court's obligation to provide justice while taking all factors into account. Where the quality of air and environment is threatened or harmed as a result of human agencies, the Supreme Court will not hesitate to utilize its creative authority within its epistolary jurisdiction to enforce and defend the right to life and to promote public interest. In environmental disputes, the judiciary has also used common law remedies for torts of annoyance, carelessness, and strict responsibility. The court has awarded relief under these remedies while keeping the Indian situation in mind, demonstrating its dynamism. The Court used the principle of absolute liability for the

carelessness of industry dealing with dangerous substances or gas, rejecting the limitations of strict liability. The court recognizes that the legislation developed in another nation may not be best suited to the Indian scenario. The court has also used criminal law remedies (Cr.P.C. and I.P.C.) to preserve the environment. Although this changed by the late 80s and early 90s as environmental rights in the Conventional Catalog of Constitutional Rights were carefully engaged by the judicial machinery. In addition to being catalysts of much judicial indoctrination, the subaltern environmental movements also led to human rights in the third generation through the expansion of the conventional ideas of legal entitlements.[220]

The year 1996 proved to be historic in the history of environmental jurisprudence in India. It was not only the final year of Justice Kuldip Singh's tenure as a Supreme Court Judge but it was also the year, he passed five of the most trail-blazing orders of his career as a judge. The close analysis of the five decisions authored by Kuldip Singh we analysed in the previous chapters reveal that the he aspired to protect environment from clutches of pollution caused by industrial wastes and effluents, noise, smoke, dust, and heat. It wanted to protect the polluted agricultural land, water and air, coastal areas, seashores, towns and cities, public health and safety and, environment degradation by means of protective justice. It wouldn't be wrong to say that the provisions of environmental laws were mere letters but the judicial interpretation of these laws has given life and blood to them. The function of the judiciary is defined by the shape of the country's political system. This is why the role of the court differs under liberal democracy, communist systems, and dictatorships. The function of the judiciary has been critical in liberal democracies such as India. The Indian Constitution was inspired by the US Constitution and so included a similar notion of judicial review. In independent India, the history of the judiciary, judicial review, and judicial activism has proven to be a fruitful field for legal scholars. It is now widely accepted that, in India, the role of the judiciary has grown in response to legislative and executive indifferences or failures. In the famous Vellore case, the Supreme Court, led by its active green justice, launched a new environmental jurisprudence and inevitably used the ratio of this decision in a succession of other major environmental cases. In all of these instances, international environmental law was utilized 'substantively,' and the Supreme Court created a distinct domestic environmental jurisprudence by combining Indian and international environmental law.

[220] Supra, Z.M. Nomani.

The Supreme Court has decided that the concepts of sustainable development are now part of the law. Various Supreme Court and High Court rulings have attempted to strike a balance between the necessity for growth and the need to conserve the environment. The Court has decreased natural resource exploitation and depletion, as well as environmental degradation, by implementing the concepts of polluter pays, the precautionary principle, and the doctrine of public trust. Not only that the Court has time and again reminded the people of India about the principles of various international conventions on environment. In a number of cases the Court has referred to Stockholm Conference 1972, Rio declaration etc. In many cases Court has not waited for legislature or executive to take action but the judiciary itself has performed the role of legislature and executive. The Supreme Court has passed various notifications, appointed various committees to supervise implementation of measures taken for environmental protection. Wherever it is found required the court has taken help of committees of technical experts before deciding the matter. The Court has created coherence between numerous environmental laws, impacted individuals, environmental activist groups, state agencies, and people in India for environmental justice. The Court has even gone so far as to declare that environmental education is essential in India. It has attempted to close the legal and administrative gaps, as well as to ensure enviro-justice in India. The acceptance and execution of sustainable development has given new structure to Indian democracy's development aspirations. The sustainable development has been incorporated as law of the land. The development must meet the environmental standards. This judicial warning has brought awareness to the government and industries.

