

---

# SUSTAINABLE MANAGEMENT OF TECHNOLOGY AND ENVIRONMENT IN INDIA: LEGAL APPROACH

---

Pratiksha Chandel, LLM Student, Himachal Pradesh University ,Shimla (H.P.)

## ABSTRACT

Mother Nature has been worshipped in India for ages. Though in recent times unclean ways of worshipping which are referred to as defilement and also the unwatched discharge of untreated sewage now have led to grave concerns. The terminologies used in the 21<sup>st</sup> century explain the current situation which has resulted from past or present activities for the advancement of mankind. E-Governance, E-courts, Green Technology, Green courts, Digital Economy, Green Economy furthermore many government initiatives<sup>1</sup> such as E-Vidya, E-Panchayats, and almost every aspect of human existence has been facilitated by some E-Application. These terms elucidate our dependence on technology which is a two-sided sword and on a legal footing Quid pro quo kind of situation. With the evolution of Environmental Jurisprudence and Green technology methods, we are trying to balance out environmental protection and concrete advancements. Judiciary's active participation has led to the mushrooming of enviro-legal principles<sup>2</sup>, guidelines, and certain strict standards owing to international conventions<sup>3</sup>, dealing with the Bhopal gas tragedy scenarios, etc. Focus now is on the sustainable development principle and keeping technological advancement and environmental protection at the same pace. A shift has been witnessed from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) which provides deep insight into the concept of sustainability and has left no corner untouched of sustainable management of resources. The Covid 19 has explained the best circular relation between the human environment and the impact of the tech era, plus how judicial decisions and orders regulated the spread of this deadly disease.

Keywords: E-Governance, Environmental Jurisprudence, Sustainability, Judicial Activism, Covid-19.

---

<sup>1</sup>Available at <https://archive.pib.gov.in/ndagov/Initiatives.aspx> (visited on 29 jan2023).

<sup>2</sup> Justice T.S.Doabia,1 Environmental and Pollution laws in India ,452 to 463 (Wadhwa & Co.,Nagpur, 1<sup>st</sup> ed ,2005); State of Himachal Pradesh Vs Ganesh Wood Products (1995)3 SCC 363.

<sup>3</sup> Intellectual Forum Vs State of Andhra Pradesh, AIR 2006SC 1350.

## 1. IMPACT OF TECHNOLOGY ON THE ENVIRONMENT IN INDIA

Positive results led to an appreciation and want for a more tech-friendly environment whereas the negative impacts led to the flooding of courtrooms.

Positive Impacts :

- Harvesting renewable sources of energy (sun, wind, water, tides, rain, etc) and conversion into electricity or usable heat is a sustainable concept.
- Electric vehicles, Increased the productivity of foodgrains by introducing machines, hybrid seeds, and fertilizers.
- Sole Dependence on e-mails, e-texts, or chats has led to reduced use of paper. Further green technology has eased commercial transactions through easy maintainability and accessibility of data.

Whereas now shifting to the negative impacts :

Many scholars and environmentalists think that human activities that exploit the environment are caused by technology. This is so because technology makes people's destructive attitudes toward the environment easier and more convenient. Technology has drastically changed the human environment by increasing the production of lethal waste be it in solid, liquid, or gaseous form. This impact could better be understood by the following pathbreaking judgments of the Honourable Apex court :

One of the pivotal cases in environmental activism is the MC Mehta Oleum gas leak litigation.<sup>4</sup> Before this case, the strict liability rule established in Ryland v. Fletcher<sup>5</sup> was in effect. The advantage of this theory was that many industries might have used exceptions or other defenses, such as the Defense of an "Act of God," etc., to avoid being held responsible for such environmental disasters. As a result, Absolute Liability was adopted in the Oleum Gas Leakage case in place of the Strict Liability principle.

The Supreme Court of India's acknowledgment of the **Precautionary Principle** as a crucial component of sustainable development and its formal recognition in Principle 15 of the Rio Declaration which India constitutionally mandated under Articles 21, 48A, and

---

<sup>4</sup> M.C Mehta Vs Union of India (Oleum Gas Case ) ,AIR1987 SC 965.

<sup>5</sup> (1868) LR 3 HL 330.

