



## Review Paper

# Environment and Their Legal Issues in India

Syed Ussain Saheb<sup>1</sup>, Sepuri Sessaiah<sup>1</sup> and Buddolla Viswanath<sup>2</sup>

<sup>1</sup> Department of Law, Sri Krishnadevaraya University, Anantapur-515 003, INDIA

<sup>2</sup> Applied Microbiology Laboratory, Department of Virology, Sri Venkateswara University, Tirupati, INDIA

Available online at: [www.isca.in](http://www.isca.in)

Received 11<sup>th</sup> September 2012, revised 20<sup>th</sup> September 2012, accepted 25<sup>th</sup> September 2012

## Abstract

*The environmental awareness needs to be cultivated in any society to be an ideal society, or rather to be more precise, in other words, an ideal society means, the society which has the environmental awareness. The dictionary meaning of the word 'environmental' is surrounding objects, region or circumstances and the phrase environmental awareness' will mean that one should be aware of his surrounding so that this surrounding is not disturbed. This relation of the environment with the human life has in recent years developed into an independent branch of scientific inquiry, which goes by the name environmental science. As per the literature, the human-environment interaction goes back to the remotest possible times in the history of humanity. Sometimes, it is seen as a manifestation of a struggle between the two. There have also been times when this relationship took the form of respectable coexistence. While the history of humanity of the last several millennia is noted for its constant and/or consistent progress in different walks of life, the mysteries of nature have often proved to be quite tempting to be solved by human thinking and actions. The key-theme of which is that the natural balance between human life and the surroundings should not be lost. This is the basic requirement for any life to flourish especially for human life. The major contribution of this paper would be to help the respective agencies in the government in building up the environmental awareness among citizens of India.*

**Keywords:** Environment, laws and acts, awareness, punishment, responsibilities.

## Introduction

The earth's expanding human population and industrial growth have been known to cause serious environmental disasters. At the end of 2011, India's population reached 1.21 billion and its economy is growing at 8.5%, the fastest after China<sup>1</sup>. Due to the population pressure, India pushes ahead with aggressive industrial development. Consequently, thousands of industrial clusters nationwide produce enormous amounts of untreated toxic waste that often end up in rivers, lakes, forests, and landfills<sup>1</sup>. Even though India has sufficient environmental laws, weak enforcement and the lack of funds and manpower are most often the stumbling blocks for the pollution control boards<sup>1</sup>. The issues of environment are the effect from the human's activities that have no civic conscious and only think the profit without concern about the impact towards the environment and their future of life. The long term effect from the environmental pollution can be seen when the ecosystem is not able to endure the pollution. According to the relevant literature, the major cause of this ecological crisis is regarding the value and belief in shaping human's relation with the surrounding and the lifestyle itself<sup>2</sup>. Present India is facing many important environmental challenges which currently threaten both the development of India and the outlook for its future<sup>3</sup>. The state of India's environment is in upset at the hands of uncontrolled human activities, and these ecological ailments are affecting social growth potential. Decrease of land quantity, increasing air

pollution, depletion of water resources, loss of indigenous species of flora and fauna and the background of overwhelming poverty are depicted in the report to detract from the positive growth of Indian people and the country as a whole<sup>4</sup>. Thus, India's rapid growth is driving equally rapid environmental destruction. An argument often put forth in developing countries is that it is unfair to ask people to make environmental sacrifices during a period of growth and industrialization when Western countries did not have to make the same choices. Yet, as we get a glimpse of above, India, as a dense country of 1 billion people, faces unique challenges that need unique responses<sup>5</sup>. Here arises the need for environmental regulations and for confirming compliances of these regulations. The Government of India has established an environmental legal and institutional system to meet these challenges within the overall framework of India's development agenda and international principles and norms. In the constitution of India it is clearly stated that it is the duty of the state to 'protect and improve the environment and to safeguard the forests and wildlife of the country'<sup>6</sup>. It imposes a duty on every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife<sup>1</sup>. Reference to the environment has also been made in the Directive Principles of State Policy as well as the Fundamental Rights. The Department of Environment was established in India in 1980 to ensure a healthy environment for the country. This later became the Ministry of Environment and Forests in 1985. The constitutional provisions are backed by a number of

laws – acts, rules and notifications. The Environment Protection Act, 1986 came into force soon after the Bhopal Gas Tragedy which was a major leak of toxic chemical gases occurred from the Union Carbide chemical plant in the city of Bhopal in 1984 and is considered an umbrella legislation as it fills many gaps in the existing laws<sup>7</sup>. Therefore a large number of laws came into existence as the problem began arising. The Bhopal disaster underlines the problem governments confront in formulating a response to disaster situations when poverty levels are high and health infrastructures and government resources are severely limited. This brings into focus the need for private multinational (or public) industries to take some responsibility towards the environments and populations they are located in<sup>8</sup>.

