



COURSE 2: LAW AND POLICIES PERTAINING TO ENVIRONMENT

Block 1 : Environmental Laws and Policies

Unit 1	: Concept of Law and Policy	3
Unit 2	: Environmental Law and the Indian Constitution	15
Unit 3	: Major Laws and Environment	36



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UNIT 1

CONCEPT OF LAW AND POLICY

Contents	Page No.
1. Introduction	3
2. Concept of Law	4
3. Concept of Policy	7
4. An Introduction to Environmental Law	9
5. Conclusion	12
6. References and Recommended Readings	14

1. Introduction

The Preamble of the United Nations Declaration on Human Environment, adopted in Stockholm in June 1972 states, “*Man is both creature and moulder of his environment, which gives him physical substance and affords him the opportunity for intellectual, moral, social and spiritual growth...Both aspects of man’s environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights the right to life itself*”.

The term Environment may be perceived in different connotations. Generally speaking, Environment includes the external conditions, resources, stimuli etc. with which an organism interacts. In general terms, environment is a set of external conditions, especially those which affecting a particular activity that are influencing the lives and activities of living things.

Environment is a term most commonly used to describe the *Natural Environment*. A natural environment refers to the totality of all the external conditions affecting the life, development and survival of living organisms. Its definition encompass -

- 1) All living and non-living things occurring naturally on Earth or some region thereof.
- 2) Interaction between all living things and between living and naturally occurring non-living things.

What constitutes a natural environment?

- ♣ **Ecological Units:** E.g. soil, rocks, the vegetation and flora, fauna, humans and all other forms of life like microorganisms, etc.
- ♣ **Natural Phenomenon:** E.g. *Ecological phenomenon* like decomposition, decay, climate change, etc.; *Meteorological phenomenon* like weather patterns, hurricane, tornados, etc.; and *geographical phenomenon* like volcanoes, earthquakes, tsunami, etc.
- ♣ **Natural Resources:** Universal physical phenomena lacking clear-cut boundaries, such as Air, Water, Climate, Energy, Radiation, etc. that does not originate from human activity.

Sec 2 (a) of the Environmental (Protection) Act, 1986, defines environment as -

Unless the context otherwise requires -

“Environment” includes water, air and land and the inter- relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

The environment is clearly at risk from a variety of sources of harm, mostly of human origin. In order to tackle this problem it is important that we develop strategies for modifying human behaviour towards environmentally benign practices and away from environmentally damaging ones. In very broad terms, techniques for modifying human behaviour can be thought of as falling into two types: **incentives and disincentives**. Law is important as it creates a framework within which incentives and disincentives can operate.

Law is all pervasive. Other methods for influencing human behaviour are to a certain extent, voluntary or optional. Education, ethics, peer and family pressure: these all apply in various degrees. Law, on the other hand, cannot easily be avoided. It is axiomatic to the “rule of law” that law in a society applies equally to everyone at all times.

Modern Environmental law as a distinct system arose in the 1960s in the major industrial economies. It is fast becoming an important and specialised branch of law. Many of its doctrines are gradually becoming clear. The provisions in the old Indian law, which have a bearing on the environment, have hardly been used in the past. The consciousness to protect the environment was not as strong then, as it is today. Unless there was awareness on the part of the people to approach the authorities neither the government nor the courts would have had the opportunity to make use of the statutory provisions.

2. Concept of Law

Law has been described as ‘generally...a way of regulating human behavior’¹. Yet such simple formulations leave many issues unresolved. Hence, there is a need to closely consider the concept of “law”.

♣ *Law as Commands*

One school of thought² is that the only thing that count as ‘laws’ are commands of a sovereign, backed up by sanctions in the event of disobedience. A sovereign, for Austin, is an individual or body that is clearly identifiable, habitually obeyed by society, and is not habitually obedient to any other superior.

One problem with the command concept of law is that it doesn’t fit very readily with laws that merely empower or permit one to do something. It fails adequately to separate legal coercion from non-legal coercion.

♣ *Law as Rules*

Problems with ‘command’ theories of law led to the development of “rule” theories of law. Hart (1961), the most eminent rule theorists, divided legal rules into primary rules

¹ Mc Eldowney and Mc Eldowney 1996, Volume. 3

² Hobbes 1996, orig. 1651; Bentham 1891, orig. 1776; Austin 1954, orig. 1832

and secondary rules. Primary rules have substantive content (e.g. it is an offence to pollute a watercourse). Secondary rules are rules about primary rules. It is the possession of both primary and secondary rules which according to Hart, demarcates a legal system from other institutions for social control. This implies, incidentally, that less formal systems of social conventions and rules as much as those possessed by certain indigenous peoples may not achieve the status of 'legal system'.

The rule model of law faces certain problems. First, what should courts do if the law does not contain a rule governing a particular case or if the rule seems vague? Hart's answer is that laws, whilst generally comprehensive and clear, there may be situations where the judges must exercise discretion. This would imply that we must accept that judges actually make law where the legislature has been unclear or left a gap. The discretion explanation itself however is subject to criticism. Second, it is not certain that any clear rules exist. Some rules are made not by the legislature but by the judges. In the case of judge-made rules (precedents) the scope of any given rule is often unclear.

♣ *Laws as Principles*

Not everyone agrees that law consists of a body of clear rules surrounded by a woolly mantle of judicial discretion. Dworkin (1977), for one, famously argued that law also contains principles and does not contain discretion. He distinguished rules and principles as follows. He said that rules apply in an "all or nothing" fashion (e.g. river pollution is forbidden) whereas principles have the quality of 'weight'; that is to say, a principle is never absolute and is always subject to being balanced with and against other principles. An example of a principle might be 'a polluter shall pay for environment damage caused'.

Unlike Hart, Dworkin denied that judges have discretion when faced with unclear or seemingly unjust cases. Instead he asserted that, in such hard cases, judges should reach a solution based on the principles of their particular legal system. Principles which can be found in most legal systems include – proportionality, non-discrimination, natural justice, and equitable principles

The idea that law contains legal principles is not unproblematic³. One issue is whilst Dworkin characterises principles as having 'weight', he never explains how this 'weight' is to be ascertained. It is not clear that Dworkin's characterisation of rules as absolute is correct; it may be that where rules appear to conflict they can also be 'weighted' against one another. If that is the case then the distinction between the two types of law collapses and the need for principles disappears. A third problem is that of identification. Protocols exist for identifying legal rules; the same does not appear to be true of legal principles.

♣ *Law as Ethics or Morality*

The argument that there is some degree of necessary connection between law and morality (or ethics) is generally known as natural law theory⁴. More specifically, natural law is the idea that law must have a certain reasonable moral content in order to be called law at all. Part of the importance of natural law thinking is that it can be used to undermine unethical legislation and defeat attempts to justify morally repugnant acts (e.g. genocide) by appeal to the claims of 'only following the law'. Human rights law which is driven by

³ Toubes Muniz 1997; Alexander and Kress 1997

⁴ Aquinas 1991; Finnis 1980

natural law theories is of increasing importance in environmental protection⁵. The recent development of the field of 'environmental ethics' raises the question of a role for natural law in promoting or protecting basic ethical values in nature.

Natural law theory is subject to certain criticisms. Most obvious is the difficulty of ascertaining or reaching agreement on, those ethical principles and values that should inform or limit law's content.

♣ *Law as Social Norm and Customs*

The western concept of law is not shared universally. In particular, many indigenous peoples exist within less formalised systems of law in which the boundary between social norms and 'legal' rules is blurred or non-existent⁶. Laws based on local custom—'customary law'—continue to be of considerable practical importance in many developing countries, especially in Africa. Individuals often rely on customary rights to protect their environment, and their own homes, from the threat of development. Many important concepts existing within one legal culture may be absent, or present only in altered form, in others. Sometimes law cannot replace the social functions of tradition and custom.

Attitudes and behaviours formed from thousands of years of custom and tradition can be almost impossible for law alone to alter. The practice in China and Hong Kong of eating wild animals, often exotic and/or endangered species has been little affected by laws rendering such practices illegal. Furthermore, the use of wild animal parts in medicinal preparations in these countries is not considered to be morally wrong.

♣ *Laws as Written Documents*

It is assumed in the modern western society that laws must exist in a written form. This stems, historically, from the need for dissemination of laws. It also acts as a safeguard against corruption or mischievous interpretation. The requirement is met in modern times, by the publication of statutes, or, in civil law countries, 'codification' of the whole environmental law. In recent times access to environmental legislation – at international, regional and domestic levels – has been significantly improved by creation of numerous Internet sites which facilitate access.

The desirability of setting laws in written form led to an increase in written reports of courts' judgment. In addition to the traditional medium of the printed page, decided cases are increasingly disseminated via electronic media such as CD ROMs and the Internet.

♣ *Law Distinguished from Policy*

An important distinction in the concept of law is the one between law and policies. Government circulars, strategies or advice documents cannot substitute for the hard-edged character of legislation which is necessary so that 'individuals are in a position of legislation which is necessary so that 'individuals are in a position to know their rights in order to rely upon them where appropriate'. Two factors distinguish law from policy. First, policy is generally advisory in nature, recommending objectives or setting targets, rather than prescribing particular actions. Second, policy may derive from any number of institutional processes whereas law must pass strict secondary rules of recognition before

⁵ Boyle and Anderson 1996

⁶ Stavenhagen 1990

it has legal quality. The 'relegation' of some instrument to the field of policy rather than law does not exclude it from legal importance. Failure to take relevant policies into account or, conversely, consideration of irrelevant policies may invalidate decisions of public bodies.

Not surprisingly, disputes not infrequently arise concerning the relevance, hence permissibility, of environmental policies taken into account by public authorities. Sometimes environmental policies must be taken into account. For instance, in UK development control law, governing advice about development controls, issued in the form of Planning Policy Guidance (PPG) notes, must be taken into consideration in the determination of applications for planning permission.⁷

3. Concept of Policy

According to a dictionary definition, policy is "any course of action followed primarily because it is expedient or advantages in a material sense". When put into a political theme, policy can be described as a 'Public Policy'. Public Policy is a concept (usually in a written document), whereby the government or a political party will determine decisions, actions and other matters that will prove advantages to society in general.

Generally speaking, a policy can be considered as a "Statement of Intent" or a "Commitment". For that reason at least, the decision-makers can be held accountable for their "Policy". Another possible way to look at policies, particularly the governments, is to think of them as the principle (be it values, interests and resources) that underlines the actions that will take place to solve public issues. This may be administered through state or federal action such as legislation, regulations and administrative practices.

Policy is an instrument in form of a principle or rule to guide decisions and achieve rational outcome on a particular issue. The term is not normally used to denote what is actually done, this is normally referred to as either procedure or protocol. Whereas a policy will contain the 'what' and the 'why', procedures or protocols contain the 'what', the 'how', the 'where', and the 'when'. Policies are generally adopted by the Board of or senior governance body within an organisation where as procedures or protocols would be developed and adopted by senior executive officers. Policies can assist in both **subjective** and **objective** decision making.

The starting point for anyone who is producing policies is to realise that there needn't always be consistency in them. This is mainly because the values of society are continuously changing, and policies being the representation of society's preferences and ideals, must change with them. It is at this broad level that policy becomes a complex interplay of "social and economic decisions, prevailing ideas, institutions and individuals, technical and analytical procedures, and general theories about the way policy is made".⁸ All of these factors when taken into account will determine how the new policy will affect the following⁹:

- ♣ Private Citizens
- ♣ Companies

⁷ Moore 1987, 176

⁸ Davis, G, Wanna, J, "Public Policy in Australia", Allen & Unwin, 1993

⁹ MacDonald, A.M, "Chambers Dictionary", T&A Constable Ltd. Edinburgh, 1980

- ♣ Corporations
- ♣ Associations

There is no right or wrong policy. But the foremost will be one that addresses the masses, and reflects their social values.

Considering that public policy is an action taken by the government that ultimately affects the public, it has been recognised that even when an area of activity is left in private hands, the very act of it being left alone can be viewed as a deliberate policy of the authorities. This could possibly be because the general societies needs did not need to be altered, or because the body that the activity was delegated to will make the necessary changes in the place of the government; possibly because they understand social issues better because of their standing within society, for example local councils¹⁰.

Many factors influence why a policy is created. Lobby groups, political parties, single issue coalitions, industrial councils, unions and pressure groups play a very active role in this, mainly because their vast size through social support which allows them to contest issues. For a government not to listen and then act on their requests would almost mean certain suicide. This is especially true around election time, when the government also makes a lot of policies that will be looked upon favourable by the voters, and thus help the government in their plight to be re-elected. But it must also be acknowledged, that not all large groups such as unions, are given whatever they want (as we saw with the transport union earlier on this year during the Grand Prix) especially if it will be a burden to the rest of society.

In general, the purpose of government is to add value to the lives of the people it serves, and through good policy making, this can be achieved. Policies should express and embody society's needs and values, and this is achieved through the comprehensive use of politics involving cooperation from groups outside the government body¹¹.

Policy addresses the intent of the organisation, whether government, business, professional, or voluntary. Policy is intended to affect the 'real' world, by guiding the decisions that are made. Whether they are formally written or not, most organisations have identified policies. Policies may be classified in many different ways ranging from determinial policies to regulatory policies to distributive policies to constitutive policies.

