

GLOBAL WARMING –LEGAL SOLUTIONS FOR GLOBAL PROBLEM

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*“Only when the last tree has died
and the last river has been poisoned
and the last fish been caught
will we realize we cannot eat money?”*

- Indian Proverb

ABSTRACT

The study of modern environmental law is primarily the study of federal environmental statutes and their implementation and enforcement by federal and state agencies. Although the common law has a role— especially common law nuisance actions – and states are important players in interpreting, applying, enforcing and regulating beyond the scope of federal law, the federal government largely calls the shots by establishing baseline environmental quality standards and imposing conditions upon the delegation of permit programs to state governments. This paper explores the diverse ingredients of entire environmental jurisprudence. An emphasize of legal efforts in combating environment related issues is also made.

Keywords: Global Warming, Climate Change, Law Enforcement, Greenhouse Effect, Clean Energy

INTRODUCTION TO GLOBAL WARMING

Change in climate and global warming is one of the most serious challenges mankind has faced having its implications even on realization of the human rights. Even United Nations Human Right Council once observed, "*Climate change poses immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of human rights*".ⁱ

Global warming is primarily a problem of excessive carbon dioxide in the atmosphere which acts as a blanket, trapping heat and warming the planet. As we burn fossil fuels like coal, oil and natural gas for energy or cut down and burn forests to create pastures and plantations, carbon accumulates and overloads our atmosphere. Certain waste management and agricultural practices also aggravate the problem by releasing other potent global warming gases such as methane emitted from landfill and other waste dumps, during the process of oil drilling, coal mining and also from leaking gas pipe lines, and nitrous oxide emitted from fertilizer applications and leguminous plants such as beans and pulses.

Global warming refers to the long-term warming of the planet since the early 20th century, and most notably since the late 1970s, due to the increase in fossil fuel emissions since the Industrial Revolution. Worldwide since 1880, the average surface temperature has gone up by about 1 °C (about 2 °F), relative to the mid-20th-century baseline (of 1951-1980). This is on top of about an additional 0.15 °C of warming from between 1750 and 1880.ⁱⁱ

CLIMATE CHANGE

Climate change refers to a broad range of global phenomena created predominantly by burning fossil fuels, which add heat-trapping gases to Earth's atmosphere. These phenomena include the increased temperature trends described by global warming, but also encompass changes such as sea level rise; ice mass loss in Greenland, Antarctica, the Arctic and mountain glaciers worldwide; shifts in flower/plant blooming; and extreme weather events.ⁱⁱⁱ

Solar radiation and the "greenhouse effect"

Global warming isn't a new concept in science. The basics of the phenomenon were worked out well over a century ago by Svante Arrhenius in 1896. His paper, published in the Philosophical Magazine and Journal of Science, was the first to quantify the contribution of carbon dioxide to what scientists now call the "greenhouse effect."

The greenhouse effect occurs because the sun bombards Earth with enormous amounts of radiation, which strike Earth's atmosphere in the form of visible light, plus ultraviolet (UV), infrared (IR) and other types of radiation that are invisible to the human eye. About 30 percent of the radiation striking the Earth is reflected back out to space by clouds, ice and other reflective surfaces. The remaining 70 percent is absorbed by the oceans, the land and the atmosphere, according to NASA.

As they absorb radiation and heat up, the oceans, land and atmosphere release heat in the form of IR thermal radiation, which passes out of the atmosphere into space. The balance between incoming and outgoing radiation keeps Earth's overall average temperature at about 59 degrees Fahrenheit (15 degrees Celsius), according to NASA.

This exchange of incoming and outgoing radiation that warms Earth is referred to as the greenhouse effect because a greenhouse works in much the same way. Incoming UV radiation easily passes through the glass walls of a greenhouse and is absorbed by the plants and hard surfaces inside. Weaker IR radiation, however, has difficulty passing out through the glass walls and is trapped inside, warming the greenhouse.

How greenhouse gases affect global warming

The gases in the atmosphere that absorb radiation are known as "greenhouse gases" (sometimes abbreviated as GHG) because they are largely responsible for the greenhouse effect. The greenhouse effect, in turn, is one of the leading causes of global warming. The most significant greenhouse gases are water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), according to the Environmental Protection Agency (EPA). "While oxygen (O₂) is the second most abundant gas in our atmosphere, O₂ does not absorb thermal infrared

radiation," said Michael Daley, an associate professor of environmental science at Lasell College in Massachusetts.

While some argue that global warming is a natural process and that there have always been greenhouse gases, the amount of gas in the atmosphere has skyrocketed in recent history. Before the Industrial Revolution, atmospheric CO₂ fluctuated between about 180 parts per million (ppm) during ice ages and 280 ppm during interglacial warm periods. Since the Industrial Revolution, though, the amount of CO₂ has increased 100 times faster than the increase when the last ice age ended, according to the [National Oceanic and Atmospheric Administration](#) (NOAA).