**Bhopal Gas Tragedy and Legal Issues:** Industrial disaster, the Bhopal gas tragedy is, till date, the world's worst industrial disaster. In the February of 1985, the Government of India filed a case in the U.S Court for a claim of \$3.3 billions against the Union Carbide Corporation (UCC). But by 1986 all of these litigations in the U.S District were transferred to India on the grounds of forum non conveniens. It means that the case should be transferred to a more convenient forum so that the trial proceeds smoothly. Meanwhile in March 1985, the Bhopal Gas Leak Disaster (Processing of Claims) Act was passed which empowered the Central Government to become the sole representative of all the victims in all kinds of litigations so that interests of the victims of the disaster are fully protected and the claims for compensation are pursued speedily. In the year 1987, cases were filed in the Bhopal District Court which ordered the Union Carbide Corporation to pay 350 crores as interim compensation. But the interim order could not be decreed and therefore the UCC refused to pay the amount. Later on, at the High Court, this interim compensation amount was reduced to 250 crores. Both the Union of India and the UCC preferred appeals by special leave against this High Court's order. One of the main issues which the Bhopal Gas tragedy raises is the issue of absolute liability. This issue was elaborately discussed in the case of *M.C. Mehta v Union of India* (<http://indiankanoon.org/doc/59060/>). The principle of absolute liability states that when an enterprise is engaged in hazardous or inherently dangerous industry and if any harm results in account of such activity then the enterprise is absolutely liable to compensate for such harm and that it should be no answer to the enterprise to say that it had taken all reasonable care and that the harm occurred without any negligence on its part<sup>6</sup>. In such industries, the principle of safe design would be that one does not guard merely against the most predictable, routine type of accidents. Rather one tries to anticipate the worst that could happen, even if it is highly unlikely, and not only guard against it, but prepare to contain it and make sure that there is no way for that even to take place<sup>9</sup>. This is the principle of absolute liability and liability can be fixed even if there is no negligence on part of the accused. In the case of absolute liability, even the defences available under strict liability would not apply. Thus, even if the accident is some freak incident, liability would still be fixed. In such a case, it would be no good defence to argue that the direct or the

proximate cause of the accident or the *causa causan* of the accident was not the carrying of such hazardous activity, but it actually is an Act of God or that it is due to some third party intervention. Even if the company had taken extreme precautions to ensure that such events do not take place, responsibility would still be fixed on them<sup>10</sup>. This principle of absolute liability in India evolved primarily because of the awakening that the Bhopal Gas Disaster and the Oleum Gas Leak case gave. The Bhopal Gas Tragedy is also in a way responsible for the passing of the Public Liability Insurance Act, 1991 which provides for compulsory insurance of any unit or factory undertaking a hazardous activity.

Apart from all of this, the tragedy has recently been much discussed in the light of the Nuclear Liability Bill. This bill has a lot of controversial provisions which aim at capping the total liability in case of a nuclear accident. The bill also prohibits the victims from suing the suppliers directly and allows them to recover only from the operators. The bill also lays a cap on the amount that an operator can recover from the suppliers<sup>11</sup>. In the light of the events that followed Bhopal, it is clear that there is a need for a proper mechanism of compensation and it is important that any kind of cap on liability should be removed as it would be unconstitutional. The tragedy is still considered to be the world's worst industrial disaster. To prevent such events from occurring in the future, the government should thoroughly check and regulate such industries<sup>8</sup>. They should be placed under constant surveillance and the activities of such industries should be monitored at least once in every six months. Any kind of repair in any of the machines or equipments should be immediately attended to. The government should take it upon itself to make sure that everything is functioning properly. Apart from this, the government should also make sure that there is a proper mechanism for compensation to the victims. It should ensure speedy justice and should make sure that proper relief is given to the victims. In the event of such a large-scale disaster as Bhopal, the questions like who is right and who is wrong and who was negligent and who was not become totally irrelevant in the plight of thousands of people who get affected in one single night. It is totally unjustifiable to leave even a single victim without providing relief. Hopefully, such incidents should never occur again, and even if they do, we should not forget the lessons from Bhopal and we should make sure that any law capping the limit on the liability of such large magnitude disasters should be declared as unconstitutional<sup>12</sup>.