The Polluter Pays Principle places the responsibility for repairing the damage is that of the offending industry. The principle was formulated & resorted by the Supreme Court in the case of Vellore Citizens Welfare Forum V. Union of India.[221] 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. In M.C. Mehta vs. Kamal Nath,[222] the Supreme Court explained the public trust doctrine. The court held that the state is the trustee of all the natural resources which are by nature meant for public use &

[221] Supra, Vellore Citizens' Welfare Forum case.
[222] Supra, M.C. Mehta vs. Kamal Nath

enjoyment. The state is as a trustee is under a legal duty to protect natural resources. These resources are meant for public used & cannot be converted into private ownership. The Public Trust Doctrine primarily rests on the principle that certain resources like air, sea, waters and the forests have such a great importance to the people as a whole that it would be wholly unjustified to make them a subject of private ownership. The said resources being a gift of nature, they should be made freely available to everyone irrespective of the status in life. The doctrine enjoins upon the Government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial purposes. The precautionary principle was applied in M.C. Mehta vs. Union of India[223] for protecting Taj Mahal from Air Pollution. In this case explaining the precautionary principle the Supreme Court held that the environmental measures must anticipate, prevent & attack the cause of environmental pollution & degradation. The precautionary principle suggests that where there is an identifiable risk of serious or irreversible harm, including, for example, extinction of species, widespread toxic pollution in threats to essential ecological processes, it may be appropriate to place the burden of proof on the person or entity proposing the activity that is potentially harmful to the environment. In the case of S. Jagannath vs. Union of India,[224] the court sought to strike balance between industries, development, employment and infrastructure on hand and environment on the other, while invoking the principles of sustainable development.

The Vellore Citizens' Welfare forum case has been cited a total of 255 times since 1996.[225] The Supreme court has invoked the judgment in 39 cases, while the High courts in 216 cases. The latest refence to the case was made by the National Green Tribunal in the case of Balkrishna Vyas vs. state of Rajasthan[226] on 01.07.2021. this only goes to show that how relevant the order stays even after more than 20 years of its pronouncement.

It is pertinent to note that during the year 1996 itself Justice Kuldip Singh court delivered many orders/judgments prior to the Vellore order passed in August 1996, but in none of these cases he invoked the international law principles to decide the said cases as he did in the Vellore Citizens' Welfare Forum case. Within a short period of four months i.e., from Sept. 1996 to Dec. 1996, the ratio of Vellore case was applied in seven important cases by the Supreme Court.

[223] Supra, Taj Trapezium case.
[224] Supra, S. Jagannath case.
[225] Manupatra.com
[226] Balkrishna Vyas vs. state of Rajasthan, NGT, 01.07.2021.

Out of these seven cases, five judgments have been written/delivered by Justice Kuldip Singh himself and there was no dissenting opinion by the other judges in such cases one case namely Bayer India Ltd,[227] the judgment was authored and delivered by Justice Hansaria on behalf of a division bench of which Justice Kuldip Singh was also a member and one case a clarificatory order referred to Justice Singh's words in Vellore Citizens' Welfare Forum Case. In these seven cases ratio of the Vellore Citizens' Welfare forum case was verbatim referred and approved. Through this exercise Vellore Citizens' Welfare forum case was virtually converted as the Grundnorm by Justice Kuldip Singh without stating that it was he who created this Grundnorm. The fact, that out of seven, five judgments were authored by Justice Kuldip Singh himself, suggests that before his retirement, which was due in Dec. 1996, he wanted to establish the ratio of Vellore Citizens' Welfare forum case as a settled precedent under Indian environmental jurisprudence.

Apart from the international environment law principles and the burden of proof, another precedent created by the green judgments referred to in this study is the involvement of professional bodies and technical expertise on matters of environmental concern. In the Vellore case, the bench Supreme court ordered a "Green bench" to be established by the Madras High Court to further look into the matter and ordered the Central Government to establish an authority to deal with the situation created by the tanneries and other polluting industries in the State of Tamil Nadu. The said authority was to implement the precautionary principle and the polluter pays principle and identify the loss to the ecology/environment; and individuals/families those who have suffered because of the pollution, and then determine the compensation to reverse this environmental damage and compensate those who have suffered from the pollution. In his judgments, Justice Singh placed strong reliance on the NEERI reports. The emphasis on expertise was reiterated by the Apex court in A.P. Pollution control board vs. M.V. Nayadu case.[228] The court made reference to the National Environmental Appellate Authority to investigate the possibility of pollution caused by the oil and glycerine industry and its impact on the sensitive catchment areas.[229] In my opinion, this was the beginning of the drift away from a generalist view of things and towards a a more scientifically accurate and technically sound approach to the matter. This was the prelude to what we see as the National Green Tribunal today.

