“What, O Earth, I dig out of thee
quickly shall that grow again
May I not, O pure one,
pierce thy vital spot
or thy heart.”

-Atharva Veda (Prithvi Sukta, Chapter 12)
INTRODUCTION

The World Environment Movement has no sharp beginning. It is reported that the real concern for the quality of the environment first reached a conscious, rational and coherent form probably during the second half of the 19th century. In western Europe, then in the United States of America, the first phase of the Industrial Revolution has resulted in crowding, misery, accumulation of filth, appalling living and working conditions, high rates of morbidity and ugliness in all the mushrooming industrial cities. With a view to prevent further deterioration in the social structure of the society, the social responses took many forms, one of the most vigorous and original being a systematic effort to correct the evils of physical environment. Pure water, pure air and pure food was the motto around which the campaign for environmental reform was initially organized in many European countries and later in the US.

Today problem are entirely different, far more intractable. The exhaustion of natural resources and erosion of the land, the chemical pollution of air and water, the high levels of noise, light and other stimuli, the pervasive ugliness of industrial civilization, the in escapable pressures resulting from population explosion - too many people and too much pollution and mechanized life, all these phenomena have become critical only during the recent decades. While our ancestors approached these problems through a creative philosophy of the environment, the present generation is faced with situation requiring immediate action.

The first UN Conference on the Human Environment held at Stockholm, Sweden, in 1972 aroused global consciousness on the need for subjecting all developmental activities to well defined ecological ground rules. It also brought home the point that so long as widespread poverty persists, there will be no hope for achieving harmony between human kind and nature. It made 109 recommendations w.r.t. ‘Action Plan for Human Environment’ and adopted 26 principles w.r.t. ‘Declaration on Human Environment’. This
International Conference attended by representatives from 113 countries and 400 NGOs delineated some important principles for international community, which include:

(i) States have sovereign rights to exploit their own resources and pursue their own environmental policies;

(ii) States are responsible to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states, and

(iii) International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit.

The Rio Summit was no less significant than the 1972 Stockholm Conference, held in 1992, was concerned with balancing environmental concerns and economic development. This Earth Summit was attended by 166 countries with about 3,500 delegates. It produced following five documents signed by heads of participated states. These are:

(i) **The Rio Declaration**

This ‘Earth Charter’, a statement of environmental principles for national behaviors insisted that a balance be established between environmental principles and those relating to development. Although the resultant compromise declaration is less inspiring and coherent than its original proponents had hoped, its 27 principles include key elements of the political agendas of both industrialized and developing countries. Principles in the document include a state’s sovereign rights to exploit its other resources in accordance with its own policies, without harming the environment elsewhere (principle 2); the right to development (principle 3); environmental protection as an integral part of development (principle 4); sustainable development that requires reducing unsustainable patterns of production and consumption, and that promotes appropriate demographic policies (principle 8); access to
information and citizen participation (principle 10); the precautionary principle (principle 15); the polluter pays principle, including the internalization of cost and the use of economic instruments (principle 16).

The strongest U.S. objection was to principle 23, which called for protection of the environmental and natural resources of “people under oppression, domination and occupation”. In a late compromise involving the US, Israel and the Arab states, this phrase was retained in the declaration but all references to people under occupation were removed from Agenda 21. The US accommodated its other objections by issuing a statement of its reservations to several principles, including the right to development, which it said could be used to justify human rights violations and the principle of “differentiated responsibilities”.

(ii) Convention on Climate Change

Because of UNCED’s political prominence, many other international environmental debates were merged into the process, such as those of conventions on climate change and biodiversity, which were not negotiated at UNCED or in the preparatory committee meetings but was signed in Rio following separate negotiations. However, even after five negotiating sessions, discussion stalled between the US and other industrial countries, particularly the European community, which asserted that the convention should contain specific commitment to limit emissions of carbon dioxide to 1990 levels by 2000. However, a compromise document that requires, industrialized countries to develop national emission limits and emission inventories was signed in Rio with strong objective “stabilization of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system ...... within a time frame sufficient to allow ecosystem to adopt naturally.”