Environmental policy is any action deliberately taken/ or not taken, to manage human activities with a view to prevent, reduce, or mitigate harmful effects on nature and natural resources, and ensuring that man-made changes to the environment do not have harmful effects on humans. These instruments are tools used by governments to implement their environmental policies. Governments may use a number of different types of instruments. For example, economic incentives and market based instruments such as taxes and tax exemptions, tradable permits, and fees can be very effective to encourage compliance with environmental policy. Voluntary measures, such as bilateral agreements negotiated between the government and private firms and commitments made by firms independent of government pressure, are other instruments used in environmental policy. Often, several instruments are combined in an instrument mix formulated to address a certain environmental problem.

¹⁰ <http://www.exnet.iastate.edu/pages/families/html>

¹¹ <http://www.uplink.com.au/lawlibrary/Documents/Docs/Doc95.html>

Such policies are either supranational, national, or regional instruments of a government/s indicating its approach to environmental protection. *Environmental policy statements* usually make commitments to decreasing pollution and waste, to using of energy and resources efficiently, and to minimising the environmental effects on habitats and biodiversity of new developments, and of the extraction of raw materials. Article 7 of the UN Declaration of Human Rights (1948-66) states that 'All people have a responsibility to protect the air, water and soil of the earth for the sake of present inhabitants and future generations,' and environmental protection became a national responsibility for us.

For a business operation, environmental policy is articulated and implemented through *environmental management systems*, which usually involve: an initial, systematic review of environmental risks; the development of techniques, technology, and training to reduce environmental impacts; and the monitoring and auditing of the system to ensure that the aims are being achieved. Environmental management systems are legally underpinned by international standard ISO 14001.

The cost of any environmentally damaging activity is paid by society-at-large. The cost incurred to prevent or rectify such damage is also borne by the society. For instance, the monetary cost of cleaning the water before drinking it is borne by the society. Citizens pay taxes to the government for such services. Hence not only access to clean water is the right of every individual but also the responsibility of one and all.

4. An Introduction to Environmental Law

The concern over the condition of environment has grown the world over, more so since the end of the 1960s. A series of national and international legal texts indicate the increasing alarm in the world community to take up urgent action for the protection and conservation of the environment. The depleting quality of environment can have been evidenced by the depletion of quality of air, water, green cover and biological diversity.

For the purpose of taking an effective stand to protect the environment it is very essential to put legal instruments to use. In international law there are two kinds of laws, namely:

- ♣ **Hard Law** - Legal Instruments which are directly enforceable. They are in form of legally binding agreements or principles which are directly enforceable by national and international bodies.
- ♣ **Soft Law** - Legal Instruments in form of agreements or principles that are meant to provide a basic guideline for nations to respect certain norms or incorporate them into national law. Although these agreements sometimes oblige countries to adopt implementing legislation, they are not usually enforceable on their own in a court.

Industrialisation, urbanisation, population explosion, poverty, over exploitation of resources, depletion of traditional resources of energy and raw materials and so on are some of the factors that have contributed to environmental degradation. In response to the global environmental concerns, various environmental efforts have taken place.

Of the several processes that all human societies in all ages have had in common, none has been more fundamental than their continual interaction with their natural environment. In fact, more than any other aspect of human endeavour, the diverse modes of human

societal interaction with the larger ecological setting provide the basis for a genuinely global history of humanity. But, unlike so many of the other themes and patterns from which world history can be constructed, environmental history transcends the human experience. Due to the profound technological and scientific transformations that have occurred over the past millennium, it has come to effect – often fatally in recent centuries – every species of living creature on earth.

Environment primarily refers to the ecological dimension (ecosystems), but can also take account of social dimension (quality of life) and an economic dimension (resource management). As the principal user of nature, humanity is responsible for ensuring that its environmental impacts are benign rather than catastrophic. **Environmental management (EM)** is the tool by which humanity can ensure the optimum use of our resources with minimal impact to the environment.

Every word in English has a history - and **Environmental law** is no exception. In this section you will learn a good deal more about the historical perspectives of environmental law; in addition you will make excursions into its origin and development. Environmental law is a body of law, which is a system of complex and interlocking statutes, law, treaties, conventions, regulations and policies which seek to protect the environment which may be affected, impacted or endangered by human activities. Some environmental laws regulate the quantity and nature of impacts of human activities: for example, setting allowable levels of pollution or requiring permits for potentially harmful activities. Other environmental laws are preventive in nature and seek to assess the possible impacts before the human activities can occur.

While many countries worldwide have since accumulated impressive sets of environmental laws, their implementation has often been woeful. In recent years, environmental law has become critical means for promoting sustainable (or “sustainability”) practices. Policy concepts such as the precautionary, public participation, environmental justice, and the polluter have informed many environmental law reforms in this respect. There has been considerable experimentation in the search for more effective methods of environmental control beyond traditional “command-and-control” style regulation. Taxes, emission, voluntary standards such as ISO 14000 and negotiated agreements are some of these innovations.

The IUCN Academy of Environmental Law is a network of some 60 law schools worldwide that specialise in the research and teaching of environmental law.

In his book “Should trees have legal standing”, the author, Christopher Stone¹² argues that nature should count jurally - to have a legally recognised worth and dignity in its own right, and not merely to serve as a means to benefit “us”. He claims that for a thing to be a holder of legal rights an authoritative body must review the actions and processes of those who threaten it and three additional criteria should be satisfied. The thing can institute legal actions at its behest; second, that in determining the granting of legal relief, the court must take injury to it into account; and; third, that relief must run to the benefit of it. The problem with this argument is that for nature to have legal standing it must have a lawyer; and would therefore be dependent on the cultural values, wisdom and competence of the lawyer(s) chosen to represent it and those of the court of law with

¹² Christopher D. Stone 1972, *Should Trees have a legal standing? - Towards Legal Rights of Natural Objects*, California Law Review, p. 450.

jurisdiction. Clayton (2000) claims that justice becomes more relevant in circumstances in which a desired response is scarce and in which there are citizens who ascribe moral significance and values to the environment. She goes on to state that since many resources are not renewable within reasonable time frames, this makes people more aware of the ways in which those resources are distributed. Stone claims that in the past natural objects have had no standing in their own right; their unique damages do not count in determining outcome; and they are not the beneficiaries of awards, but are objects for man to conquer and master and use.

Environment plays a pivotal role in human life as well as in the development of society. With growing technological advancement and industrialisation, the purity of the environment has been threatened to an appalling extent. The need to protect and improve the environment is so compelling for the peaceful survival of mankind and other life forms on planet Earth that right to environment has emerged as a human right.

Over the last two decades, the Indian judiciary has fostered an extensive and innovative approach to environmental rights in the country. Complex matters of environmental management have been resolved and consequently a series of innovative procedural remedies have evolved to accompany this new substantive right. The new environmental right is therefore championed as a legal gateway to speedy and inexpensive legal remedy.

The notional expansion of right to life was recognised even in the absence of a specific reference to direct violations of the fundamental right. Placed in a nutshell, the human right culture has percolated down to Indian human right regime within a short period of time. An interdisciplinary approach to environmental protection may be another reason for the operation of the right to healthy environment. This has been undertaken through international environmental treaties and conventions, national legislative measures and in judicial responses. On undertaking a comprehensive study of environmental law, it can be found that the Indian scenario is replete with examples of preserving the environment from degradation.

Today the need is to evolve a new jurisprudence of striking balance between growth, development and the ecosystem. Growth that does not respect the natural world, its complexity and its sensitivity, limits itself. Resources are exhausted, eco-systems collapse, species disappear and our own physical and mental health and even our survival are threatened.

The concept of environment is very wide, it includes land, water air, flora, fauna, natural resources and human habitation. There, are number of Acts direct and indirect relating to various aspect of environment. There are various protective Laws for human beings relating to air, water, land, noise, nuclear, thermal pollution and also for other living specifiers of wild , marine life, flora and fauna. The focus of environmental law in India should be moved from protection to management of the environment and from reactive to proactive legal mechanisms.

Many Constitutions in the world acknowledge the fundamental right to environmental protection and many international treaties also acknowledge the right to live in a healthy environment. The constitution of India provides that every person has right to life as enshrined in Article 21, on the other hand it also imposes duty on the Citizens to protect the environment (see Articles 51 A(g)(ii), 39(b),(c),19(e)). Similarly the government

departments also have duties towards protection of environment, article 48A directs the government to protect and improve the environment and to safe guard the forest and wildlife of the country, Article 31 A and 31C gives eminent powers to the government to acquire forest , lands, estates and other natural resources however the acquisition must be done equitably for common good (Article 39(b)and (c) of directive principles).

The 1X schedule of the constitution gives powers to the center, over the state and judiciary to declare numerous land related Laws as unreviewable in any court. The V11 schedules (list 1, entries 52-58) places some environmental issues in center's power alone, Atomic energy, oil fields and resources, mines, interstate rivers and valleys and fishing in territorial waters are subjects related to environmental protection in union list and fall within subject of union list (list I , entries 6, 53, 54, 56 and 57). Public health and sanitation, agriculture land and fisheries within state territories and water fall under state subjects (list II entries 6,14,18,21 and entry 17) however certain subjects like forest, wildlife and population control falls under list III, entries 17 A,17 B, the concurrent list where both center and state can legislate. Nomadic tribes, social and economic planning, monopolies, factories and electricity, having close connection with environmental protection also falls within concurrent list (list III, entries 15, 20, 21, 29, 36, 37, and 38).

5. Conclusion

Man is a creature of nature which has been recognised by all civilisations much before we look at what law or policy governs national or international society, it is important to look at mans relationship with nature. Although man has control over natural resources what distinguishes him from lower animals is his power to discern and use his resources rationally. However, we witness the reverse today. A lion shares his meals with his Pride, eats only as much as his stomach can take. The fox, wolf or other scavengers also share his catch.

But man hunts with driftnets that kill fishes and turtles, hunts whales which are not his basic diet, acquire property that he does not require for his living, pollutes oceans that provide him food and sustenance.

So where do we find a place for law and policy. Aquinas¹³ regarded natural law as supreme law because he believed that god is the creator and all men drew their sustenance from god's mercies. The divinity of kings, who are the fountain heads of the law, is a well known concept in the ancient Indian society based on *dharma* too. Law has been created by man to support an ordered life. Far from the life being short nasty and brutish view of Hobbes¹⁴. Lockean¹⁵ ideas provided a representative form of government and also the need for laws along with Bentham's¹⁶ concept of utilitarianism of greatest happiness of

¹³ Saint Thomas Aquinas was a Italian Dominican Catholic priest in the 1200s.

¹⁴ Thomas Hobbes of Malmsbury (5 April 1588 - 4 December 1679) was an English philosopher best known today for his work on political philosophy and this Social Contract Theory.

¹⁵ The philosophy of John Locke (29 August 1632 - 28 October 1704), who is considered as the father of Liberalism.

¹⁶ Jeremy Bentham (15 February 1748 - 6 June 1832) was an English jurist, philosopher, and legal and social reformer.

greater number. H. L. A. Hart¹⁷ spoke of the need for primacy of rules; those that create a primary obligation and those that create secondary duties too. Dworkin too, who was much of a liberal, spoke of the underlying philosophy of law being in principles as opposed to just rules. There is some truth, in this as it is principles that provide the conceptual framework for rules to exist in international society.

Customs often decide the shape of laws to come. Customary practices create social mores and mores become norms or acquire normative character. Man has always worshipped nature. He also utilises the resources of nature for his own use. The intention of doing so originally would have been noble or good. As the society progresses, such utilisation unfortunately takes shape of exploitation. It is even more unfortunate that such exploitation many a times takes the form of a social more. For instance, the Chinese believe that tiger products or parts are used as Medicine. No measure of law can change this time acquired social more. In international law custom is supposed to be a primary source of law. Laws can be abrogated rescinded, customs can't. Their effect continues even when States are not parties or there are no place reservations¹⁸. However man in his quest for precision and clarity prefers clear obligations or as many say hard written obligations. It is useful to have clear written obligations as laws which can be authoritatively interpreted and quoted. Most national Constitutions provide for a rationale to regulate the Environment.

Environmental Law is a body of law, which is a system of complex and interlocking statutes, common law, treaties, conventions, regulations and policies which seek to protect the natural environment which may be affected, impacted or endangered by human activities. Some environmental laws regulate the quantity and nature of impacts of human activities: for example, setting allowable levels of pollution or requiring permits for potentially harmful activities. Other environmental laws are preventive in nature and seek to assess the possible impacts before the human activities can occur.

As mentioned earlier, environmental law as a distinct system arose in the 1960s in the major industrial economies. Over the years, together with a spreading of environmental consciousness, there has been a change in the traditionally-held perception that there is a trade-off between environmental quality and economic growth as people have come to believe that the two are necessarily complementary. However, the current focus on environment is not new. Environmental considerations have been an integral part of the Indian culture. The need for conservation and sustainable use of natural resources has been expressed in Indian scriptures, more than three thousand years old and is reflected in the constitutional, legislative and policy framework as also in the international commitments of the country.

Even before India's independence in 1947, several environmental legislations existed but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). Under the influence of this declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. This Council later evolved into

¹⁷ Herbert Lionel Adolphus Hart (18 July 1907-19 December 1992) was an influential legal philosopher of the 20th century. He was Professor of Jurisprudence at Oxford University and the Principal of Brasenose College, Oxford. He authored *The Concept of Law*.

¹⁸ *Nicara Gua case* ICJ rep. 1986.

a full-fledged Ministry of Environment and Forests (MoEF) in 1985 which today is the apex administrative body in the country for regulating and ensuring environmental protection. After the Stockholm Conference, in 1976, constitutional sanction was given to environmental concerns through the 42nd Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties.

We will be dealing emergence of environmental law as a separate branch, both in international as well as the national context in detail in the following units.