**Environment Protection-From Indian Constitution Prespective:** 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."

Article 21 of the Constitution is a fundamental right which reads as follows: "No person shall be deprived of his life or personal liberty except according to procedure established by law."

Article 48-A of the constitution comes under directive principles of State policy and Article 51 A(g) of the constitution comes under fundamental duties.

The state's responsibility with regard to raising the level of nutrition and the standard of living and to improve public health has been laid down under Article 47 of the constitution which reads as follows: "The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health."

The 42<sup>nd</sup> amendment to the constitution was brought about in the year 1974 makes it the responsibility of the state government to protect and improve the environment and to safeguard the forests and wildlife of the country. The latter, under fundamental duties, makes it the fundamental duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

The forty-second amendment to the Indian constitution in 1976 introduced principles of environmental protection in an explicit manner into the constitution through Articles 48A and 51A(g). Article 48A, part of the directive principles of state policy, obligated the state to protect and improve the environment. On the other hand, Article 51A (g) obligated citizens to undertake the same responsibilities. As far as legislative power was concerned, the amendment also moved the subjects of "forests" and "protection of wild animals and birds" from the state list to the concurrent list. The Stockholm conference is honored by references in the air act and the environment act – a result of effective applications of Article 253 of the Constitution, which gives the parliament (India's central legislature) the power to make laws implementing India's international obligations, as well as any decision made at an international conference, association or other body. In addition to the constitutional mandate, India has a number of national policies governing environmental management, including the National Policy on Pollution Abatement (NPPA, 1992) and the National Conservation Strategy and Policy Statement on Environment and Development (NCS/PSSED, 1992). While these national policies are not judicially enforceable, they serve as guiding principles for the central and state governments to follow<sup>10</sup>.

**Legal Framework: Environmental Protection:** India has an elaborate legal framework with over two hundred laws relating to environmental protection<sup>2</sup>. Key national laws for the prevention and control of industrial and urban pollution include the following:

**Water (Prevention and Control of Pollution) Act, 1974:** Prohibits the discharge of pollutants into water bodies beyond a given standard, and lays down penalties for non-compliance. . The act was amended in 1988 to conform closely to the provisions of the EPA, 1986. It set up the CPCB (Central Pollution Control Board) which lays down standards for the prevention and control of water pollution. At the state level, the SPCBs (State Pollution Control Board) function under the direction of the CPCB and the state government.

**Water (Prevention and Control of Pollution) Cess Act, 1977:** Provides for a levy and collection of a cess on water consumed by industries and local authorities. It aims at augmenting the resources of the central and state boards for prevention and control of water pollution. the water (prevention and control of pollution) cess rules were formulated in 1978 for defining standards and indications for the kind of and location of meters that every consumer of water is required to install.

**Air (Prevention and Control of Pollution) Act, 1981:** Ambient air quality standards, means for the control and abatement of air pollution, prohibits the use of polluting fuels and substances and regulates appliances that give rise to air pollution. To empower the central and state pollution boards to meet grave emergencies, the air (prevention and control of pollution) amendment act, 1987, was enacted. The boards were authorized to take immediate measures to tackle such emergencies and recover the expenses incurred from the offenders. The power to cancel consent for non-fulfilment of the conditions prescribed has also been emphasized in the air act amendment.

**The Air (Prevention and Control of Pollution) Rules, 1982:** Defines the procedures for conducting meetings of the boards, the powers of the presiding officers, decision-making, the quorum; manner in which the records of the meeting were to be set etc.

**The Wildlife (Protection) Act, 1972:** The WPA (Wildlife Protection Act), 1972: provides for protection to listed species of flora and fauna and establishes a network of ecologically-important protected areas. The WPA empowers the central and state governments to declare any area a wildlife sanctuary, national park or closed area.