The convention established a financial assistance mechanism to support its implementation in developing countries, to be administered by the Global
Environmental facility on an interim basis. It also instituted mechanism for periodic review and an update of commitments, including the scheduling of regular conferences.

(iii) Convention on Biodiversity

This treaty has three goals: the conservation and sustainable use of biological diversity and fair sharing of product made from gene stocks. To advance these goals, the signatories must develop plans for protecting habitat and species; provide funds and technology to help developing countries provide protection, ensure commercial access to biological resources for development and share revenues fairly among source countries and developers; and establish safety regulations and accept liability for risks associated with biotechnology development.

These negotiations were plagued by conflict over the financial mechanism, the sharing benefits and biotechnology regulation. France originally threatened not to sign the treaty because it did not include a list of global biodiversity - rich nations, Japan threatened not to sign because it feared biotechnology regulation. At last moment the United States refused to sign because it feared that financial mechanism represented an open - ended commitment with insufficient oversight and control; that the benefit sharing provisions were incompatible with existing international regimes for intellectual property rights, and that the requirement to regulate the biotechnology industry be stifle innovation.

(iv) Forest Principles

The UN Food and Agriculture Organisation had discussed for a forest treaty before the UNCED and recommended in November, 1990 that a treaty be concluded in time for UNCED but the possibility of a forest treaty was inhibited by strong differences between industrialized countries, which wanted
a treaty focusing on tropical rain forests and developing countries, which insisted on the inclusion of temperate forests.

(V) Agenda 21

It is the only document signed at UNCED that attempts to embrace the entire environment and development agenda. It is also the largest product of UNCED, comprising 40 chapters and 800 pages. Each chapter contains a description of a programme and its cost estimate. Agenda 21 is not a legally binding document but a ‘work plan’ or ‘agenda for action’, with a political commitment to pursue a set of goals.

Speaking at the closing plenary, Maurice Strong said, “People may criticize, they may be cynical, they may say that what we are asking is unrealistic, but they have to talk today about the problems of the developing countries, about poverty, about inequality, about terms of trade, about flows of resources to developing countries. Today you cannot talk about environment without putting all these issues into equation”. The Earth Summit was not an end in itself. It should be rather looked as the beginning of a long process to be unfolded through the efforts and battles of development actors.

Basically, the pattern of development plays the key role in determining the environmental problems in developed and developing countries. In developed countries, the problems have emerged due to the advanced scientific and technological development but the lack of development determines the environmental problems in developing countries. The Royal Commission on Environmental Pollution in its first report in 1971 has pointed out that, ‘the problem we face is how to strike a balance between the benefits of a rising of standard of living and its costs in terms of deterioration of the physical environment and the quality of life. In the past, the danger of polluting air, water and land was not fully recognized, but now there is no doubt that it is a matter of great concern.
'Environmental pollution' is the presence of any environmental pollutant, defined as any solid, liquid, gaseous substance present in such concentration may be, or may tend to be, injurious to the environment. There is an increasing trend in environmental pollution. The industrial revolution and modern civilization turn the breathing air into a waste basket in which dust, noxious fumes, toxic gases, mist, odour and smoke are thrown. Ambient air quality trends in major Indian cities indicate that levels of suspended particulate matter is higher than the prescribed standard.

Water pollution is a serious problem ever since sewage and industrial effluents are being disposed off into the rivers. Water is polluted by four kinds of substances: traditional organic waste, waste generated from the industrial process, chemical agents for fertilizers and pesticides for crop protection and silt from degraded catchments. While it is estimated that three fourths by volume of the waste water generated is from municipal sources, industrial waste water though small in volume contributes over one half of the total inanimate pollutant load and the major portion of this comes from large and medium industries. For class I cities of India, less than five percent of the total waste water generated is collected and less than one fourth of this is treated.

Apart from water and air pollution, attention should also be given to the pollution caused by noise. Increased industrial operations, vehicular and air traffic with modern day to day activities contribute much to noise pollution.

In brief, population density and per capita gross national product which is generally a result of industrialization are considered to be the general indicators of pollution sources. When any country moves towards higher levels in these two aspects, it is likely to under go environmental deterioration.