6. References and Recommended Readings

Bakshi, P.M., *Environmental Law: Some issues for the Future*

Dr. Desai, Bharat, *Environmental Law: Some reflections*

Divan, Shyam and Rosencranz, Armin, *Environmental Policy in India, Environmental Law and Policy in India - Cases, Materials and Statutes*, Oxford University Press, New Delhi, pp. 23-39.

Jaiswal, P.S., *Introduction, Environmental Law*, Pioneer Publications, New Delhi, 2004, pp. 2-18.

Beena Kumari, V.K., *Environmental pollution and Common Law Remedies*, *Cochin University Law Review*, School of Legal Studies, Cochin University, Volume 8, p. 101.

Nayak, R.K. (ed.), *Shaping the Future by Law: Children, Environment and Human Health*, Indian Law Institute, New Delhi, 1996.

Divan, Shyam and Rosencranz, Armin, *Environmental Law and Policy in India - Cases, Materials and Statutes*, Oxford University Press, New Delhi.

Thakur, Kailash, *Environmental Protection Law and Policy in India*, 1997.

UNIT 2

ENVIRONMENTAL LAW AND THE INDIAN CONSTITUTION

Contents	Page No.
1. Introduction	15
2. Environmental Law as a Specialised Branch in International Law	16
3. Constitutional Provisions Pertaining to the Environment	19
4. India's International Obligations Pertaining to Environment	28
5. Conclusion	34
6. References and Recommended Readings	34

1. Introduction

Environment is our surroundings which include all forms of life including plants, animals, human beings, as well as non living external physical matters like air, water, land, buildings, parks, vehicles, etc. Our environment is in a dynamic state. It keeps changing every now and then. You would have observed many changes around you, like floods or drought in certain years, new industries, multi-storey buildings, new means of transport, etc. If these changes are favourable to life, then the environment is not harmed. However, unfavourable changes lead to degradation of the environment.

The environment is a whole, albeit a complicated one, with many interfacing components. The wise management of the environment depends upon an understanding of its components, its rocks, minerals and waters, its soils and their present and potential vegetation, its animal life and potential for livestock husbandry, and its climate. Positive and realistic planning is needed to balance human needs against the potential the environment has for supporting these needs.¹ Environmental studies deal with every issue that affects a living organism. It is essentially a multidisciplinary approach that brings about an appreciation of our natural world and human impact on its integrity. It is an applied science, as it seeks practical answers to the increasingly important question of how to make civilisation sustainable on the Earth's finite resources.

Mahatma Gandhi had said, *"The Earth has enough for everybody's need but not for everybody's greed"*.

As the use of these natural resources increases, waste and pollution also increases. This is because waste is a by-product of the use of natural resources. Wastes damage the environment after an extent, and turn into pollutants. Thus, we can say that overuse of natural resources leads to pollution. Moderation, industry, machines and transport have speeded up the consumption of all natural resources. The resultant pollution has affected air, water, soil and life on the earth, chemically, physically and as far as human beings is concerned, even psychologically. Our world today is affected by different kinds of pollution. Air, water, soil, noise, waste and heat radiation are a result of speedy consumption of natural resources.

¹ Datuk Amar Stephen K. T. Yong, *Opening Address*, p g. 8, in: Sunderlal Bahuguna, Vandana Shiva and M. N. Buch, *Environment Crisis & Sustainable Development*. Natraj Publishers (1992).

When we study the natural history of the areas in which we live, we can see that our surroundings were originally a natural landscape, such as a forest, a river, a mountain, a desert or a combination of these elements. Most of us live in landscapes that have been profoundly modified by human beings. Our dependence on nature is so great that we cannot continue to live without protecting the Earth's environmental resources. Most traditional societies have learned that respecting nature is vital in protecting their own livelihoods. This had led to many cultural practices that have helped traditional societies protect and preserve their natural resources. Respect for nature and all living creatures is not new to India; all our traditions are based on these values. Emperor Ashoka's edict proclaimed that all forms of life are important for our well-being, and this was as far back as the 4th century BC.

2. Environmental Law as a Specialised Branch in International Law

At the beginning of the 'ecological era' and in particular in the 1960's there was a general trend towards the development of environmental regulations, which were considered as the remedy to pollution and to the depletion of the world's wild flora and fauna. In 1980's disillusion concerning the effectiveness of legal rules for the protection of the environment increased, but this did not halt or even slow down the legislative efforts. In the 1990's with the triumph of the market economy system, many advanced the view that law is not the adequate tool for protecting the environment, whether at an international or a domestic level, because of its ineffectiveness.

Two regional instruments inspired by genuinely ecological perspectives can be seen as precursors to our present environmental concepts. The first, the 1933 London Convention Relative to the Preservation of Fauna and Flora in their Natural State, applicable to Africa then largely colonised. It provided for the creation of national parks and strict protection for some species of wild animals. The second instrument is the 1940 Washington Convention on Nature Protection and Wildlife Preservation in Western Hemisphere; which envisages the establishment of reserves and the protection of wild animals and plants especially migratory birds.

As we have studied in the previous unit, the legal instruments of International Law are of two kinds, namely, Hard Laws and Soft Laws. International law includes both the customary rules and usages to which states have given express or tacit assent and the provisions of ratified treaties and conventions. International law is directly and strongly influenced, although not made, by the writings of jurists and publicists, by instructions to diplomatic agents, by important conventions even when they are not ratified, and by arbitral awards. The decisions of the International Court of Justice (ICJ) and of certain national courts, such as prize courts, are considered by some theorists to be a part of international law. In many modern states, international law is by custom or statute regarded as part of national or municipal law.

Since there is no sovereign super national body to enforce international law, some older theorists have denied that it is true law². Nevertheless, international law is recognised as

² Thomas Hobbes, Samuel Pufendorf, and John Austin have denied that international law is true law, due to the lack of a sovereign supernatural body to enforce the same.

law in practice, and the sanctions for failing to comply, although often less direct, are similar to those of municipal law; they include the force of public opinion, self-help, intervention by third-party states, the sanctions of international organisations such as the United Nations, and, in the last resort, war.³

As mentioned earlier, in international law, a distinction is often made between hard and soft law. Hard international law generally refers to agreements or principles that are directly enforceable by a national or international body. Soft international law refers to agreements or principles that are meant to influence individual nations to respect certain norms or incorporate them into national law. Although these agreements sometimes oblige countries to adopt implementing legislation, they are not usually enforceable on their own in a court.

If a treaty or convention does not specify an international forum that has subject matter jurisdiction, often the only place to bring a suit with respect to that treaty is in the member state's domestic court system. This presents at least two additional hurdles. If the member state being sued does not have domestic implementing legislation in place to hear the dispute, there will be no forum available. Even in the event that the domestic legislation provides for such suits, since the judges who decide the case are residents of the country against which it is brought, potential conflicts of interest arise.

Only nations are bound by treaties and conventions. In international forums, such as the International Court of Justice (ICJ), countries must consent to being sued. Thus, it is often impossible to sue a country. The final question in the jurisdictional arena is who may bring a suit. Often, only countries may sue countries. Individual citizens and non-governmental organisations (NGOs) cannot. This has huge repercussions. First, the environmental harm must be large and notorious for a country to notice. Second, for a country to have a stake in the outcome of the subject matter, some harm may have to cross the borders of the violating country into the country that is suing. Finally, even if transboundary harm does exist, the issue of causation, especially in the environmental field, is often impossible to prove with any certainty.

The enforcement issue is one where advocates for a safer environment often find themselves stymied. Even if a treaty or convention provides for specific substantive measures to be taken by a country (many treaties merely provide 'frameworks'), specifies a forum for dispute resolution and authorises sanctions for non-compliance, international law remains largely unenforceable. A country cannot be forced to do what it is not willing to do. One can sanction the country, order damages, restrict trade, or, most frequently, publicise non-compliance. But beyond that, if a country will not comply, there is very little to be done.

International institutions are generally not responsible for directly implementing and enforcing international environmental law, but they often play important monitoring, informational and diplomatic roles. For example, the 1992 Convention on the Conservation of Biological Diversity (Biodiversity Convention) created a new international body, the Committee on Sustainable Development (CSD). The CSD lacks the power to bring enforcement actions against either governments or private parties, but it plays a role in implementing the Biodiversity Convention. The CSD helps monitor national compliance efforts by requiring

³ <http://northport.k12.ny.us/~Patch/intlaw/intlaw.htm>

member nations to submit annual reports. Through its meetings and publications, the CSD also provides a forum to discuss and debate issues associated with global protection of biological diversity and forests.

Traditional international law only recognised states as actors in international legal relations. Called subjects of international law, states have the exclusive right to conclude treaties, to send and receive diplomatic representatives, to give their nationality to individuals according to rules which they determine, to protect their nationality abroad, to adhere to international organisations and to assume international responsibility.

After World War II, a debate began over whether individuals and non-state groups could also become subjects of international law. The proliferation of international conventions protecting human rights triggered such debates. According to the present state of international law, individuals are entitled to have rights which can be internationally enforced mostly in the framework of specific treaties guaranteeing their fundamental rights and freedoms and creating specific enforcement mechanisms.

While traditional rules are formally applied in international legal relations, the need to protect the environment posed a challenge to international law, and this has fundamentally changed the system. Most of the major environmental rules were triggered by public awareness which then pressured governments to adopt appropriate measures. For example, the public role has been recognised by a growing number of international institutions which accept the presence of representatives of certain NGOs at designated meetings as observers who can report back to their constituency and who can be authorised to take the floor.

Environmental decisions in the domestic field, as well as at the international level, are not always welcomed by industrialists, farmers, foresters, transporters - and the investors who fund their activities. The beginning of the ecological era was characterised by the strong resistance of groups representing certain economic interests. This was starting point for a wave of 'green' products and advertisements praising the environmental qualities of given products, eventually leading to environmental labelling.

A certain measure, of cooperation between industries and civil societies is very essential to achieve any real results. The preparation of the treaty system for the protection of the stratospheric ozone layer was the best example in this regard; the whole initiative was strongly backed by public opinion represented by NGOs. The preparation of the Rio Conference amplified such developments: there was a constant pressure of non-governmental organisations on the negotiators and parallel to the governmental conference a 'forum' of NGOs was held with the representatives of 1400 associations sometimes helping, sometimes criticising but taking a growing part in the international protection of the environment.

One of the main characteristics of environmental law is the necessity for an interdisciplinary approach. Nowadays interdisciplinary studies are increasingly necessary in most sciences, where progress can be made only after acquisition and review of essential data coming from other specialties or other field. This is especially true in environmental matters, because of the complexity of the subject. Legislation and the creation of institutions, which are fundamental tasks of law, require knowledge of data which can be furnished

only by sciences representing several disciplines, including life and earth sciences, as well as social sciences⁴.

Thus, a chain of biologists, chemists, medical doctors, ecologists, economists, sociologists and lawyers is needed to elaborate and implement environmental norms. The tasks will be to ascertain and further develop the knowledge of environment itself, of its deterioration and of its impact as well as of the possible remedies. The result of scientific investigation must then be integrated into the economic, social and cultural context of a given situation. The final decision is made in the political arena, but without knowing as many possible of the elements of the problem no useful decision can be taken. The best illustration of this process is the discovery by scientists of the depletion of the stratospheric ozone layer. They were the only ones who could state and assess the problem, but the solution, the building up of a regime for protecting the stratospheric ozone molecules needed the cooperation of economists, representatives of the world public opinion and of industry, political decision-makers and, last but not the least, legal experts.

The interdisciplinary character, involving various scientific branches as well as scientific uncertainty, imposes frequent adaptations upon environmental law. Changes are always a problem for law, one of the objectives of which is to ensure stability in human relations. New legal methods and techniques have to be applied in order to keep pace with the general evolution of environmental sciences⁵.

3. Constitutional Provisions Pertaining to the Environment

Indian Constitution is one of the few Constitution in the world which is containing provisions relating to environment protection and it has been effectively mentioned in the various provisions of the Constitution of India.

The **Fundamental Rights**, **Directive Principles of State Policy** and **Fundamental Duties** are sections of the Constitution that prescribe the fundamental obligations of the State to its citizens and the duties of the citizens to the State. The *Fundamental Rights* are defined as the basic human rights of all citizens. These rights, defined in Part III of the Constitution, apply irrespective of race, place of birth, religion, caste, creed or gender. They are enforceable by the courts, subject to specific restrictions.

The *Directive Principles of State Policy* are guidelines for the framing of laws by the government. These provisions, set out in Part IV of the Constitution, are not enforceable by the courts, but the principles on which they are based are fundamental guidelines for governance that the State is expected to apply in framing and passing laws.

The *Fundamental Duties* are defined as the moral obligations of all citizens to help promote a spirit of patriotism and to uphold the unity of India. These duties, set out in Part IV-A of the Constitution, concern individuals and the nation. Like the Directive Principles, they are not legally enforceable.

All the provisions in the Constitution has been incorporated for the welfare of the citizens. After independence the Constitution was in the state of infancy and there were not

⁴ Introduction to International Environmental Law by Professor Alexander Kiss, Course 1, 'Programme of Training for the Application of Environmental Law, UNITAR.

⁵ *Supra*

many provisions pertaining to the environment protection and another factor was the non involvement of the people in the environment protection. After the liberalisation of Article 32 and liberal interpretation of the Constitution led to the emergence of the new concept of advocacy known as PIL(Public Interest Litigation) under which many spirited and social welfare lawyers contested very important cases which has been appreciated world over.