**The Forest (Conservation) Act, 1980:** restricts the powers of the state in respect of de-reservation of forests and use of forestland for non-forest purposes.

**Environment (Protection) Act, 1986 (EPA):** An Act to provide for the protection and improvement of environment and for matters connected therewith. It provide a framework for the co-ordination of central and state authorities established under the water (prevention and control) act, 1974 and air (prevention and control) act, 1981 and the central government is empowered to take measures necessary to protect and improve the quality of the environment by setting standards for emissions and discharges; regulating the location of industries; management of hazardous wastes, and protection of public health and welfare.

**Power of Central Government to take measures to protect and improve environment:** Subject to the provisions of this act, the central government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing controlling and abating environmental pollution.

In particular, and without prejudice to the generality of the provisions of subsection (1), such measures may include measures with respect to all or any of the following matters, namely:- co-ordination of actions by the state governments, officers and other authorities-i. under this act, or the rules made there under, or ii. under any other law for the time being in force which is relatable to the objects of this act; planning and execution of a nation-wide programme for the prevention, control and abatement of environmental pollution; laying down standards for the quality of environment in its various aspects; laying down standards for emission or discharge of environmental pollutants from various sources whatsoever: Provided that different standards for emission or discharge may be laid down under this clause from different sources having regard to the quality or composition of the emission or discharge of environmental pollutants from such sources; restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards; laying down procedures and safeguards for the prevention of accidents which may cause environmental pollution and remedial measures for such accidents; laying down procedures and safeguards for the handling of hazardous substances; examination of such manufacturing processes, materials and substances as are likely to cause environmental pollution; carrying out and sponsoring investigations and research relating to problems of environmental pollution; inspection of any premises, plant, equipment, machinery, manufacturing or other processes, materials or substances and giving, by order, of such directions to such authorities, officers or persons as it may consider necessary to take steps for the prevention, control and abatement of environmental pollution; establishment or recognition of environmental laboratories and institutes to carry out the functions entrusted to such environmental laboratories and institutes under this Act; collection and dissemination of information in respect of matters relating to environmental pollution; preparation of manuals, codes or guides relating to the prevention, control and abatement of environmental pollution;

such other matters as the central government deems necessary or expedient for the purpose of securing the effective implementation of the provisions of this act.

The central government may, if it considers it necessary or expedient so to do for the purpose of this act, by order, published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under section 5) of the central government under this act and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the central government and the provisions of such order, such authority or authorities may exercise and powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures<sup>3</sup>.

**The National Environment Appellate Authority Act, 1997:** Establishment of a national environment appellate authority to hear appeals with respect to restriction of areas in which any industry operation or process or class of industries, operations or processes could not carry out or would be allowed to carry out subject to certain safeguards under the environment (Protection) Act, 1986.

**Factories Act, 1948 and its Amendment in 1987:** The Act contains a comprehensive list of 29 categories of industries involving hazardous processes, which are defined as a process or activity where unless special care is taken, raw materials used therein or the intermediate or the finished products, by-products, wastes or effluents would: i. Cause material impairment to health of the persons engaged. ii. Result in the pollution of the general environment.

**Public Liability Insurance Act (PLIA), 1991:** The PLIA was amended in 1992, and the central government was authorized to establish the environmental relief fund, for making relief payments.

**National Environment Tribunal Act, 1995:** The act provided strict liability for damages arising out of any accident occurring while handling any hazardous substance and for the establishment of a national environment tribunal for effective and expeditious disposal of cases arising from such accident, with a view to give relief and compensation for damages to persons, property and the environment and for the matters connected therewith or incidental thereto.

The primary institutions responsible for the formulation and enforcement of environmental acts and rules include the Ministry of Environment and Forests (MOEF), the Central Pollution Control Board (CPCB), State Departments of

Environment, State Pollution Control Boards (SPCBs) and Municipal Corporations<sup>13</sup>.