It has been considered that law is a good potential tool to harmonize development and environmental protection. The aim of all the environmental laws is of two types: First, to maintain a balance between development and environment and Second, to improve environmental quality. In the aftermath of
Stockholm conference, it has been realised that clean environment is one of the basic need of the society. In the post-Stockholm period, several statutory and constitutional measures have been taken in India to control water, air, land and noise pollution.

The Indian Parliament passed the 42\textsuperscript{nd} Constitutional Amendment Act whereby specific provisions for environment protection were inserted in the form of Fundamental Duties And Directive Principles of State Policy. Article 48 (A) (g) imposes a constitutional obligation on the state to protect and improve the environment and safeguard the forests and wildlife of the country. Article 51 (A) (g) imposes a constitutional obligation on the citizens of India to protect and improve the natural environment, including forests, lakes, rivers and wildlife and to have compassion for all living creatures. Indeed, it would be no exaggeration to comment that Article (48) (A) and 51 (A) (g) laid down the foundation for sustainable development by outlining a blueprint of social and economic betterment and by providing guidelines for protection and improvement of environment.

Not only that, prominent environmental laws viz., the Water Act (1974), the Air Act (1981) and the Environment Protection Act (1986) were also enacted in pursuance of the powers conferred by Article 253 of the constitution, mainly to implement the decisions taken at Stockholm Conference in 1972. The Air Act (1981) in its preamble clearly mentions that this act was enacted to implement the decisions reached at the Stockholm Conference in so far they relate to the preservation of quality of air and control of air pollution.

Till today, EPA (1986) remains India’s most significant and comprehensive environmental legislation, enacted to enable coordination of activities of various national authorities concerned with environmental protection and preservation. Moving beyond the Water and Air Acts, EPA stresses both monetary sanction and provision for punishments including imprisonment for any violation of the act.
The Water (Prevention and Control of Pollution) Act of 1974 was the culmination of over a decade of discussion and deliberation between the centre and the states. The act vests regulatory authority in state boards and empowers them boards to establish and enforce effluent standards for factories discharging pollutants into bodies of water. A central board performs the same functions for union territories and coordinates activities among the states. The boards control sewage and industrial effluent discharges by approving, rejecting or conditioning application for consent to discharge. The state boards also minimize water pollution by advising state governments on appropriate sites for new industries.

Prior to its amendment in 1988, enforcement under the Water Act was achieved through criminal prosecution initiated by the boards and through applications to magistrates for injunctions to restrain polluters. The 1988 amendment strengthened the act’s implementation provisions. Now, a board may close a defaulting industrial plant or withdraw its supply of power or water by an administrative order; the penalties are more stringent; and a citizen’s initiative provision bolsters the enforcement machinery. The amendments introduced in Gujarat in 1988 have not been adopted by a resolution of the legislature under Article 252. As a result the 1988 amendments do not apply to that state.

The framework of the Air (Prevention and Control act of Pollution) Act of 1981 is similar to the one created by its predecessor, the Water Act of 1974. To enable an integrated approach to environmental problems, the Air Act expanded the authority of the Central and State boards established under the Water Act, to include air pollution control. States not having water pollution boards were required to set up air pollution boards.

Under the Act, all industries operating within designated air pollution control areas must obtain a consent from the State Boards. The states are required to prescribe emission standards for industry and automobiles after consulting the Central Board and noting its ambient air quality standards.
Prior to its amendment in 1987, the Air Act was enforced through mild court-administered penalties on violators. The 1987 amendment strengthened the enforcement machinery and introduced stiffer penalties. Now, the boards may close down a defaulting industrial plant or may stop its supply of electricity or water. A board may also apply to court to restrain emissions that exceed prescribed standards. Notably, the 1987 amendment introduced a citizen’s initiative provision into the Air Act and extended the act to include noise pollution.

For every problem, ‘there ought to be law’ is a cry frequently heard from people. But putting a law on the statute book does not necessarily mean putting it into effect. The laws are only a preliminary stage and its effectiveness depends on its enforcement.

Although a series of laws have been passed regarding protection of environment but Tiwari Committee Report commented that most of these laws lack provisions for helping the enforcement machinery because of their outdatedness, mutual inconsistencies and inefficacy.