51A(g) of the Indian Constitution.<sup>6</sup> In *Vellore Citizen Welfare Forum v. Union of India*, Kuldip Singh J. stated in 1996<sup>7</sup> that the concept involves three conditions:

a) The "onus of proof" is on the actor, developer, or industrialist to demonstrate that the actions are ecologically sound.

b) The state government and statutory agencies must identify, stop, and combat environmental degradation's causes;

c) lastly, a lack of scientific confidence should not be used as an excuse for delaying actions to avoid environmental deterioration if dangers of serious and permanent damage exist;

Further in *A.P Pollution Control Board Vs M.V Nayudu*<sup>8</sup> and *S.Jagannath Vs Union of India (Shrimp Culture Case )*<sup>9</sup> Honourable Apex court highlighted the importance of this principle. **Polluter Pay Principle** came to recognition by Indian Courts for the first time in the *Indian Council of Enviro-Legal Action vs Union of India*.<sup>10</sup> In this case, Justice Dalveer Bhandari stated that the industry that generated the pollution should bear the financial burden of taking preventative and control measures for the pollution that was caused. According to the judges' observations in the cases of *Vellore Citizens' Welfare Forum v. Union of India*<sup>11</sup> and *Ors. and Research Foundation For Science Technology National Resource Policy v. Union of India*<sup>12</sup> and *Anr*, respectively, environmental laws in India are fundamentally based on ethical principles like the precautionary principle and the polluter pays principle.

According to **Section 20 of the National Green Tribunal Act,2010**<sup>13</sup> while passing any ruling, award, or verdict for balanced development without damaging Mother Earth, the tribunal may apply the concepts of sustainable development, the polluter pays principles, and the precautionary principle. The enduring resources of mankind are not to be depleted in a single generation,<sup>14</sup> To avoid having any significant negative effects on ecology and the environment, natural resources should be managed with the necessary care and attention.<sup>15</sup>

---

<sup>6</sup> The Constitution of India .

<sup>7</sup> AIR 1996 SC 2715.

<sup>8</sup> AIR 1999 SC 812.

<sup>9</sup> AIR 1997 SC 811.

<sup>10</sup> AIR 1996 SC 1446.

<sup>11</sup> 1996 5 SCR 241.

<sup>12</sup> (2005) 10 SCC 510.

<sup>13</sup> NGT Act,2010 (Act 19 of 2010) ,s. 20.

<sup>14</sup> *Kinkri Devi &Anr Vs State of Himachal Pradesh* ,AIR 1988 HP 4.

<sup>15</sup> *Rural Litigation and Entitlement Kendra Dehradun vs. State of Uttar Pradesh* ,AIR 1985 SC 652.

In *Tarun Bharat Sangh Vs Union of India*,<sup>16</sup> a petition was brought against the Rajasthan government because they failed to preserve the environment and permitted mining in forested areas. "Sustainable Development" includes what type or extent of development can take place, which can be sustained by nature or ecology with or without mitigation as dealt with in the case of *Narmada Bachao Andolan v. Union of India*.<sup>17</sup>

Environmental Rights are impliedly included in the ambit of Article 21<sup>18</sup> of the Indian Constitution which guarantees its citizens the Right to a Clean and Pollution free environment, the Right to clean water, Air, etc.

## **2. REASONS FOR INCONSISTENT RELATIONSHIP BETWEEN TECHNOLOGY AND ENVIRONMENT IN INDIA.**

Land subsidence has occurred in Joshimath as a result of the town's geological location and the uncontrolled and massive development that has taken place there( Chaar Dhaam Project) and nearby. Mishra Committee Report<sup>19</sup> of 1976;46 years ago recommended not to carry out any huge-scale construction in Joshimath owing to its sensitive geological conditions but this fell on deaf ears.<sup>20</sup>

Illegal mining near the century-old colonial railway bridge on the Chakki River which connected Punjab and Himachal for the past more than three decades is reported to have damaged the bridge's supporting pillars and defensive wall<sup>21</sup>. These are a few glances at the greed of mankind by compromising the environmental setup for development purposes. Overuse of natural resources, improper waste management, and unchecked industrial output have all contributed to excessive pollution and environmental damage. Disaster management is required rather than environmental management. Less number of Technical hands are associated with respective boards or committees which assess the pollution generated by firms, such absence of scientific and technical assistance may lead to improper conclusions.

---

<sup>16</sup> 1993 Supp (3) SCC 115.

<sup>17</sup> (2000) 10 SCC 664.

<sup>18</sup> *L.K Koolwal Vs State of Rajasthan*, AIR 1988 Raj 2; *Olga Tellis v/s Bombay Municipal Corporation*(Pavement Dwellers Case),(1985) 3 SCC 545 .

<sup>19</sup> *P.C. Tewari Vs. State of Uttarakhand and others* WPPIL No.67 of 2021.

<sup>20</sup> *Ibid.*

<sup>21</sup> Lalit Mohan , " Illegal Mining in Himachal: Deep digging in Chakki river threatens rail bridge", *The Tribune*, July 25, 2022, available at <https://www.hindustantimes.com/cities/chandigarh-news/illegal-mining-high-court-seeks-reports-on-chakki-bridge-collapse-in-punjab-101661896169428.html> (visited on 2 Feb 2023).

Substandard punishments prescribed by environmental laws and add a cherry on the cake non-compliance with rules, policies, standards laid down for the quality or quantity of effluents to be permissible. Court leniency and corrupt authorities both facilitate non-compliance.