LAWS & POLICIES

In the Indian context, the Government of India as well as our Parliament is increasingly supportive of stringent environmental legislations and Regulations. Various legislations have been enacted by Indian Parliament in about the last thirty years to tackle the problem of environmental protection. The Supreme Court has pronounced a number of judgments and orders and issued various directions with the objective of securing the protection and preservation of environment and enforcement of human rights of citizens.

Article 21 of Constitution of India states that 'No person shall be deprived of his life or personal liberty except according to procedure established by law.'^{iv}

In **Indian Council for Enviro-Legal Action vs. Union of India**, the Supreme Court has implemented the right to wholesome environment as part of the Right to Life enshrined in Article 21. In terms of Article 21 of the Constitution, a person has a right to a decent life, good environment and maintenance of ecology.

Therefore, when we talk of environment degradation, we talk of violation of rights under Article 21. The State's responsibility with regard to environmental protection has been laid

down under Article 48-A of our Constitution, which reads as follows: "The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country" Environmental protection is a fundamental duty of every citizen of this country under Article 51-A(g) of our Constitution which reads as follows: "It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."

The Constitution of India under Article 47 states that it is the primary duty of a state to raise the nutrition level, the standard of people living in it and the improvement of public health. It is evident from it that protection and improvement of the environment are included in the improvement of public health because without protecting the environment, public health cannot be assured.

The United Nations Charter of 1945 marked the beginning of modern international human rights law, whereas the Stockholm Declaration of 1972 is generally seen as the starting point of a rights-based approach to environmental protection. This declaration formulated several principles, including that Man have 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 generations.

On 16 May,1994, an international group of experts on Human Rights and Environmental Protection met at Geneva and drafted the first ever Declaration on the principles of Human Rights and the Environment. This Declaration was the first international instrument comprehensively addressing the linkage between Human Rights and the environment. It is divided into 5 parts and contains 27 articles. It demonstrates that accepted environmental and human rights principles embody the right of everyone to a secure, healthy and ecologically sound environment and describes the environmental dimension of established human rights, such as the rights to life, health and culture. The Draft Declaration also describes duties that correspond to the rights--duties that apply to individuals, governments, international organizations and transnational corporations.^v

ROLE OF JUDICIARY IN ENVIRONMENT PROTECTION

Indian environmental law has seen considerable development in the last over three decades. Most of the principles under which environmental law works in India today were assembled over the last three decades. A predominant share of essence of the existing law relating to the environment has developed through careful judicial thinking in the Supreme Court and the High Courts. In the process of adjudication on the environmental matters, the Supreme Court has actually come up with the new pattern of "judge-driven implementation" of environmental administration in India. The court has played a pivotal role in interpreting those laws and has successfully isolated specific environmental law principles upon the interpretation of Indian statutes and the Constitution, combined with a liberal view towards ensuring social justice and the protection of human rights. So, when one analyses the Indian environmental law's development path, one will surely have to keep in mind the concept of judicial law making.

The orders and directions of the Supreme Court cover a wide range of areas whether it be air, water, solid waste or hazardous waste. The field covered is very vast such as – vehicular pollution, pollution by industries, depletion of forests, illegal felling of trees, dumping of hazardous waste, pollution of rivers, illegal mining etc. The list is unending. The Supreme Court has passed orders for closure of polluting industries and environmentally harmful aqua-farms, mandated cleaner fuel for vehicles, stopped illegal mining activity, and protected forests and architectural treasures like *Taj Mahal*.

Some of the judgments wherein various principles relating to environment law were judicially recognised are worth mentioning:

In *MC Mehta V/s. Union of India*,^{vi} the honorable Supreme Court in its order dated 24-10-2018, decided that no motor vehicle conforming to the emission standard BS-IV shall be sold or registered in the entire country with effect from 01.04.2020, and the same shall be substituted by BS-VI compliant vehicles. Certain orders were also passed in therein with respect to imposing ban on diesel vehicles to curb the air pollution.

In *MC Mehta V/s. Union of India*^{vii}, (*Oleum Gas Leak case*), the Supreme Court formulated an indigenous jurisprudence of absolute liability in compensating the victims of pollution caused by hazardous and inherently dangerous industries.

In *M.C. Mehta V/s. Union of India*^{viii}, wherein the issue of pollution of the Ganga River by the hazardous industries located on its banks was highlighted, the honorable Supreme Court ordered the closure of a number of polluting tanneries near Kanpur.

The honorable Supreme Court in the case of *TN Godavarman Thirumulpad V/s. Union of India and Ors.*^{ix} dealing with the issue of livelihood of forest dwellers in the Nilgiri region of Tamil Nadu being affected by the destruction of forests, passed a series of directions.