How the purpose of environmental laws is translated into action explains the need for enforcement machinery. For this purpose to be achieved, however, the organizational aspect of enforcing environmental laws must be focused.

*The problem of enforcement has two dimensions:*

(i) *Inadequacy of law*

Many laws having provision for environment protection has been enacted but many of these laws are outdated and have no relevance with the present enforcement machinery. Only few major acts like Water Act, Air Act Environment Protection Act and Water Cess Act are relevant in this respect. A close study of these Acts too reveals that they lack adequate provisions for helping the enforcement machinery. There is no procedure for reviewing the efficacy of the law. More so, most of these laws are inconsistent. For example,
the legislature made stringent laws to protect the pollution but section 24(2) of Environment Protection Act, 1988, diluted the position. From legislation point of view, there are some lacunas also which hinder the proper enforcement. For example, Acts have been passed to control the air and water pollution, but they have lost their significance in the absence of similar provisions made for the control of noise pollution. One of the main defects of Water Act itself is that it is not uniformly adopted. This Act is criticized on the ground of its approach regarding 60 days notice which gives a longtime to the offender to escape liability under the Act. Yet another loophole of EPA is undue centralization of powers. Even the authorities constituted to enforce it are subject to the supervision and control of Central Government.

(ii) Inadequacy of Enforcement Machinery

A preliminary enquiry shows that many of the officers of the Pollution Control Boards and Ministry entrusted with the formulation and administration of the environmental laws have neither the necessary experience nor the expertise warranted for the purpose. A proposal to establish a National Environment Protection Authority (NEPA) was mooted in way back 1987 with various such-groups, like an environmental impact assessment group, environmental courts, and interim relief cell and a standards and enforcement division. The function of this agency would be to monitor enforcement of various environmental protection laws and to serve as a coordinating body on environmental protection taken or proposed to be taken by various State Governments. However, till today, such as comprehensive agency has not been established in India. There is no coordination between the different controlling agencies.

The Central Pollution Control Board is entrusted with the task of laying down standards, harmonising the activities of its counterparts (SPCBs) in the states but a close analysis shows that the State Boards did all the “dirty work” and the Central Board did nothing but to load over them.
The constitution of the agency is such that vested interest creeps into it. The officers of these agencies are prone to corruption. When it comes to a question of taking an enforcement decision against the interest of the Government, the Boards are not able to function effectively and independently. This is so because the members, being nominated by the Governments can be disqualified and can also be removed from the office. To encapsulate, the Boards are not free from external influence in the exercise of their powers and functions.

An in depth analysis of the organization, functions and powers of statutory and administrative agencies reveals that they are ill-suited to ensure adoption of adequate pollution control measures. It is a well-known adage that a liberal law that is strictly enforced is better than a loosely enforced strict law. As a result, enforcement remains the crux of the problem.

This study traces the history of environment movement and explains the politics involved in protection of various facets of environment which are clearly manifested at various international forums and summits. Not only internationally, but nationally too, the situation is not different. The basic objective of protecting and preserving environment is plagued by politics with its various dimensions. An attempt has been made here by zeroing down the focus to the study of enforcement machinery in this field to find out their efficacy, strength and weakness and suggest the remedies.

This study covers various aspects of the enforcement machinery such as organization, powers and functions of both legislative and administrative bodies involved in the enforcement. Different levels of enforcement which the machinery adopts will also be highlighted, since the aim of all kinds of laws and their enforcement is to abate pollution. It becomes all the more important to throw light on the existing laws, state of environment and dimension of the problem. Actual functioning of the machinery, legislative and administrative, will be discussed with the help of both primary and secondary sources. A purposive sampling of cases has also been incorporated to see in
depth the actual functions of enforcement machinery, particularly the Central Pollution Control Board.

Certain constitutional and statutory mechanisms which help tremendously in the enforcement and conceptual aspect of enforcement will be discussed in brief. The proposed study will also cover in its gambit the reasons which make the enforcement difficulties such as lack of resources, lack of will to enforce, in availability of the sampling equipments and lack of coordination between different bodies of the machinery. A discussion will also be there relating to prosecutions, penalties at funds etc.