In the Union Carbide case⁶, Honorable Bhagwati.J evolved a new concept of liability and the court did not use the concept of liability which was given in the case of *Ryland vs Fletcher*. The Court evolved the concept of “Absolute Liability” and this concept is being appreciated all over the world. After this case green bench has been set up which hears the cases pertaining to the environment protection.

Preamble of the Constitution of the India talks about the Socialistic pattern of the society. The Socialistic society may include decent standard of living and pollution free environment and there are many provision in the Constitution which talks about environment protection like:

- ♣ Article 51A(g) imposes obligation on State and individual to protect and improve environment and to have compassion to the living creature.
- ♣ Article 47 is one of the Directive Principle of State Policy which aims to raise standard of living and public health of people and public health of people can not be achieved with good environment and it is the responsibility of the State to promote measures which protects environment.
- ♣ Article 48 comprehensively states that the State shall protect the environment.
- ♣ Article 21 of the Constitution of India talks about the Right to life and Right to live in pollution free environment and this is only possible when the environment protection is given staple priority and steps are being taken in order to provide Sustainable Development to the coming generations.
- ♣ The Right to livelihood also comes under Article 21 and it is a right of a person to earn livelihood and if a person is displaced due to some inimical policies of the government then such rights stands violated.
- ♣ Article 19 talks about freedom of speech and expression. In India most of the cases relating to environment protection comes before the court only through Judicial Activism and PIL. So Article 19 played very vital role in taking prompt action against violations.

Article 19 (1)(g) talks about freedom to carry on trade and business and in this context important Case is available: In the case of Vellore Citizens Forum Supreme Court held that the Industries which were charged for causing pollution are of vital importance for the India’s economy but it can not be allowed to continue at the cost of ecology. So every industry shall prove before the court that they are conducting their affair in an area of demarcated guidelines and in an eco friendly manner.

Similarly in the Kanpur Tanneries Case⁷, tanneries in Kanpur were directed by the Supreme Court to put up treatment plant so that the Ganga is not polluted and if they do not obey the orders they will have to close the industry.

⁶ *M.C. Mehta v. Union of India* (1987) 1 ACC 157 : 1987 1 SCC 395 : AIR 1987 SC 965

⁷ *M.C. Mehta v. Union of India* (1987) 4 SCC AIR 463

Let us now examine the constitutional provisions pertaining to environment in detail -

I. Part IV- Article 37, 39(e), 48A, 49, 51(c)⁸

– **Article 37 - Duty of the State (Part IV)**

Part IV of the Constitution of India contains the directive principles of State policy. These directives are the active obligations of the State; they are policy prescriptions for the guidance of the Government.

Article 37 of Part IV of the Constitution limits the application of the directive principles by declaring that these principles shall not be enforceable by any Court. Therefore, if a directive is not followed by the State, its implementation cannot be secured through judicial proceedings. On the other hand, these principles are fundamental in the governance of the country and it is the duty of the state to apply these principles during the process of law-making.

⁸ PART IV: DIRECTIVE PRINCIPLES OF STATE POLICY

37. Application of the principles contained in this Part.—The provisions contained in this Part shall not be enforceable by any court, but the principles therein laid down are nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws.

39. Certain principles of policy to be followed by the State.—The State shall, in particular, direct its policy towards securing—

- a) that the citizens, men and women equally, have the right to an adequate means of livelihood;
- b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good;
- c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment;
- d) that there is equal pay for equal work for both men and women;
- e) *that the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength;*
- f) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment.

48A. Protection and improvement of environment and safeguarding of forests and wild life.—The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.

49. Protection of monuments and places and objects of national importance.—It shall be the obligation of the State to protect every monument or place or object of artistic or historic interest, declared by or under law made by Parliament to be of national importance, from spoliation, disfigurement, destruction, removal, disposal or export, as the case may be.

51. Promotion of international peace and security.—The State shall endeavour to—

- a) promote international peace and security;
- b) maintain just and honourable relations between nations;
- c) foster respect for international law and treaty obligations in the dealings of organised peoples with one another; and
- d) encourage settlement of international disputes by arbitration.

– **Article 48A - Directive Principles of State Policy (Part IV)**

Article 48A. Protection and improvement of environment and safeguarding of forests and wild life.

The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.

The parliament had considerable debate over the wording of the draft Article 48-A. Several amendments were moved in both the houses of the Parliament. Seervai has correctly pointed out:

Article 48-A reflects an increasing awareness of people all over the word of the need to preserve the environment from pollution, especially in urban areas. Smoke, industrial waste, deleterious exhaust fumes from motor cars and other combustion engines are injurious to the health and well-being of the people and foul the atmosphere. The preservation of forests and their renewal by afforestation has long been recognised in India as of great importance both with reference to rainfall and to prevent erosion of the soil by depriving it of forests which protect it. The preservation of wild life is looked upon as necessary for the ‘preservation of ecological balance’. Article 48-A rightly emphasis the fact that the State should try not only to protect but to improve the environment.⁹

– **Article 39(e), 47 and 48-A (Part IV)**

Article 39(e), 47 and 48-A of the Directive Principles of State Policy have a definite bearing of environmental problems. They, by themselves and collectively impose a duty on the State to secure the health of the people, improve public health and protect and improve the environment.

– **Article 49 (Part IV)**

Environmental pollution may damage the monuments of national importance, the protection of which is a duty of the State under Article 49 of the Constitution. Article 49 of the Directive Principles of State Policy provides for the obligation of the State to protect monuments, places and objects of national importance. In the *Taj* case¹⁰ the Supreme Court of India seems to have got inspiration from Article 49 while protecting the Taj Mahal, a monument protected under the Ancient Monuments and Archaeological Sites and Remains Act, 1958, from harmful Industrial emissions originating in and around Agra.

– **Article 51(c) (Part IV)**

Article 51(c) directs the State to foster respect for international law and treaty obligations in the dealings of organised peoples with one another. Therefore, in view of the range of international treaties law and treaty obligations in Article 51 (c), read to conjunction with the specific treaty provision, may also serve to strengthen the hands of pro-conservation judge.

⁹ H.M. Seervai, *Constitutional Law of India: A Critical Commentary*, 2019 (Vol.2, 1993).

¹⁰ *M.C. Mehta v. Union of India*, AIR 1997 SC 734.

II. Part IVA - Article 51A¹¹

– Fundamental Duties of the Citizens (Part IV A)

The Constitution (Forty-second Amendment) Act, 1976 inserted part IV-A into the Constitution of India. This new part prescribes certain fundamental duties for the citizens of India. The sole Article of this part, Article 51-A, specifies ten fundamental duties.

Part IVA - Fundamental Duties

Article 51A. Fundamental duties - It shall be the duty of every citizen of India ... (g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;

Then Indian Constitution has imposed a joint responsibility upon the State; and every citizen of India to protect and improve the natural environment. In the words of Ranganath Mishra, J.:

“Preservation of environment and keeping the ecological balance unaffected is a task which not only Government but also very citizen must undertake. It is a social obligation and let it remind every citizen that it is his fundamental duty as enshrined in Article 51-A (g) of the Constitution”¹²

After making reference to Article 48-A and Article 51-A (g), the High Court of Himachal Pradesh concluded-

Thus there is both a Constitutional pointer to the State and a Constitutional duty of the citizens not only to protect but also to improve the environment and to preserve and safeguard the forests, the flora and fauna, the rivers and lakes and all the other water resources of the country. The neglect or failure to abide by the pointer or to perform the duty is nothing short of a betrayal of the fundamental law which the State and, indeed, every Indian high or low, is bound to uphold and maintain.¹³

¹¹ PART IV A: FUNDAMENTAL DUTIES

51A. Fundamental duties.—It shall be the duty of every citizen of India—

- a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- c) to uphold and protect the sovereignty, unity and integrity of India;
- d) to defend the country and render national service when called upon to do so;
- e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- f) to value and preserve the rich heritage of our composite culture;
- g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- i) to safeguard public property and to abjure violence;
- j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

¹² *Rural Litigation and Entitlement Kendra v. State of U.P.*, AIR 1987 SC 359, 364.

¹³ *Kinkri devi v. State of Himachal Pradesh*, AIR 1988 HP 4,8.

The Courts have reminded time and again to both State as well as citizens about their duties towards environment while deciding environmental issues by referring to Article 48-A and 51- A(g) of the Constitution.

III. Part III- Article 14, 21, 32, 19(1)(g)¹⁴

Part III of the Constitution confers Fundamental Rights. Many fundamental rights have an implied correlation to environmental protection. Let us examine some such provisions.

Right to Wholesome Environment

Part III of the Constitution of India contains fundamental rights. These rights were included in the Constitution after long debates in the Constituent assembly.

Part III - Fundamental Rights

Article 21 - Protection of life and personal liberty

No person shall be deprived of his life or personal liberty except according to procedure established by law.

Article 32. Remedies for enforcement of rights conferred by this Part

- 1) The right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed.

¹⁴ PART III: FUNDAMENTAL RIGHTS

Right to Equality

14. Equality before law.—The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India.

Right to Freedom

19. Protection of certain rights regarding freedom of speech, etc.—(1) All citizens shall have the right—

- a) to freedom of speech and expression;
- b) to assemble peaceably and without arms;
- c) to form associations or unions;
- d) to move freely throughout the territory of India;
- e) to reside and settle in any part of the territory of India; and [(f) *has been repealed*]
- g) to practise any profession, or to carry on any occupation, trade or business.

21. Protection of life and personal liberty.—No person shall be deprived of his life or personal liberty except according to procedure established by law.

Right to Constitutional Remedies

32. Remedies for enforcement of rights conferred by this Part.—

- 1) The right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed.
- 2) The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari*, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part.
- 3) Without prejudice to the powers conferred on the Supreme Court by clauses (1) and (2), Parliament may by law empower any other court to exercise within the local limits of its jurisdiction all or any of the powers exercisable by the Supreme Court under Clause (2).
- 4) The right guaranteed by this article shall not be suspended except as otherwise provided for by this Constitution.

- 2) The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari*, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part.

It was the *Maneka Gandhi* case that heralded the new era of judicial thought. The court started recognising several unarticulated liberties that were implied by Article 21 and during this process the Supreme Court interpreted, after some hesitation the right to life and personal liberty to include the right to wholesome environment. The conflict between development needs and environmental protection has been the most controversial issue before the courts in decide in environmental matters. Incidentally the *Dehradun Quarries* case that paved the way for right to wholesome environment has also focused on this continuing conflict. The judgments in Dehradun quarries cases were passed under Article 32 of the Constitution and involved closure of some of the quarries on the ground that their operation was upsetting ecological balance of the area. The indirect approval of the right to humane and healthy environment by the Supreme Court continued further in the *Oleum gas leak* case.¹⁵

Life cannot be possible without clean drinking water therefore; right to clean water is one of the attributes of the right to life in Article 21 of the Constitution.¹⁶ The industrial establishments in and around residential colonies are another cause of concern, more so, when the industries have mushroomed contrary to the development plans. In *V. Lakshmi pathy v. State of Karnataka*¹⁷ the same issue came before the High Court of Karnataka. The High Court held that once a development plan had earmarked the area for residential purpose, the land was bound to be put to such use only. Thus, High Courts, it seems, were more enthusiastic and active in accepting and declaring that 'right to life' in Article 21 includes 'right to environment'.

Right to livelihood vis-à-vis Environment

The Supreme Court has recognised another aspect of the right to life enshrined under Article 21 of the Constitution, viz. the right to livelihood. There is a real chance of clash of these rights, i.e. right to environment and right to livelihood as government's action to close down industrial units for protection of environment may result in loss of job, dislocation of poor workers and might disrupt badly the lifestyles of people heavily dependent on such industries.

The right to livelihood has been recognised by the Supreme Court in the case of *Olga Tellis v. Bombay Municipal Corporation*.¹⁸ The Court issued directions to the Municipal Corporation to provide alternative sites or accommodation to the slum and pavement dwellers near to their original sites; and to provide amenities to slum-dwellers.

In many cases the Supreme Court passed orders requiring State agencies and concerned person to resettle and rehabilitate the workers or other persons who were being displaced by the decision of the Court or of the Government displaced by the Decision of the Court or of the Government to close down an industry or to relocate at a suitable place.

¹⁵ *M.C. Mehta v. Union of India*, AIR 1987 SC 965.

¹⁶ *Attakoya Thangal v. Union of India* 1990 (1) KLT 580

¹⁷ AIR 1992 Kant 57

¹⁸ AIR 1986 SC 180

Right to equality

Article 14 of the Constitution guarantees to every person the right - not to be denied equality before the law or the equal protection of the laws. The possibility of infringement of this Article by a government decision having impact on the environment cannot be ruled out. Article 14 strikes at arbitrariness because an action that is arbitrary must necessarily involve a negation of equality.¹⁹

Thus, permission for contractions that is contrary to town planning regulation by the municipal authority may be challenged. Similarly, Article 14 may be invoked to challenge governmental sanction of projects having adverse impact on the natural environment and where such sanctions involve arbitrary considerations.

Freedom of trade

Article 19(1) (g) of the Constitution guarantees to all citizens of India, the right to practice any profession or to carry on any occupation or trade or business. The freedom however, is not uncontrolled.

The aggrieved industrialist may resort to Article 19 in case his trade and business interests are affected by the action of governmental agencies in the name of the environmental protection. As environmental regulation grows more stringent and its enforcement becomes more vigorous, industrial challenge to agency action is likely to increase. Courts will then need to balance environmental interests with the fundamental right it carries on any occupation, trade or business guaranteed in Article 19(1) (g). Various standards have been prescribed by the Government for the discharge of different pollutants. An industry may challenge a very stringent standard which cannot be complied with, despite best efforts by available technology or if it is otherwise unreasonable.