Financial instability is another root cause for lenient behaviors and lack of seriousness. Money brings better establishments and devices that are essential for discharging the respective duties. India being a developing nation has to face many other challenges too like poverty, and population explosion which has resulted in unemployment, and a low standard of living. For instance, without the use of technological instruments, humans may cut down the same number of trees in a day which would take years to do without them. Due to technological improvements, vehicles now account for a significant portion of carbon emissions. While facilitating quicker and easier communication, communication technology has raised the level of radiation in the environment. Runoff of fertilizers, herbicides, and pesticides into streams and rivers degrades the water quality and affects residents' quality of life. Technology and its byproducts damage the environment in a variety of ways every day.

Stop playing the victim card and acknowledge that how technology is used ultimately determines whether it is good or evil.

### **3. COMPREHENSIVENESS OF THE INDIAN JUDICIARY AND ITS FORESIGHTEDNESS**

Since the 1980s from dealing with air, and water pollution to plastic ban cases or proportionality principles our Indian Judiciary has shown its progressive character and acceptance of economic growth without compromising ecology.

The Sustainable Development concept attempts to balance out the quantity of development and the quality of the environment; one must not suffer at others' cost as held in *Rural Litigation and Entitlement Kendra Dehradun vs. State of Uttar Pradesh*<sup>22</sup> which further has been reiterated in *Mukti Sangharsh Movement Vs State of Maharashtra*<sup>23</sup>.

In the case of *M.C. Mehta Vs Union of India*,<sup>24</sup> the court held that life, public health, and ecology have to be considered over the concept of unemployment and loss of revenue. In *A.P*

---

<sup>22</sup> (1985) 2 SCC 431.

<sup>23</sup> 1990 (Suppl) SCC 37.

<sup>24</sup> (1987) 4 SCC 463.

Pollution Control Board Vs M.V Nayudu,<sup>25</sup> the court proposed the urgent need for the establishment of Environmental Courts, National Appellate Authority in furtherance to which a separate Department of chemical technology and other respective bodies as required so that adequate and unambiguous data be tabled before courts to adjudicate the technical issue in hand. Quoted in the above-referred case U.S Supreme Court judgment Daubert V. Merrel Dow Pharmaceuticals<sup>26</sup>a relevant para ‘There are important differences between quest for truth in the courtroom and a laboratory. Scientific conclusions are always subject to perpetual revisions whereas law on the other side must resolve disputes finally and quickly.’

Recognition of the public trust doctrine in M.C Mehta vs Kamal Nath <sup>27</sup> offers a foundation for improving the efficiency and impact of Indian environmental laws. Additionally, it instructs the government to protect the natural resources that were given to us by mother nature. They need to be maintained, safeguarded, and honored.

We must take advantage of the digital revolution to enhance environmental sustainability by combining high- and low-tech solutions. Through the use of digital technology, governments, companies, and citizens must be encouraged to adopt environmentally friendly behaviors, regulations, and business models. For instance, waste treatment technology is beneficial to environmental challenges. How rapidly more advanced technology replaces less-effective technology in diverse international conditions heavily influences how quickly human society overcomes these and other challenges. Technological progress, application, transfer, and diffusion are complex processes. However, environmentally friendly technology must be consistent with national socioeconomic, cultural, and environmental interests as well as development goals. Several global environmental agreements, intergovernmental treaties, and the 2030 Agenda for Sustainable Development all stress the need for channels to facilitate the such transfer of technology.

#### 4. CONCLUSION

Father of the Nation emphasized that Governance must be strong at the grassroots level to strengthen the whole system by focusing on the Panchayat system in India, likewise,

---

<sup>25</sup> (1999)2 SCC 718.

<sup>26</sup> (1993)113 SC T 2786.

<sup>27</sup> (1997) 1 SCC 388 ; M. I. Builders v. Radhey Shyam Sahu, AIR 1999 SC 2468.

the sustainable management of technology and the environment can also be met up with everyone's active participation and self-determination. Environmental Literacy and awareness campaigns (Swachh Bharat Abhiyaan ) which included the prohibition of outdoor defecation, and availability of women's Sanitary facilities then employing online platforms for the faster spread of such concepts; Legislative policy formulations or Judicial interventions will serve no good unless it's a combined effort of everyone. In the present scenario India being a developing nation have to pace up with the economies of developed nations and also deal with its domestic challenges such as poverty, and expanding population which results in unemployment, and an increased crime rate and also have to manage the environmental resources from being overexploited.

The existence of some laws is entirely different from their implementation because ratifying international conventions, treaties or mere doing of paperwork will amount to nothing if the respective ideas or concepts of the letters are not strongly implemented on the ground levels. Elaborated and beautiful judicial pronouncements showcase the intent of the judiciary to sustain resources for future generations too.