**Notifications issued under Environmental Protection Act (1986) are:** Doon Valley Notification (1989), which prohibits the setting up of an industry in which the daily consumption of coal/fuel is more than 24 MT (million tonnes) per day in the Doon Valley. Coastal Regulation Zone Notification (1991), which regulates activities along coastal stretches. As per this notification, dumping ash or any other waste in the CRZ is prohibited. The thermal power plants (only foreshore facilities for transport of raw materials, facilities for intake of cooling water and outfall for discharge of treated waste water/cooling water) require clearance from the MoEF. Dhanu Taluka Notification (1991), under which the district of Dhanu Taluka has been declared an ecologically fragile region and setting up power plants in its vicinity is prohibited. Revdanda Creek Notification (1989), which prohibits setting up industries in the belt around the Revdanda Creek as per the rules laid down in the notification. The Environmental Impact Assessment of Development Projects Notification, (1994 and as amended in 1997). As per this notification: All projects listed under Schedule I require environmental clearance from the MoEF. Projects under the delicensed category of the new industrial policy also require clearance from the MoEF. All developmental projects whether or not under the schedule I, if located in fragile regions must obtain MoEF clearance. Industrial projects with investments above Rs 500 million must obtain MoEF clearance and are further required to obtain a LOI (Letter of Intent) from the Ministry of Industry and an NOC (No Objection Certificate) from the SPCB and the State Forest Department if the location involves forestland. Once the NOC is obtained, the LOI is converted into an industrial licence by the state authority. The notification also stipulated procedural requirements for the establishment and operation of new power plants. As per this notification, two-stage clearance for site-specific projects such as pithead thermal power plants and valley projects is required. Site clearance is given in the first stage and final environmental clearance in the second. A public hearing has been made mandatory for projects covered by this notification. This is an important step in providing transparency and a greater role to local communities. Ash Content Notification (1997), required the use of beneficiated coal with ash content not exceeding 34% with effect from June 2001, (the date later was extended to June 2002). This applies to all thermal plants located beyond one thousand kilometres from the pithead and any thermal plant located in an urban area or, sensitive area irrespective of the distance from the pithead except any pithead power plant. Taj Trapezium Notification (1998), provided that no power plant could be set up within the geographical limit of the Taj Trapezium assigned by the Taj Trapezium Zone Pollution (prevention and control) Authority. Disposal of Fly Ash Notification (1999) the main objective of which is to conserve the topsoil, protect the environment and prevent the dumping and disposal of fly ash discharged from lignite-based power plants. The salient feature of this notification is that no person

within a radius of 50 km from a coal-or lignite-based power plant shall manufacture clay bricks or tiles without mixing at least 25% of ash with soil on a weight-to-weight basis. For the thermal power plants the utilisation of the flyash would be as follows: Every coal-or lignite-based power plant shall make available ash for at least ten years from the date of publication of the above notification without any payment or any other consideration, for the purpose of manufacturing ash-based products such as cement, concrete blocks, bricks, panels or any other material or for construction of roads, embankments, dams, dykes or for any other construction activity. Every coal or lignite based thermal power plant commissioned subject to environmental clearance conditions stipulating the submission of an action plan for full utilization of fly ash shall, within a period of nine years from the publication of this notification, phase out the dumping and disposal of fly ash on land in accordance with the plan<sup>14</sup>.

**Penalty for contravention of the provisions of the act and the rules, orders and directions:** i. Whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued thereunder, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention, ii. If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to seven years.

**Offences by companies:** Where any offence under this Act has been committed by a company, every person who, at the time the offence was committed, was directly in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly<sup>15</sup>: Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence<sup>4</sup>.

Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

For the purpose of this section, i. “company” means anybody corporate and includes a firm or other association of individuals; ii. “director”, in relation to a firm, means a partner in the firm.

**Offences by Government Departments:** Where an offence under this Act has been committed by any Department of Government, the Head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly. Provided that nothing contained in this section shall render such Head of the Department liable to any punishment if he proves that the offence was committed without his knowledge or that he exercise all due diligence to prevent the commission of such offence.

Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a Department of Government and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the Head of the Department, such officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly<sup>5,16</sup>.