[227] F.B. Taraporewala vs. Bayer India Ltd., AIR 1997 SC 1846.
[228] Supra, A.P. Pollution control board case
[229] Supra, P.Leelakrishnan and N.S. Chandrashekharan.

Post his retirement in 1996, these judgments/orders authored by Justice Singh have been cited numerous times by various courts across the country, even in landmark cases like the Narmada Bachao Andolan case, the Samatha Case, the Bombay Dyeing case etc. In fact, this ratio of *Vellore* has been further strengthened when in many other important environmental cases the Supreme Court reiterated and upheld the same. But, in post Kuldip Singh era nature and extent of the application of Vellore Citizens' Welfare Forum Case's ratio has varied from case to case. In these cases, briefly mentioned below, the courts have made passing references or restrictive use or selective use of Vellore Citizens' Welfare Forum Case's ratio. However, there has been no dissent against the Vellore Citizens' Welfare Forum Case's ratio in these cases. Among all the green decisions by Justice Singh, the precedential value of Vellore Citizens' welfare forum case is the most. The order is time and again referred in the context of Sustainable development, the precautionary principle, the polluter pays' principle and the burden of proof on the developer/industry who proposed to alter/ altered the status quo in cases of potential/ actual environmental damage.

In Samatha case [230] only meaning and importance of the term sustainable development as well as "the polluter pays principle as a facet thereof" have been briefly mentioned and affirmed by the Supreme Court. In M.V. Nuyudu case[231] citing Vellore Citizens' Welfare Forum case the Supreme Court felt it necessary to further elaborate the meaning of precautionary principle in more detail. In Narmada Bachao Andolan Case[232] majority judgment referred the M.V. Nayudu & Vellore Citizens' Welfare Forum Cases and approved the construction of a mega dam and found it compatible with the concept of sustainable development which requires that mitigative steps should be taken. The court refused to apply the precautionary principle in this matter by distinguishing the dam with the hazardous industries.

To sum up, the impact of international law in general, and international environmental law in particular, has been on a rise in India, and a strong connection has been cultivated between international environmental law and municipal law. It appears that the expansion of Indian environmental legislation has frequently coincided with the expansion of international environmental law. Following the Bhopal Tragedy (December 1984), the Supreme Court, swiftly contributed to the development of environmental jurisprudence in India, drawing inspiration from international environmental law. India's constitutional framework has a dualist

[230] Supra, Samatha, v. State of A.P. & others.
[231] Supra, A.P. Pollution Control Board v. Prof. M.V. Nayudu.
[232]Supra, Narmada Bachao Andolan v. Union of India

approach to treaty obligations. Similarly, Indian courts have historically taken a reasoned approach to incorporating customary international law into domestic law. In this regard, Indian courts took a conventional stance and supported the doctrine of incorporation from 1950 to 1984. However, between 1985 and 1995, there was a rising impact of international instruments in Indian courts. Since 1996, the Indian Supreme Court has employed international environmental law in ways that have blurred the line between monism and dualism while also redefining the position of international law in Indian courts. The judicial activism of the higher courts and especially of the Supreme Court has led to the adoption, under domestic law, of many international environmental concepts whose legal standing remains subject to debate under international law.

Justice Kuldip Singh, through his green judgments in 1996, affirmed the principle of sustainable development, precautionary principle and polluter pays principle as 'customary international law' and made them as part of the Indian domestic law. Justice Singh applied the ratio of Vellore Citizens' Welfare forum case in several landmark cases and in this way successfully made it as a grundnorm which, in post 1996 period, became a well settled judicial precedent under Indian environmental jurisprudence. Consequently, the international environmental law principles namely sustainable development, precautionary principle and polluter pays principle have not only been made 'part' of the Indian municipal law but have also been given 'new' meaning which is now a unique feature of the Indian environmental law. It appears that the international environmental law principles have been utilized by the Indian courts not only to 'formulate' much of the contemporary environmental jurisprudence in India but also to 'enrich' the same. This process is still going on and it has been resulting into the progressive integration of the Indian environmental law with the international environmental law.

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