Ganesh Wood Products V/s. State of Himachal Pradesh^x, this judgment expanded the definition of forest to its ordinary dictionary meaning, and imposed a ban on all non-forest activities on forest land without prior approval of the Central Government and directions were given to constitute Expert Committee in each State to identify forests and for movement and disposal of timber, and for constitution of a High-Power Committee to deal with forest.

MC Mehta V/s. Kamal Nath^{xi}, is a case where there was an attempt to divert the flow of a river for augmenting facilities in a motel. The Supreme Court interfered by recognizing the Public Trust Doctrine and held that the State and its instrumentalities as trustees have a duty to protect and preserve natural resources such as rivers, lakes, forests, open spaces and other common property resources.

MI Builders Pvt. Ltd. V/s. Radhey Shyam Sahu^{xii}, wherein also the honorable Supreme Court applied Public Trust Doctrine and asked a city development authority to dismantle an underground market built beneath a garden of historical importance.

In *Vellore Citizens Welfare Forum V/s. Union of India*^{xiii} the Supreme Court adopted the *Precautionary Principle* to check pollution of underground water caused by the leather industries in Tamil Nadu. The honorable Court also opined the precautionary principle and the polluter pays principle are part of the environmental law of the country.

In *Indian Council for Enviro-Legal Action V/s. Union of India*^{xiv}, the Supreme Court reiterated and applied the principle to restore the environment of a village whose ecology had been destroyed by the sludge left out by the trial run of the industries permitted to produce the 'H' acid.

In *State of Himachal Pradesh V/s. Ganesh Wood Products*^{xv}, the Supreme Court invalidated forest-based industry, recognizing the *Principle of Inter-Generational Equity* as being central to the conservation of forest resources and sustainable development.

The honorable Supreme Court also noted in *Indian Council for Enviro-Legal Action V/s. Union of India*^{xvi} (*CRZ Notification case*), that the *Principle of Sustainable Development* would be violated if there were a substantial adverse ecological effect caused by industry.

The *Principle of Sustainable Development* was also recognized by the Supreme Court of India in the *M.C. Mehta V/s. Union of India*^{xvii} (*Taj Trapezium case*)

In *Enkay Plastics Pvt. Ltd. V/s. Union of India (UOI) and Ors.*^{xviii}, the Delhi High Court upheld the order of closure of certain units which were manufacturing Urea Formaldehyde Powder in thickly populated residential areas and held that the direction to close down such industries cannot be treated as violative of Article 19 of the Constitution as it is in the larger public interest to prevent any danger to the health and life of the public at large.

Amongst others, the Delhi High Court has also directed for preservation of ancient monuments of historical importance, restoration of water bodies in and around Delhi and in maintaining the forest ridge area in Delhi which are the lungs of the city.^{xix}

CONCLUSION

A greener, healthier world requires each of us to do all we can to eliminate the pollution and practices that are warming the planet and changing our climate. Environment America takes concrete steps to move us closer to the world we want to live in, from promoting the fossil fuel

divestment movement to accelerating the transition to cars that don't pollute.^{xx} To promote global warming solutions many of the countries especially America is playing vital role in all over the world. Progress is impossible without change and those who cannot change, their minds cannot change anything. So for a happy healthy environment we must first create a healthy mind to deal with this green issue.

ENDNOTES

ⁱ Available at <https://www.mondaq.com/india/clean-air-pollution/945304/climate-change--indian-law-and-judiciary>

ⁱⁱ Available at <https://climate.nasa.gov/resources/global-warming/>

ⁱⁱⁱ Available at <https://climate.nasa.gov/resources/global-warming/>

^{iv} Pandey, J.N “Constitutional Law of India”, (2014) Central Law Agency: Allahabad

^v Available at <http://www.legalserviceindia.com/article/1450-Global-Warming.html#:~:text=The%20State's%20responsibility%20with%20regard,protection%20is%20a%20fundamental%20duty>

^{vi} WP (C) 13029/1985

^{vii} AIR 1987 SC 1086

^{viii} AIR 1988 SCR (2) 538

^{ix} W.P.(C) No. 202 of 1995

^x AIR 1996 SC 149

^{xi} (1996) 1 SCC 38

^{xii} AIR 1996 SC 2468

^{xiii} AIR 1996 SC 2718

^{xiv} AIR 1996 SC 1446

^{xv} AIR 1996 SC 149

^{xvi} (1996) 5 SCC 281

^{xvii} AIR 1997 SC 734

^{xviii} 2000 (56) DRJ 828

^{xix} Available at <https://www.mondaq.com/india/clean-air-pollution/945304/climate-change--indian-law-and-judiciary>

^{xx} Available at <https://environmentamerica.org/feature/ame/global-warming-solutions>