## Current Situation and Key Challenges

**Compliance Monitoring:** All polluting facilities are legally required to obtain from a respective SPCB a consent (permits) to establish (CTE) and a consent to operate (CTO). In accordance with a Notification issued by the MOEF in September 2006, certain new industrial projects/activities or those planning major notifications also require a Prior Environmental Clearance (from the CPCB for Category A or from an SPCB for Category B) based on an environmental impact assessment (EIA) report. Monitoring and inspection are a key function of SPCBs. The frequency of on-site visits to verify compliance is determined by the pollution potential (red/orange/green) and size (based on the value of capital investment) of the industry. According to the national Environmental (protection) Rules of 1986, each polluting facility must submit an environmental statement at the end of each financial year<sup>17</sup>. The area-based approach to environmental regulation has been tried in India since 1991 through different CPCB and SPCB programs. While pollution control boards may close an offending facility or order the withdrawal of its power or water supply, it may only impose penalties by filing cases under the Water and Air Acts and the EPA, which may include fines and/or imprisonment<sup>18</sup>. Pursuing cases through trial and appellate courts, however, has proven to be an ineffective enforcement response, since courts are overburdened, procedures are cumbersome, and resources of state boards are overstretched. To help industry achieve compliance, PCBs undertake a range of activities, including: i. organizing training and technical assistance; ii. developing industry-specific reports outlining problems, iii. compliance status and, iv. preventive/control options; disseminating the charter on corporate responsibility for environmental protection in the 17

categories of highly polluting industries, which seek voluntary compliance beyond the prescribed standards; and awareness campaigns.

Currently, economic instruments play a supplemental role in promoting environmental compliance in India. Principal economic instruments include rebate on the water cess, bank guarantees, subsidies for pollution control equipment, and other fiscal incentives<sup>19</sup>.

Over the last twenty years, the Supreme Court of India and some High Courts of the states have led the way in the enforcement of environmental laws through citizen-led public interest litigation (PIL) that has its legal basis in the constitutional right to a healthy environment<sup>20</sup>. Through this judicial activism, the courts have issued orders with specific implementation requirements that not only remedy the case at hand, but also set new policies and practices with widespread implications for the regulated community as well as regulatory agencies. This is evident from a plethora of cases starting from Ratlam Municipality Case, which provoked the consciousness of the judiciary to a problem which had not attracted much attention earlier. The Supreme Court responded with equal anxiety and raised the issue to come within the mandate of the Constitution<sup>6,21</sup>. Through these cases the courts have evolved the following doctrines for enforcing mandatory compliance of environmental regulations: i. Public Trust Doctrine: M.C.Mehta v. Kamal Nath, (1996) 1 SCC 38, MI Builders Pvt. Ltd. v. Radhey Shyam Sahu, AIR 1996 SC 2468, ii. Precautionary Principle: Vellore Citizens Welfare Forum v. UOI, AIR 1996 SC 2718, Narmada Bachao Andolan v. UOI, AIR 2000 SC 375, iii. Polluter Pays Principle: Vellore Citizens Welfare Forum v. UOI, AIR 1996 SC 2718, iv. Absolute Liability Principle: M. C. Mehta v. UOI, AIR 1987 SC 1086, Narmada Bacho Andolan v. UOI, AIR 2000 SC 375, v. Sustainable Development: M.C. Mehta v. UOI, AIR 1997 SC 734, State of Himachal Pradesh v. Ganesh Wood Products, AIR 1996 SC 149.

**Recommendations:** In India, environmental statute though impressive in range and coverage are more often observed in breach than practice. Environmental law enforcement, being a highly specialized area of implementation, entrusted to different agencies under different laws, presents a none-too-happy-a-picture. Lack or inadequacy of skill; less than satisfactory infrastructural facilities; poor and unimaginative understanding of the law; jurisdictional conflicts and lack of coordination, among different agencies of implementation, appear to contribute to poor and in effective implementation of the laws. Ability of some of the more resourceful industries in either camouflaging their violations and non-compliance and in exerting undue pressure on the enforcement agencies, also has contributed to the inefficiency of the enforcement apparatus<sup>22</sup>. The deterrent theory of punishment employed under strict and absolute liability principle has achieved some decree of success. Nevertheless, the search for better alternative principles of liability hardly needs an elaboration. Hence it is time to

harmonize the developmental activities with environment because development is also a very important aspect of life. For which the environmental regime has to be accounted and strengthened with more expert mechanism to deal with the longer spectrum of problems hither to unattended by the law. Primarily meant as guiding principle for the administrative process to prevent adverse effects on the environment, the precautionary approach warrants formulation of expert environmental agencies at the initial decision making as well as at the appellate and reviewing levels<sup>7</sup>. Such a step will be undoubtedly a leap forwards towards sustainable development and augmentation of a strong environmental regime<sup>23</sup>.