IV Role of Panchayat and Municipalities - Article 243 B and 243 G²⁰

The Constitution (Seventy-third Amendment) Act 1992 and the Constitution (Seventy - fourth Amendment) Act, 1992 have given a Constitutional status to the panchayats and the Municipalities respectively. Article 243-B provides for the establishment of intermediate and district levels. Article 243-G authorises the legislature of State to endow the Panchayats

¹⁹ *Ajay Hasia v. Khalid Mujib Shervardi* , AIR 1981 SC 487,499.

²⁰ ARTICLE 243 B and 243 G:

PART IX - PANCHAYATS

243B. Constitution of Panchayats.—(1) There shall be constituted in every State, Panchayats at the village, intermediate and district levels in accordance with the provisions of this Part.

(2) Notwithstanding anything in clause (1), Panchayats at the intermediate level may not be constituted in a State having a population not exceeding twenty lakhs.

243G. Powers, authority and responsibilities of Panchayats.—Subject to the provisions of this Constitution, the Legislature of a State may, by law, endow the Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government and such law may contain provisions for the devolution of powers and responsibilities upon Panchayats at the appropriate level, subject to such conditions as may be specified therein, with respect to—

- a) the preparation of plans for economic development and social justice;
- b) the implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the Eleventh Schedule.

with such powers and authority as may be necessary to enable them to function as institution of self-government.

The Eleventh Schedule along with other matters contains following matters which are directly or indirectly related to environment like, agriculture, soil conservation, water management and watershed development; fisheries; social forestry and farm forestry; minor forest produce; drinking water; health and sanitation; and maintenance of community assets.

The matters which are related to environment in the twelfth Schedule may be enumerated as follows:

Urban planning including town planning regulation of land use water supply; public health, sanitation, conservancy and solid waste management, urban forestry, protection of the environment and promotion of ecological aspects; provision of urban amenities such as park grounds; cremation grounds and electric crematoriums; prevention of cruelty to animals regulation slaughter houses and tanneries.

Thus it is evident that the Constitution imposes the duty to protect and preserve the environment in all the three tiers of the Government i.e. Central, state and local.

IV. Article 32 and 226²¹

Writ Jurisdiction and Public Interest Litigations

One of the most innovative parts of the Constitution is that the Writ Jurisdiction is conferred on the Supreme Court under Article 32 and on all the High Courts under Article

²¹ For Article 32 - See footnote 14

ARTICLE 226 - PART VI: THE STATES

CHAPTER V.—THE HIGH COURTS IN THE STATES

226. Power of High Courts to issue certain writs.—(1) Notwithstanding anything in Article 32 every High Court shall have power, throughout the territories in relation to which it exercises jurisdiction, to issue to any person or authority, including in appropriate cases, any Government, within those territories directions, orders or writs, including writs in the nature of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari*, or any of them, for the enforcement of any of the rights conferred by Part III and for any other purpose.

(2) The power conferred by clause (1) to issue directions, orders or writs to any Government, authority or person may also be exercised by any High Court exercising jurisdiction in relation to the territories within which the cause of action, wholly or in part, arises for the exercise of such power, notwithstanding that the seat of such Government or authority or the residence of such person is not within those territories.

(3) Where any party against whom an interim order, whether by way of injunction or stay or in any other manner, is made on, or in any proceedings relating to, a petition under clause (1), without—
(a) furnishing to such party copies of such petition and all documents in support of the plea for such interim order; and

(b) giving such party an opportunity of being heard, makes an application to the High Court for the vacation of such order and furnishes a copy of such application to the party in whose favour such order has been made or the counsel of such party, the High Court shall dispose of the application within a period of two weeks from the date on which it is received or from the date on which the copy of such application is so furnished, whichever is later, or where the High Court is closed on the last day of that period, before the expiry of the next day afterwards on which the High Court is open; and if the application is not so disposed of, the interim order shall, on the expiry of that period, or, as the case may be, the expiry of the said next day, stand vacated.

(4) The power conferred on a High Court by this article shall not be in derogation of the power conferred on the Supreme Court by clause (2) of Article 32.

226. Under these provisions, the courts have the power to issue any direction or orders or writs, including writs in the nature of *habeas corpus*, *mandamus*, *prohibition*, *quo warranto* and *certiorari*, whichever is appropriate. This has paved way for one of the most effective and dynamic mechanisms for the protection of environment, that is, Public Interest Litigations.

4. India's International Obligations Pertaining to Environment

Entering into international treaties and agreements is one of the attributes of State sovereignty. The principle of sovereign equality as embodied in the UN Charter²² is the cornerstone of the international relations between the States²³. Though International law requires a State to carry out its international obligations undertaken by it by ratifying international treaties, but it does not govern the process of incorporating international law into municipal law.

In fact, the States follow different processes of incorporating international law into their domestic legal system, depending on their constitutional provisions in this respect. Thus, the process of implementation of international law at national level varies in different countries. In India, international treaties do not automatically become part of national law. It, therefore, requires the legislation to be made by the Parliament for the implementation of international law in India.

The Constitution of India does not lay down any express provisions to deal with the international treaties and conventions. There is no specific article which says so. It has been dealt with in relation to the powers of the executive for entering into such treaties and the obligations arising thereof. The Constitution of India has dealt with the provisions with regard to the international treaties through the Articles 73 and 253. Though the position with regard to the international treaties has not been explicitly laid down or dealt with in any of the articles of the Constitution they have been dealt within the course of dealing with the power of the executive in relation to the international treaties and the effect that they would have on the laws of the land.

In this respect, Indian judiciary has also played a very important role. Though not empowered to make legislations, judiciary has interpreted India's obligations under international law into the constitutional provisions relating to implementation of international law in pronouncing its decision in a case concerning issues of international law. Through judicial activism the Indian judiciary has played a proactive role in implementing India's international obligations under International treaties, especially in the field of human rights and environmental law.

These two Articles of the Constitution, namely, Articles 73 and 253 relate to the powers of the Executive with relation to international treaties. The scope of the power that the executive can exercise with regard to the international treaties has been covered under

²² Articles 2(1) and 2(2) of the UN Charter.

²³ R. P. Anand, "Sovereignty of States in International Law", *Confrontation or Cooperation: International Law and the Developing Countries* (1987).

these two articles. Even while exercising powers conferred by virtue of Article 73, the Executive cannot infringe on the rights of the citizens and create new laws thereof. This has been the established norm even for dealing with the situations that relate to the provisions of the domestic law wherein the executive cannot affect the rights that are guaranteed to the citizens of the nation under the Constitution. Further, as per some presiding judgments of courts, no new offences can be created similarly without a confirmatory legislation.

Article 73²⁴ provides scope of the powers of the executive. These extend to-

- a) The matters specified in the List 1, inclusive of the entry 14, with respect to entering into and implementing treaties.
- b) Such rights or obligations as are exercisable in consequence of any treaty or convention which India has ratified.

The executive has the right to execute laws with respect to which the parliament has the right to make laws. And it is also extended to the exercise of such rights and obligations that arise by virtue of entering upon such treaties or because of international conventions.

With regard to Article 253²⁵ it is pertinent to quote from the judgment of Shah, J. in the *Maganbhai Case*²⁶:

“..the effect of Article 253 is that if a treaty or convention with a foreign state deals with a subject within the competence of the state legislature, the Parliament alone has, notwithstanding Article 246 (3), the power to make laws to implement treaties, agreement or convention or any decision made at any international conference....”

The Central Legislature is vested with the power to legislate laws for India. In the matter of making laws, the Central Government, part of the Executive, cannot be the concerned authority. The theory of separation of powers governs this aspect whereby the fields of

²⁴ ARTICLE 73: EXTENT OF EXECUTIVE POWER OF THE UNION

- 1) Subject to the provisions of this Constitution, the executive power of the Union shall extend -
 - a) to the matters with respect to which Parliament has power to make laws; and
 - b) to the exercise of such rights, authority and jurisdiction as are exercisable by the government of India by virtue of any treaty or agreement: Provided that the executive power referred to in sub clause (a) shall not, save as expressly provided in this constitution or in any law made by Parliament, extend in any State to matters with respect in which the Legislature of the State has also power to make laws
- 2) Until otherwise provided by Parliament, a State and any officer or authority of a State may, notwithstanding anything in this article, continue to exercise in matters with respect to which Parliament has power to make laws for that State such executive power or functions as the State or officer or authority thereof could exercise immediately before the commencement of this Constitution Council of Ministers

²⁵ ARTICLE 253

253. Legislation for giving effect to international agreements Notwithstanding anything in the foregoing provisions of this Chapter, Parliament has power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body

²⁶ *Maganbhai v. Union of India*, AIR 1969 SC 783.

work of the various organs of the government are segregated. Flowing from this is the concept that the executive can only restrict itself to the field of ratifying the treaty and the legislature has the task cut out for the purpose of creation of laws with regard to the international treaties and conventions.

The work of the Central Government is to execute the laws framed by the Legislature where in the doctrine of separation of powers makes inroads into the Constitution in an implicit manner. Consequently, it is beyond its authority to legislate new laws.

It must be noted, however, that treaties or international conventions need not always have a legislative backing in order for them to be applicable under the established domestic law regime. The basic manner by which treaties become a part of the domestic law regime is by incorporation. The process by which an international convention or treaty gets to become a part of the domestic legal system is known as incorporation. That happens when the treaty is first signed and then ratified by the executive. A concomitant legislative backing is not always a prerequisite.

International conventions and treaties do not become part of the domestic law by their own force on ratification. Though it is not a prerequisite that the Legislature should back these international instruments after they have been ratified by the Executive; further, if the implementation is possible at the administrative level, there is no need for it to have a statutory foundation.

However, in case when the convention or treaty is in deviance with the law of the land they have to be backed with a legislation (that is, if the provisions are not in consonance with the provisions of the domestic law). Any such convention or treaty which seeks to alter the Constitution or any other law in force in India requires an act of the Legislature. Till the time they are not backed with legislation, the treaties and conventions are not generally enforceable under the courts of India.

The importance of international treaties cannot be overemphasized. They have shown the path where there existed none to the Indian judiciary. It continues to do so even today, inspiring the evolution of law. And this ensures that the domestic law regime keeps pace with the latest developments in the international realm.

With respect to environmental issues, India has obligations under numerous international treaties and agreements. As a contracting party, India must have ratified a treaty, that is, by adopting it as national law before it came into force, or by acceding to it after it has come into force. For a treaty to enter into force, the requisite number of countries must ratify the treaty, which then has the force of international law.

Specific obligations under any treaty vary, depending on the treaty itself. The nature and degree of compliance and implementation depend on a number of factors, among them:

- 1) the capabilities and staff of an international institution charged with coordinating national compliance efforts, if there is one;
- 2) the willingness of other state parties to enforce or comply with the treaty;
- 3) the political agenda of the government and popular support;
- 4) trade and diplomatic pressures brought to bear by other countries; and
- 5) sometimes, judicial or NGO involvement through court cases and publicity.

Some of the international environmental obligations of India are:

- 1) The Antarctic Treaty (Washington, 1959) 402 UNTS 71. Entered into force 23 June 1961. India ratified with qualifications, 19 August 1983.
- 2) Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar, 1971). 11 I.L.M. 963 (1972). Entered into force 21 December 1975. India acceded, October 1, 1981.
- 3) Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972). 11 I.L.M. 1358 (1972). Entered into force 17 December 1975. India signed, 16 November 1972.
- 4) Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973) 12 I.L.M. 1055 (1973). Entered into force 1 July 1975. India signed, 9 July 1974; ratified 20 July 1976.
- 5) Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL) (London, 1978). Entered into force 2 October 1983. India ratified with qualifications, 24 September 1986.
- 6) Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979) 19 I.L.M. 15 (1980). Entered into force 1 November 1983. India signed, 23 June 1979; ratified 4 May 1982.
- 7) Convention on the Conservation of Antarctic Marine Living Resources (Canberra, 1980). 19 I.L.M. 841 (1980). Entered into force 7 April 1982. India ratified, 17 June 1985.
- 8) United Nations Convention on the Law of the Sea (Montego Bay, 1982). 21 I.L.M. 1261 (1982). Entered into force 16 November 1994. India signed, 10 December 1982.
- 9) Convention for the Protection of the Ozone Layer (Vienna, 1985). 26 I.L.M. 1529 (1987). Entered into force 22 September 1988. India ratified, 18 March 1991.
- 10) Protocol on Substances That Deplete the Ozone Layer (Montreal, 1987). 26 I.L.M. 1550 (1987). Entered into force 1 January 1989. India acceded, 19 June 1992.
- 11) Amendments to the Montreal Protocol on Substances That Deplete the Ozone Layer (London, 1990). 30 I.L.M. 541 (1991). Entered into force 10 August 1992. India acceded, 19 June 1992.
- 12) Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel, 1989). 28 I.L.M. 657 (1989). Entered into force 5 May 1992. India signed, 5 March 1990; ratified 24 June 1992.
- 13) United Nations Framework Convention on Climate Change (Rio de Janeiro, 1992). 31 I.L.M. 849 (1992). Entered into force 21 March 1994. India signed, 10 June 1992; ratified 1 November 1993.
- 14) Convention on Biological Diversity (Rio de Janeiro, 1992). 31 I.L.M. 818 (1992). Entered into force 29 December 1993. India signed, 5 June 1992; ratified 18 February 1994.