In view of the involvement of complex scientific and specialized issues relating to environment, there is a need to have separate 'Environment Courts' manned only by the persons having judicial or legal experience and assisted by persons having scientific qualification and experience in the field of environment. In order to achieve the objectives of accessible, quick and speedy justice, these 'Environment Courts' should be established and constituted by the Union Government in each State. However, in case of smaller States and Union Territories, one court for more than one State or Union Territory may serve the purpose. Establishing a system of administrative fines and streamline the system of criminal fine, overcoming legal limitations on using self-monitoring information as evidence in court or other proceedings, establishing and disseminating comprehensive standard compliance monitoring and enforcement policies and procedures, and develop and deliver related training programs, increase the emphasis on compliance monitoring and enforcement and prioritize inspection efforts based on environmental risk, establishing a public information disclosure program and creating performance management systems and nationwide performance indicators also will help to overcome the current difficulties faced in compliance management of environmental regulations.

A dichotomy exists in our society - we tend to keep our homes clean but have no compunction in throwing the garbage out, because there is someone paid to clean it up. This contrasts with the situation in advanced countries where littering, spitting and using public places as toilets are frowned upon. While we tend to imitate those countries in various ways, we have not taken such good points for adoption. Awareness of the environmental issues is minimal in the community. The politicians largely give a go-by to environmental issues because they are more concerned about losing people's votes. Huge trees are uprooted to make way for new highways. Lovely trees are cut to lay a foundation for a highrise building with no tears shed for their loss. Environmental issues, thus, have no takers. It is the lone voice of Sunderlal Bahuguna or Medha Patkar which is heard in protest against destructive environmental policies of the state. Schools have failed to inculcate in the students a deep love and attachment to Nature. No wonder they grow up without any concern for the environment which asks little but gives plenty in

return. Rapid receding of the Gangotri glacier, the source of the holy Bhagirathi, in recent times has brought the issue of global warming nearer home. Environmental issues are thus real, not scary sci-fi to be read leisurely<sup>24</sup>.

## Conclusion

India - the land of spirituality and philosophy-is also the land of rivers as it harbors 14 large, 44 medium, and 55 minor rivers. From the Ganges in the north to the Cauvery in the south, most devout Hindu pilgrims consider the waterways sacred since the religious texts hold that Ganges purifies the bather of sins - merely catching the sight of Narmada is said to do the same. However, India's rivers are increasingly becoming the dump sites for domestic, industrial, and agricultural wastes. Polluted environment endangers the human race by threatening its survival on planet earth. Boundaries of any nation can not limit these environmental problems to a particular country and region, but its impact is global one. This large scale environmental degradation has caused a global concern about the conservation and protection of the earth's environment. Hence, efforts are being made for inculcating environmental consciousness or awareness among the masses. It is education which can make the human being conscious and knowledgeable about environment and environmental problems. The existing principles, laws, case law, regulations, standards, resolutions and so on, already constitute a vast and complicated apparatus of paper and of powers conferred upon certain bodies or persons. When it is considered that the existing law is, however, also seemingly quite inadequate to the problem and that much more may be needed, one is bound to ask questions about how much of the India's resources, wealth, energy and intellect is to be spent on this task of regulation and control. Pollution resulting from an excess of the complication and sheer number of laws, regulations and officials is by no means the least of the threats to our living environment. Another matter of concern is the need to keep laws and regulations in this area reasonably flexible and open when necessary to changes of direction. Good laws on the environment are driven, or should be driven, by the lessons to be learned from the natural sciences and from technology. But scientists are not by any means always in agreement. It is reasonable to assume, moreover, that the enormous sums spent upon further scientific and technological research imply that the scene of scientific 'fact' is liable to change importantly and even suddenly; for, if not, it is difficult to see what this expensive endeavour is about. Awareness of environmental laws in society plays a vital role in prevention and control of pollution in industrial as well as at community levels. Moreover, awareness is essential for the action.

## Acknowledgements

The corresponding author, Buddolla Viswanath is thankful to Department of Science and Technology (DST), Govt. of India for awarding Fast Track Young Scientist Scheme (SR/FT/LS-144/2010) for the project entitled "Environmental geochemistry,

human *in vitro* bioaccessibility and ecosystem health effects of scarce, technologically important metals (STIM)".

## References

1. Govindasamy A., India's Pollution Nightmare: Can It Be Tackled?, *Environ. Sci. Technol.*, **46**, 1305–1306 (2012)
2. Bajaj R., CITES and the wildlife trade in India, New Delhi: Centre for Environmental Law, WWF – India, 182 (1996)
3. Divan S. and Rosencranz A., Environmental law and policy in India, cases, materials and status, 2<sup>nd</sup> edition, New York, Oxford University Press (2001)
4. Geetanjoy S., Implications of Indian Supreme Court's Innovations for Environmental Jurisprudence, *Law, Environment and Development Journal*, **4(1)**, 1–19 (2008)
5. Government of India (Department of Science and Technology), Report of the (Tiwari) Committee for Recommending Administrative Measures and Legislative Machinery for Ensuring Environmental Protection, New Delhi (1980)
6. Milind K. and Gurumurthy R., The Causes and Consequences of Particulate Air Pollution in Urban India: A Synthesis of the Science, *Annual Review of Energy and the Environment*, **25**, 629–684 (2000)
7. National Institute of Public Finance and Policy, Report of the Task Force to Evaluate Market Based Instruments for Industrial Pollution Abatement, National Institute of Public Finance and Policy, New Delhi (1997)
8. Padia R.G., Global Concern for Environmental Hazards and Remedial Measures', *In: R.B. Singh and S. Misra (eds.) Environmental Law in India Issues and Responses*, Concept Publishing House, New Delhi (1996)
9. Das, R.C., Baral J.K., Sahu N.C. and Misra M.K., The Environmental Divide - The Dilemma of Developing Countries (1998)
10. Environmental Law; S.C. Shastri; II Edition; Edition; Eastern Book Company (2005)
11. Soli J., Sorabjee (Ed), Law and Justice –An anthology, Universal Law Publishing Company, New Delhi, 345 (2003)
12. Environmental Protection Law and Policy in India; Kailash Thakur; Edition; Deep and Deep Publication Pvt. Ltd (2007)
13. Environmental Law and Policy in India; II Edition; cases, materials and statutes; Shyam Divan Arnim Rosencrantz; Oxford India
14. Forest Laws, Wildlife Law and the Environment; Sanjay Upadhyay, Videh Upadhyay; Edition; Lexis Nexis Butterworths (2002)
15. Geetanjoy Sahu. "Implications of Indian Supreme Court's Innovations for Environmental Jurisprudence", *Law, Environment and Development Journal* **4(1)**, 1–19 (2008)
16. Rathinam and Raja, "Economic Efficiency of Public Interest Litigations (PIL): Lessons from India" (2008)
17. Chauhan and Chauhan. "Ecological Destruction vis-à-vis Environmental Jurisprudence in India: A Survey". *J. Hum Ecol* **27 (3)**, 207–216 (2009)
18. Alexander Fischer, "Which Road to Social Revolution? Liberalization and Constitutional Reform in India". South Asia Institute, University of Heidelberg (2007)
19. "India's Forests", Ministry of Environment and Forests, Government of India (2009)
20. Indira Gandhi Conservation Monitoring Centre (IGCMC), New Delhi and the United Nations Environmental Program (UNEP), World Conservation Monitoring Center, Cambridge, UK. Biodiversity profile for India (2001)
21. "National Forest Commission Report, Chapters 1-8". Ministry of Environment and Forests, Government of India (2006)
22. "India's Forests: Forest Policy and Legislative Framework, Chapter 3-5", Ministry of Environment and Forests (2009)
23. Environmental Issues, Law and Technology - An Indian Perspective. Ramesha Chandrappa and Ravi D.R., Research India Publication, Delhi, ISBN 978-81-904362-5-0 (2009)
24. Milind Kandlikar, Gurumurthy Ramachandran, "2000: India: The Causes and Consequences of Particulate Air Pollution in Urban India: A Synthesis of the Science", *Annual Review of Energy and the Environment*, **25**, 629–684 (2000)