- 15) Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (Paris, 1994). 33 I.L.M 1332 (1994). Entered into force, 26 December 1995; India signed, 14 October 1994; ratified 17 December 1996.
- 16) International Tropical Timber Agreement (Geneva, 1994). 33 I.L.M. 1016 (1994). Entered into force 1 January 1997. India signed, 17 September 1996. India ratified 17 October 1996.
- 17) Protocol on Environmental Protection to the Antarctica Treaty (Madrid, 1991). Entered into force 15 January 1998. excerpt Environmental Norms²⁷ - Norms are general legal principles that are widely accepted. This acceptance is evidenced in a number of ways, such as international agreements, national legislation, domestic and international judicial decisions, and scholarly writings.

The leading norms in the field of international environmental law are addressed below:

- 1) Foremost among these norms is Principle 21 of the 1972 Stockholm Declaration on the Human Environment. Principle 21 maintains that “States have, in accordance with the Charter of the United Nations and the principles of international law, the *sovereign right to exploit their own resources* pursuant to their own environmental policies, and *the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction*”.
- 2) Another widely shared norm is the *duty of a state to notify and consult* with other states when it undertakes an operation that is likely to harm neighbouring countries’ environments, such as the construction of a power plant, which may impair air or water quality in downwind or downstream states.
- 3) Over and above the duty to notify and consult, a relatively new norm has emerged whereby states are expected to *monitor and assess* specific environmental conditions domestically, and disclose these conditions in a *report* to an international agency or international executive body created by an international agreement, and authorised by the parties to the agreement to collect and publicise such information.
- 4) Another emerging norm is the guarantee in the domestic constitutions, laws or executive pronouncements of several states, including India, Malaysia, Thailand, Indonesia, Singapore and the Philippines, that all *citizens have a right to a decent and healthful environment*. In the United States, this fundamental right has been guaranteed by a handful of states but not by the federal government.
- 5) Most industrialised countries subscribe to the *polluter pays principle*. This means polluters should internalise the costs of their pollution, control it at its source, and pay for its effects, including remedial or cleanup costs, rather than forcing other states or future generations to bear such costs. This principle has been recognised by the Indian Supreme Court as a ‘universal’ rule to be applied to domestic polluters as well. Moreover, it has been accepted as a fundamental objective of government policy to abate pollution.

²⁷ Excerpts from the “*Established Norms of International Environmental Law*”, Global Change Instruction Program, UNCAR.

- 6) Another new norm of international environment law is the *precautionary principle*. This is basically a duty to foresee and assess environmental risks, to warn potential victims of such risks and to behave in ways that prevent or mitigate such risks. In the context of municipal law, Justice Kuldip Singh of the Supreme Court has explained the meaning of this principle in the *Vellore Citizens' Welfare Forum Case*, which is excerpted later in this section.
- 7) *Environmental impact assessment* is another widely accepted norm of international environmental law. Typically, such an assessment balances economic benefits with environmental costs. The logic of such an assessment dictates that before a project is undertaken, its economic benefits must substantially exceed its environmental costs. India has adopted this norm for select projects which are covered under the Environmental Impact Assessment (EIA) regulations introduced in January, 1994.
- 8) Another recent norm is *to invite the input of non-governmental organisations (NGOs)*, especially those representing community-based grassroots environmental activists. This NGOs participation ensures that the people who are likely to be most directly affected by environmental accords will have a major role in monitoring and otherwise implementing the accord. This principle is mirrored in the Indian government's domestic pollution control policy and the national conservation policy, and is given statutory recognition in the EIA regulations of 1994. The Supreme Court has urged the government to draw upon the resources of NGOs to prevent environmental degradation.
- 9) In October 1982, the United Nations General Assembly adopted the World Charter for Nature and Principles of *Sustainable Development*. The agreement expressly recognised the principle of sustainable development, defined as using living resources in a manner that 'does not exceed their natural capacity for regeneration' and using 'natural resources in a manner which ensures the preservation of the species and ecosystems for the benefit of future generations.' The principle of sustainable development was also acknowledged in the 1987 report *Our Common Future*, published by the United Nations World Commission on Environment and Development. This report defined sustainable development as 'humanity's ability ... to ensure that [development] meets the need of the present generation without compromising the ability of future generations to meet their needs.' The Supreme Court as well as the Indian government have recognised the principle of sustainable development as a basis for balancing ecological imperatives with developmental goals.
- 10) *Intergenerational equity* is among the newest norms of international environmental law. It can best be understood not so much as a principle, but rather as an argument in favour of sustainable economic development and natural resource use. If present generations continue to consume and deplete resources at unsustainable rates, future generations will suffer the environmental (and economic) consequences. It is our children and grandchildren who will be left without forests (and their carbon retention capacities), without vital and productive agricultural land and without water suitable for drinking or sustaining cultivation or aquatic life. Therefore, we must all undertake to pass on to future generations an environment as intact as the one we inherited from the previous generation.

Proponents of intergenerational equity maintain that the present generation has a moral obligation to manage the earth in a manner that will not jeopardise the

aesthetic and economic welfare of the generations that follow. From this moral premise flow certain ecological commandments: 'Do not cut down trees faster than they grow back. Do not farm land at levels, or in a manner, that reduce the land's regenerative capacity. Do not pollute water at levels that exceed its natural purification capacity.'

In *State of Himachal Pradesh v. Ganesh Wood Products* the Supreme Court recognised the significance of inter-generational equity and held a government department's approval to establish forest-based industry to be invalid because 'it is contrary to public interest involved in preserving forest wealth, maintenance of environment and ecology and considerations of sustainable growth and inter-generational equity. After all, the present generation has no right to deplete all the existing forests and leave nothing for the next and future generations.'

- 11) At the 1982 United Nations Conference on the Law of the Sea (UNCLOS), developing countries, led by India, articulated the norm that certain resources, such as the deep seabed, are part of the *common heritage of mankind* and must be shared by all nations.
- 12) The 1992 Rio de Janeiro Earth Summit articulated the norm of *common but different responsibilities*. With regard to global environmental concerns such as global climate change or stratospheric ozone layer depletion, all nations have a shared responsibility, but richer nations are better able than poorer nations to take the financial and technological measures necessary to shoulder the responsibility.

5. Conclusion

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'. It imposes a duty on every citizen 'to protect and improve the natural environment including forests, lakes, rivers, and wildlife'. Reference to the environment has also been made in the Directive Principles of State Policy as well as the Fundamental Rights. In pursuance to the constitutional obligations to protect and improve the environment, 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 EPA (Environment Protection Act), 1986 came into force soon after the Bhopal Gas Tragedy and is considered an umbrella legislation as it fills many gaps in the existing laws. Thereafter a large number of laws came into existence as the problems began arising, for example, Handling and Management of Hazardous Waste Rules in 1989.

We shall trace a few of such environmental legislations in detail in our next unit.

6. References and Recommended Readings

Divan, Shyam and Rosencranz, Armin, *Constitutional and Legislative Provisions, Environmental Law and Policy in India - Cases, Materials and Statutes*, Oxford University Press, New Delhi, pp. 40-86.

Jaiswal, P.S., *Constitutional Provisions and Environment Protection in India*, Environmental Law, Pioneer Publications, Delhi, pp. 36-77.

Rosencranz, Armin; Divan, Shyam and Noble, Martha L., (Ed.) Tripathi, *Environmental Law and Policy in India - Cases, Materials and Statutes*, The Book Review Literary Trust, New Delhi, pp. 50-76.

Singh, Jaspal, *Constitutional Safeguards for Environment and Heritage: An Appraisal*.

Sreeram Panchu, *Constitutional Provisions for Environmental Protection*.

Divan, Shyam and Rosencranz, Armin, *Environmental Law and Policy in India - Cases, Materials and Statutes*, Oxford University Press, New Delhi.

Rosencranz, Armin; Divan, Shyam and Noble, Martha L., (Ed.) Tripathi, *Environmental Law and Policy in India - Cases, Materials and Statutes*, The Book Review Literary Trust, New Delhi.

Jaiswal, P.S., *Environmental Law*, Pioneer Publications, Delhi.

UNIT 3

MAJOR LAWS AND THE ENVIRONMENT

Contents	Page No.
1. Introduction	36
2. Major Environmental Legislations	39
3. References and Recommended Readings	55

1. Introduction

No constitution in the world deals explicitly with a matter such as environmental protection. This is because the main purpose of any constitution is to formulate the rules of laws in relation to the power structure, allocation, and manner of exercise. When the constitution of India was first drafted, it did not have any specific provision safeguarding the healthy environment. Therefore it was, till the subsequent amendments the constitutional text of India, without any specific provision for the protection and promotion of the environment. However the seeds of such provision could be seen in Article 47 of the constitution which commands the State to improve the standard of living and public health. To fulfill this constitutional goal, it is necessary that the State should provide pollution free environment.

The United Nations Conference on Human Environment held on in June, 1972 at Stockholm placed the issue of the protection of biosphere on the official agenda of international policy and law. The agenda of the conference consisted of the following:

- a) Planning and management of human settlements for environmental quality.
- b) Environmental aspects of natural resources management.
- c) Identifications and control of pollutants and nuisances of broad international significance.
- d) Educational, Information, Social and cultural aspects of environmental issues.
- e) Development and environment.
- f) International organisational implications of action proposals.

The Stockholm Conference's agendas, proclamations, principles and subsequent global, environment protection efforts shows the words realisation of the need to preserve and protect the natural environment. The Conference acclaimed man's fundamental right to adequate conditions of life in an environment of a quality that permitted a life off dignity and well-being.

In United Nations Conference on Human Environment, at Stockholm the then Prime Minister of India Mrs. Gandhi while displaying the nation's commitment to the protection of environment said *"The natural resources of the earth, including the air, water, land flora and fauna and especially representative sample of the nature ecosystem must be safeguard for the benefits of present and future generations through careful planning or management, as appropriate... Nature conservation including wildlife must therefore receive importance in planning for economic development"*.

To comply with the principles of the Stockholm Declarations adopted by the International Conference on Human Environment, the Government of India, by the Constitution 42nd Amendment Act, 1976 made the express provision for the protection and promotion of the environment, by the introduction of Article 48-A and 51-A(g) which form the part of Directive Principles of State Policy and the Fundamental Duties respectively. The amendment provided for the following :

- 1) **Article 48 A:** By the Constitution (42nd Amendment) Act, Section 10 (w.e.f. 3.1.1977). Protection and improvement of environment and safeguarding of forests and wild life:-
“The State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country.”
- 2) **Fundamental Duties - Article 51-A(g) :** By Constitution (42nd Amendment) Act, 1976. Section 11 (w.e.f. 3.1.1977) “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.”

Thus the Indian Constitution made a two fold provision. On the one hand, it gave the directive to the State for the protection and improvement of environment. On the other hand it created a duty on part of the citizens. According to the constitution, the citizens owe a constitutional duty to protect and improve natural environment.

The Government of India to accelerate the pace for environment protection further amended the constitutional text by making the following changes.

1) **Seventh Schedule of the Constitution:**

- In the Concurrent List, 42nd Amendment Inserted.
 - a) Entry 17-A, providing for forests.
 - b) Entry 17-B, for the protection of wild animals and birds.
 - c) Entry 20-A, providing for population control and family planning.

2) **Eleventh Schedule of the Constitution:**

- This new schedule is added by the Constitution 73rd Amendment Act, 1992, which received the assent of the President on 20.4.1993. This schedule has 8 entries (2,3,6,7,11,12,15 and 29) providing for environmental protection and conservation.

3) **Twelfth Schedule of the Constitution:**

- The entry number 8 of this schedule added to the constitutional text by the 74th Amendment Act,1992, which received the assent of the President on 20.4.1993 providal for the Urban Local bodies, with the function of environment and promotion of ecological aspects of them.

Due to the above changes the division of legislative power between the Union and the States is spelt out in the following three of the 7th Schedule of the constitution.

List I (Union List) Entries:

52. Industries.
53. Regulation and development of oil fields and mineral oil/resources.
54. Regulation of mines and mineral development.
56. Regulation and development of inter-State rivers and river valleys.
57. Fishing and fisheries beyond territorial waters.

List II (State List) Entries:

6. Public health and sanitation.
14. Agriculture protection against pest and prevention of plant diseases.
18. Land colonisation.
21. Fisheries.
23. Regulation of Mines and Mineral development subject to the provisions of the Act.
24. Industries subject to the provisions of the Act.

List III (Common or Concurrent List) Entries:

- 17-A Forests.
- 17-B Protection and wild animals and birds.
20. Economic and social planning .
- 20-A Population control and family planning.

The 11th Schedule, added to the Constitution by the constitution 73rd Amendment Act, 1992, assign the functions of soil conservation, water management, social and form forestry, drinking water, fuel and fodder, etc. to the Panchayats with a view to environmental management.

The 12th Schedule of the Constitution added by 74th Amendment Act, 1992 commands the Urban local bodies such as municipalities to perform the functions of protection of environment and promotion of ecological aspects.

The constitutional changes effected in the 7th Schedule by the 42nd Amendment Act, 1976 is a milestone steps, in the direction of the protection of environment. Because the subject of forests originally was in the State list as entry 19, this resulted into no uniform policy by the State so as to protect the forests. By placing the item 'forest' now in the concurrent list by the entry 17-A, along with the State, Parliament has acquired a law making power.

Owing to the above change, in order to have a uniform policy in the forest management the Government of India in the year 1980 set up the Ministry of Environment and Forests. By virtue of this change Parliament also enacted, the central legislation i.e. Forest Conservation Act, 1980, which was amended in 1988. The government also adopted the new National Forest Policy in 1988 with a twin object. One to protect the forests and another to consider the needs of the forest dwellers.

Similarly the insertion of the entry 17-B in the concurrent list has empowered the Parliament to enact a law with a view to protection of wild animals and birds. Although we had a comprehensive legislation in the form of Wildlife Protection Act of 1972 the 42nd Amendment has considered the wildlife along with forests. India has also formulated National Action Plan for the Protection of Wildlife. The new entry 20 A in the concurrent list empowers the Parliament to regulate the population explosion as one of the prime cause of the environmental pollution. By these changes, legally and constitutionally it has become possible to make a uniform action in the matters of proper management of the environment.

2. Major Environmental Legislations

Since the 1970s an extensive network of environmental legislation has grown in the country. The MoEF and the pollution control boards (CPCB i.e. Central Pollution Control Board and SPCBs i.e. State Pollution Control Boards) together form the regulatory and administrative core of the sector.

A policy framework has also been developed to complement the legislative provisions. The Policy Statement for Abatement of Pollution and the National Conservation Strategy and Policy Statement on Environment and Development were brought out by the MoEF in 1992, to develop and promote initiatives for the protection and improvement of the environment. The EAP (Environmental Action Programme) was formulated in 1993 with the objective of improving environmental services and integrating environmental considerations in to development programmes.

Other measures have also been taken by the government to protect and preserve the environment. Several sector-specific policies have evolved, which are discussed at length in the concerned chapters.

This unit attempts to highlight the legislative initiatives towards the protection of the environment.

1) Water

When toxic substances enter lakes, streams, rivers, oceans, and other water bodies, they get dissolved or lie suspended in water or get deposited on the bed. This results in the pollution of water whereby the quality of the water deteriorates, affecting aquatic ecosystems. Pollutants can also seep down and affect the groundwater deposits.

Water pollution has many sources. The most polluting of them are the city sewage and industrial waste discharged into the rivers. The facilities to treat waste water are not adequate in any city in India. Presently, only about 10% of the waste water generated is treated; the rest is discharged as it is into our water bodies. Due to this, pollutants enter groundwater, rivers, and other water bodies. Such water, which ultimately ends up in our households, is often highly contaminated and carries disease-causing microbes. Agricultural run-off, or the water from the fields that drains into rivers, is another major water pollutant as it contains fertilisers and pesticides.



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Water quality standards especially those for drinking water are set by the Indian Council of Medical Research. These bear close resemblance to WHO standards. The discharge of industrial effluents is regulated by the Indian Standard Codes and recently, water quality standards for coastal water marine outfalls have also been specified. In addition to the general standards, certain specific standards have been developed for effluent discharges from industries such as, iron and steel, aluminium, pulp and paper, oil refineries, petrochemicals and thermal power plants. Legislations to control water pollution are listed below.

a) *Water (Prevention and Control of Pollution) Act, 1974*

This Act represented India's first attempts to comprehensively deal with environmental issues. The Act 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.



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b) *Water (Prevention and Control of Pollution) Cess Act, 1977*

This Act 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. Following this Act, *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.

c) *Other related legislations*

- ♣ **The Easement Act, 1882** allows private rights to use a resource that is, groundwater, by viewing it as an attachment to the land. It also states that all surface water belongs to the state and is a state property.
- ♣ **The Indian Fisheries Act, 1897** establishes two sets of penal offences whereby the government can sue any person who uses dynamite or other explosive substance in any way (whether coastal or inland) with intent to catch or destroy any fish or poisonous fish in order to kill.
- ♣ **The River Boards Act, 1956** enables the states to enroll the central government in setting up an Advisory River Board to resolve issues in inter-state cooperation.
- ♣ **The Merchant Shipping Act, 1970** aims to deal with waste arising from ships along the coastal areas within a specified radius.
- ♣ **The Coastal Regulation Zone Notification, 1991** puts regulations on various activities, including construction, are regulated. It gives some protection to the backwaters and estuaries.

II) Air

Some of the worst forms of air pollutions are found in Indian cities. The Central Pollution Control Board (CPCB) considers air to be 'clean' if the levels are below 50 per cent of the prescribed standards for pollutants. During 2007 only 2 per cent cities have low air pollution on the basis of PM₁₀¹. In about 80 per cent of cities (of a total of 127 cities/towns monitored under the NAMP²) at least one criteria pollutant exceeded the annual average ambient air quality standards. This has serious public health implications. There

¹ The PM₁₀ (particles measuring 10 micrometers or less) standard was designed to identify those particles likely to be inhaled by humans, and PM₁₀ has become the generally accepted measure of particulate material in the atmosphere in many countries.

² National Air Quality Monitoring Programme - NAMP is a nation-wide programme executed by CPCB to determine the ambient air quality monitoring. The network consists of three hundred and forty two (342) operating stations covering one hundred and twenty seven (127) cities/towns in twenty six (26) states and four (4) Union Territories of the country.

Objectives of the NAMP are to determine status and trends of ambient air quality; to ascertain whether the prescribed ambient air quality standards are violated; to Identify Non-attainment Cities; to obtain the knowledge and understanding necessary for developing preventive and corrective measures and to understand the natural cleansing process undergoing in the environment through pollution dilution, dispersion, wind based movement, dry deposition, precipitation and chemical transformation of pollutants generated. Under NAMP four air pollutants viz ., Sulphur Dioxide (SO₂), Oxides of Nitrogen as NO₂, Suspended Particulate Matter (SPM) and Respirable Suspended Particulate Matter (RSPM / PM₁₀) have been identified for regular monitoring at all the locations. The monitoring of meteorological parameters such as wind speed and wind direction, relative humidity (RH) and temperature were also integrated with the monitoring of air quality.

The monitoring of pollutants is carried out for 24 hours (4-hourly sampling for gaseous pollutants and 8-hourly sampling for particulate matter) with a frequency of twice a week, to have one hundred and four (104) observations in a year. The monitoring is being carried out with the help of CPCB; State Pollution Control Boards; Pollution Control Committees; National Environmental Engineering Research Institute (NEERI), Nagpur. CPCB co-ordinates with these agencies to ensure the uniformity, consistency of air quality data and provides technical and financial support to them for operating the monitoring stations. NAMP is being operated through various monitoring agencies. Large number of personnel and equipments are involved in the sampling, chemical analyses, data reporting etc. It increases the probability of variation and personnel biases reflecting in the data, hence it is pertinent to mention that these data be treated as indicative rather than absolute.

are very few cities, which can be termed clean keeping PM10 levels (respirable particulates) as criteria however over the years SO₂ levels have fallen sharply in many cities but the NO₂ levels are increasing in many cities.



© Cartoon published on Earth Day, 2010 in Chicago Tribune, by Dana Summers & Orlando Sentinel

Legislations to control air pollution are listed below.

a) *Air (Prevention and Control of Pollution) Act, 1981*

To counter the problems associated with air pollution, ambient air quality standards were established, under the 1981 Act. The Act provides means for the control and abatement of air pollution. The Act seeks to combat air pollution by prohibiting the use of polluting fuels and substances, as well as by regulating appliances that give rise to air pollution. Under the Act establishing or operating of any industrial plant in the pollution control area requires consent from state boards. The boards are also expected to test the air in air pollution control areas, inspect pollution control equipment, and manufacturing processes.

National Ambient Air Quality Standards (NAAQS) for major pollutants were notified by the CPCB in April 1994. These are deemed to be levels of air quality necessary with an adequate margin of safety, to protect public health, vegetation and property (CPCB 1995 cited in Gupta, 1999). The NAAQS prescribe specific standards for industrial, residential, rural and other sensitive areas. Industry-specific emission standards have also been developed for iron and steel plants, cement plants, fertiliser plants, oil refineries and the aluminium industry. The ambient quality standards prescribed in India are similar to those prevailing in many developed and developing countries.

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 authorised 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.



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b) *The Air (Prevention and Control of Pollution) Rules* formulated in 1982

This Act defined 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. They also prescribed the manner and the purpose of seeking assistance from specialists and the fee to be paid to them.

Complementing the above Acts is the *Atomic Energy Act* of 1982, which was introduced to deal with radioactive waste. In 1988, the *Motor Vehicles Act*, was enacted to regulate vehicular traffic, besides ensuring proper packaging, labelling and transportation of the hazardous wastes. Various aspects of vehicular pollution have also been notified under the EPA of 1986. Mass emission standards were notified in 1990, which were made more stringent in 1996. In 2000 these standards were revised yet again and for the first time separate obligations for vehicle owners, manufacturers and enforcing agencies were stipulated. In addition, fairly stringent Euro I and II emission norms were notified by the Supreme Court on April 29, 1999 for the city of Delhi. The notification made it mandatory for car manufacturers to conform to the Euro I and Euro II norms by May 1999 and April 2000, respectively, for new non-commercial vehicle sold in Delhi.

c) *Other related legislations*

- ♣ **The Factories Act and Amendment in 1987** was the first to express concern for the working environment of the workers. The amendment of 1987 has sharpened its environmental focus and expanded its application to hazardous processes.
- ♣ **The Air (Prevention and Control of Pollution) Rules, 1982** defines the procedures of the meetings of the Boards and the powers entrusted to them.
- ♣ **The Atomic Energy Act, 1982** deals with the radioactive waste and emissions.
- ♣ **The Air (Prevention and Control of Pollution) Amendment Act, 1987** empowers the central and state pollution control boards to meet with grave emergencies of air pollution.
- ♣ **The Motor Vehicles Act, 1988** states that all hazardous waste is to be properly packaged, labelled, and transported.

III) Forests and wildlife

A forest is a terrestrial ecosystem, a community of plants and animals interacting with one another and with the physical environment. They are natural renewable resources. Depending on the potential of climate and land area, all countries differ in their forest resources. In recent times, there has been a considerable reduction in the forest cover throughout the world. Today, forests cover only nearly 30 to 40 per cent of the world's land.

India is the seventh largest country in the world occupying 2.5 per cent of the world area. However, only 1.8 per cent of forest covers lies in India. Despite recent efforts to increase forest cover through reforestation, India's forests are in a devastated condition, with less than 18 per cent of India under forest cover in 1997.³ Dense forests cover only 12 per cent of land.⁴ The policy requirement is that the forest cover should be 33 per cent of the area of the country, and all of this should be closed forest. However, we are far from achieving this figure.

Forests are critical for the quality of global environment. They are of great importance to the sustainability and prosperity of human beings since they yield multiple benefits to society. These include tangible products such as fuel wood, timber, fodder, manure and minor forest products, intangible services such as hydrological benefits, soil conservation, climate change mitigation and habitat for wildlife, and other intangible values such as spiritual or aesthetic values. These benefits flow towards many different beneficiary groups. Only some of these beneficiaries live in physical proximity of the forest. Others live downstream in the watershed, or in the whole region or nation or even world. It is estimated that some 1.6 billion people worldwide depend on forests for their livelihoods. 60 million indigenous people depend on forests for their subsistence.

Forest resources also represent a survival base for as many as 200-300 million small farmers and shifting cultivators around the world. Seasonal harvesting of forest products is of vital importance to most shifting cultivator households especially during the hungry period between harvests. Some 350 million people that live in or near forests depend on them for income and subsistence. Some additional 1 billion people worldwide, constituting about 20 per cent of the global population, depend on varying degrees on forests or agro-forestry farming.

Forests are major stores of carbon and other greenhouse gases such as methane. They play a crucial role in conserving the world's biodiversity. Forests provide habitats for at least two-thirds of the world's species and contain at least 80 per cent of the remaining earth's biodiversity.

Forests also play a major role in containing soil erosion and in regulating water supplies. They contribute to reducing sedimentation in dams and reservoirs, to clean rivers and protect fishery resources, to maintain agricultural productivity. Tree shelterbelts slow wind velocity and lower temperature thus contributing to moisture conservation and agricultural productivity. Trees and forests critically contribute to food security in most of the food-deficient countries of the world. Forests are a precious resource of economic development and environmental stability. However, forests today are under immense threat of

³ Reply by Union Minister of Environment and Forests to Rajya Sabha, 24 March, 1998.

⁴ State of India's Environment: The Citizen's Fifth Report, Centre for Science and Environment, 1999.

deforestation. They are reducing at an alarming rate. This process of deforestation is a serious threat to the economy, quality of life and the future of environment in our country. Some of the major reasons for degradation and decline of forests are:

- ♣ Rapid explosion of human and livestock population
- ♣ Over utilisation of forest resources by local communities
- ♣ Conversion of land to non-forestry use
- ♣ Expansion of agricultural cropland for farming
- ♣ Practice of slash and burn agriculture on invaded lands
- ♣ Enhanced grazing by cattle
- ♣ Increased demand in fuel-wood, timber, wooden crates, paper, medicines, and other forest dependent products
- ♣ Impact of other commercial activity
- ♣ Impact of developmental activity
- ♣ Impact of chemicals and other hazardous substances
- ♣ Illegal forest activities

Illegal forest activities are one of the major contributors of deforestation. Such activities are varied and include, *inter alia*, the unauthorised occupation of public and private lands, illegal logging in protected or environmentally sensitive areas, logging of protected species, poaching, woodland arson, illegal transport of wood and other forest products, smuggling, transfer pricing and other fraudulent accounting practices, illegal forest industrial processing such as discharging pollutants, etc. Virtually all illegal acts can be associated with corruption. Furthermore, corrupt acts are perpetrated for private gain and are intentional as distinguished from negligent acts, and are surreptitious in nature.

At the time of framing of the Constitution forest was a 'State' subject place under Entry 19, List II of the Seventh Schedule. The forests departments of individual states regulated forests in accordance with the pre-existing Forest Act of 1927, as implemented by state regulations.

However, the Indian Parliament, realising the national significance of the forests, made certain changes to the Seventh Schedule. In 1976, the Forty-second Amendment Act led to the deletion of Entry 19 from List II of the Schedule. A new entry (Entry 17-A) related to forests was inserted in the Concurrent list or List III of Seventh Schedule. Now, Forestry is a concurrent subject in the Indian Constitution, being under the purview of both the central and state government. Hence, as per the Constitution, both Center and State may legislate on issues related to forests and protection of wildlife.

The provisions directly related to the conservation of forests were also included in the Constitution of India by the Constitution (Forty-second Amendment) Act, 1976. The Forty-second Amendment introduced a new Directive Principle of State Policy [Article 48-A] under Part IV and a Fundamental Duty [51 (A) (g)] under Part IV A for the protection and improvement of the forests.

Even prior to the British era, customary rules have regulated the use of forests in India. Certain types of trees were regarded as sacred and never cut. Certain areas under forest

were regarded as God's groves and not even deadwood and leaves were taken out from these areas. Even today, some such areas in their natural condition are found in different parts of the country, though their condition is rapidly worsening.⁵ The history of modern forest legislation in India is more than a century old. The first codification which came to the statute book in relation to the administration of forest in India was the Indian Forest Act, 1865. It empowered the government to declare any land covered with trees or brushwood as government forest and to make rules to manage them. The act was applicable only to the forests in control of the government and did not cover private forests. It made no provision regarding the rights of the users.⁶

The Act of 1865 was replaced by a more comprehensive Indian Forest Act of 1878. Forests were divided into reserve forests, protected forests and village forests. Several restrictions were imposed upon the people's rights over forest land and produce in the protected and reserved forests. The act empowered the local government to levy duty on timber produced in British India or brought from any place beyond the frontier of British India, thus encouraging them to earn revenue from forests. The Act radically changed the nature of common property and made it state property.

The Act was amended from time to time and was ultimately repealed and replaced by the Indian Forest Act, 1927.



© Pulitzer Prize winning cartoon 'Deforestation'- by Mikhail Zlatkovsky, Russia

a) *The Indian Forest Act, 1927*

The Indian Forest Act, 1927 was enacted during pre-independence era with the object to consolidate the law relating to forests, the transit of forest-produce and the duty leviable on timber and other forest-produce. It also sought to consolidate and reserve the areas having forest cover, or significant wildlife.

The Act contains 86 Sections and still remains in force. However, has been subjected to amendments from time to time to make it more in tune with the current situation. The Forests Act establishes three kinds of forests, namely, Reserve forests, Protected forests

⁵ Mahdhav Gadgil and V.D. Vartak, Sacred Groves in Maharashtra: An Inventory, in S.K. Jain (ed), *Glimpses of Indian Ethnobotany*, Oxford University Press, Bombay, 1981.

⁶ B.H. Baden Powell, *Forest Law*, Bradbury Agnaw and Co., London, 1893, p. 225.

and Village forests. Reserved forests are the most restrictive category of forests. These forests are constituted by the State Government on any forestland or wasteland which is the property of the government or on which the government has proprietary rights. Protected forests, constituted by the state government, are forests other than reserved forests over which the government has proprietary rights. Village forests, on the other hand, are those in which the state government assigns to “any village-community the rights of government to or over any land which has been constituted a reserved forest”. The categories are explained in detail as follows:

- 1) **Reserved Forests** - Reserved forest is dealt with in Chapter II of the Act. It is an area or mass of land duly notified under Section 20 or under the reservation provisions of the Forest Acts of the State Governments of the Indian Union. It is within power of a State Government to issue a preliminary notification under Section 4 of the Act declaring that it has been decided to constitute such land, as specified in a Schedule with details of its location, area and boundary description, into a Reserved Forest.

Such a notification also appoints an officer of the State Government, normally the Deputy Commissioner of the concerned district, as Forest Settlement Officer. The Forest Settlement Officer fixes a period not less than three months, to hear the claims and objections of every person having or claiming any rights over the land which is so notified to be reserved and conducts inquiries into the claims of rights, and may reject or accept the same. He is empowered even to acquire land over which right is claimed. For rights other than that of right of way, right of pasture, right to forest produce, or right to a water course, the Forest Settlement Officer may exclude such land in whole or in part, or come to an agreement with the owner for surrender of his rights, or proceed to acquire such land in the manner prescribed under the Land Acquisition Act, 1894. Once the Forest Settlement Officer settles all the rights either by admitting them or rejecting them, as per the provisions of the Act, and has heard appeals, if any, and settled the same, all the rights with the said piece of land, with or without alteration or modification of boundaries, vest with the State Government. Thereafter, the State Government issues notification under Section 20 of the Indian Forest Act, 1927 declaring that piece of land to be a Reserved Forest.

- 2) **Village Forests** - Village forest is dealt with in Chapter III of the Act. It is constituted under Section 28. The Government may assign to any village community the rights over a land which may be a part of a reserved forest for use of the community. Usually, forested community lands are constituted into Village Grazing Reserve (VGR). Parcels of land so notified are marked on the settlement revenue maps of the villages.

A Village forest is different from a Forest Village. Though many a times both terms are used interchangeably, both are different in their meaning. While village forest is a legal category under the Indian Forest Act forest village is merely an administrative category. Although forest village is recognised as a forest department, the revenue benefits cannot accrue to such villages as they are not technically under the revenue departments.

- 3) **Protected Forests** - Protected forest is dealt with in Chapter IV of the Act. It is an area or mass of land, which is not a reserved forest, and over which the Government has property rights, declared to be so by a State Government under the provisions of the Section 29. It does not require the long and tedious process of settlement, as in

case of declaration of a reserved forest. However, if such a declaration infringes upon a person's rights, the Government may cause an inquiry into the same; but pending such inquiries, the declaration cannot abridge or affect such rights of persons or communities. Further, in a protected forest, the Government may issue notifications declaring certain trees to be reserved, or suspend private rights, if any, for a period not exceeding 30 years, or prohibit quarrying, removal of any forest produce, breaking of land, etc.

There is another type of forests known as Non-government Forests. Though this category is not expressly termed as a separate category, it is dealt with in Chapter V of the Act. It covers the forests and land not being in control of the government. The State government can, by notification, regulate or prohibit the breaking up or clearing of land for cultivation, the pasture for cattle or the firing or clearing of vegetation to protect against storms, winds, rolling stones, floods and avalanches, to preserve soil from erosion, to maintain water supply in springs, rivers and tanks, to protect roads, bridges, railway, lines of communication and to preserve public health.

The State Governments are also empowered under the Act to impose duty on timber and other forest produce as well as control transit of the same. The Act also defines a forest offence and vests power in the State Governments to impose penalties on violation of the provisions of the Act.

b) *The Wildlife (Protection) Act, 1972 and its Amendment Act of 1991*

The Wildlife (Protection) Act, 1972 (WPA) 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. There is a blanket ban on carrying out any industrial activity inside these protected areas. It provides for authorities to administer and implement the Act; regulate the hunting of wild animals; protect specified plants, sanctuaries, national parks and closed areas; restrict trade or commerce in wild animals or animal articles; and miscellaneous matters. The Act prohibits hunting of animals except with permission of authorised officer when an animal has become dangerous to human life or property or so disabled or diseased as to be beyond recovery (WWF-India, 1999). The near-total prohibition on hunting was made more effective by the Amendment Act of 1991.



c) *The Forest Conservation Act, 1980*

In 1980, the Parliament, in response to the rapid decline in the forest covers in India, and also to fulfill the Constitutional obligation under Article 48-A, enacted a new legislation called the Forest Conservation Act, 1980.

Deforestation causes ecological imbalance and leads to environmental deterioration. With a view to check further deforestation, the President promulgated the Forest (Conservation) Ordinance, 1980 on the October 25, 1980. The Ordinance made the prior approval of the Central Government necessary for de-reservation of reserved forest and for use of forest land for non-forest purposes. Ordinance also provided for the constitution of an advisory Committee to advise the Central Government with regard to grant of such approval.

The Ordinance was later on replaced with the enactment of the Forest Conservation Act, 1980 that came into force on October 25, 1980, which is the date on which the Forest Conservation Ordinance was promulgated. The Act too was passed with a view to check deforestation. The basic aim of the Act was to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

Under the provisions of this Act, prior approval of the Central Government is essential for diversion of forest lands for the non-forestry purposes. In the national interest and in the interest of future generations, this Act, therefore, regulates the diversion of forest lands to non forestry purposes. The basic objective of the Act is, to regulate the indiscriminate diversion of forest lands for non forestry uses and to maintain a logical balance between the developmental needs of the country and the conservation of natural heritage. The, guidelines have been issued under the Act from time to time, to simplify the procedures, to cut down delays and to make the Act more user friendly.

Prior to 1980, the rate of diversion of forest lands for non forestry purposes was about 1.43 lakh hectare per annum. However, with the advent of the Forest (Conservation) Act, 1980, the rate of diversion of forest lands were controlled to a certain extent.

The Act allows the diversion of forest land only for certain purposes such as to meet the developmental needs for drinking water projects, irrigation projects, transmission lines, railway lines, roads, power projects, defense related projects, mining etc. For such diversions of forest lands for non forestry purposes, compensatory afforestation is stipulated and catchment area treatment plan, wildlife habitat improvement plan, rehabilitation plan etc. are implemented, to mitigate the ill effects of diversion of such vast area of green forests.

To monitor the effective implementation of the compensatory afforestation in the country, an authority named as “Compensatory Afforestation Management and Planning Authority (CAMPA)” was being constituted at the national level. A monitoring cell was set up in the Ministry of Environment & Forests to monitor the movement of proposals at various stages and the compliance of the conditions stipulated in the forestry clearances by the user agencies.

Clearance from Central Government for de-reservation of Reserve Forests, for use of forestland for non-forest purpose and for assignment of leases has been made mandatory under The Forest Conservation Act, 1980. Under Section 2 of the Act, prior approval of Central Government has to be obtained by the State Government or other authority.

The proposal has to be sent to the Central Government in the form specified in The Forest Conservation Rules, 1982.

In case the proposal for clearances are rejected, a person aggrieved by an order granting environmental clearance can appeal to National Green Tribunal (NGT) setup under the National Green Tribunal Act, 2010.

d) *The Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006*

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 was passed almost unanimously by the Lok Sabha as well as the Rajya Sabha on December 18, 2006.

This legislation, aimed at giving ownership rights over forestland to traditional forest dwellers. The law concerns the rights of forest dwelling communities to land and other resources, denied to them over decades as a result of the continuance of colonial forest laws in India.

A little over one year after it was passed, the Act was notified into force on December 31, 2007. On January 1, 2008, this was followed by the notification of the “Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Rules, 2007” framed by the Ministry of Tribal Affairs to supplement the procedural aspects of the Act.

The Ministry of Tribal Affairs was established as an independent ministry in 1999 to deal specifically with scheduled tribes. The criteria for designating a tribe as “scheduled” include having ‘primitive’ traits, dwelling in geographical isolation, having a distinct culture, being shy of contact with the outside world and being economically ‘backward’. There are more than 600 officially listed scheduled tribes in the country, comprising less than 10% of the country’s total population and with little over 2% believed to be dwelling in forests.

The list of rights as provided under the Act includes:

- ♣ Right to live in the forest under the individual or common occupation for habitation or for self-cultivation for livelihood
- ♣ Right to access, use or dispose of minor forest produce
- ♣ Rights of entitlement such as grazing and traditional seasonal resource access
- ♣ Rights for conversion of leases or grants issued by any local authority or any state government on forest lands to titles
- ♣ Right to protect, regenerate or conserve or manage any community forest resource which the scheduled tribes and other traditional forest dwellers have been traditionally protecting and conserving

The Act grants four types of rights. Section 3(1) of the Act grants **Title rights**, that is, ownership to land that is being farmed by tribals or forest dwellers as on December 13, 2005, subject to a maximum of 4 hectares. Ownership is only for land that is actually being cultivated by the concerned family as on that date, meaning that no new lands are granted. Section 3 (1) also grants **Use rights** over minor forest produce, including the ownership, to grazing areas, to pastoralist routes, etc.

Relief and development rights are granted under Sections 3 (1) and 3 (2) of the Act. It includes the right to rehabilitation in case of illegal eviction or forced displacement and to basic amenities, subject to restrictions for forest protection. **Forest management rights** are granted under Section 3 (1) and Section 5 of the Act with the view to protect forests and wildlife.

IV) Environment

a) *Environment (Protection) Act, 1986 (EPA)*

This Act is an umbrella legislation designed to 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. Under this Act, 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.

From time to time the central government issues notifications under the EPA for the protection of ecologically-sensitive areas or issues guidelines for matters under the EPA.

Some notifications issued under this Act 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 utilisation 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.

Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms/ Genetically Engineered Organisms or Cell were introduced in 1989 with the view to protect the environment, nature and health in connection with gene technology and micro-organisms, under the Environmental Protection Act, 1986. The government in 1991, further decided to institute a national label scheme for environmentally-friendly products called the ECOMARK. The scheme attempts to provide incentives to manufactures and importers to reduce adverse environmental impacts, reward genuine initiatives by companies, and improve the quality of the environment and sustainability of available resources. Besides the above attempts, notifications pertaining to *Recycled Plastics Manufacture and Usage Rules, 1999* were also incorporated under the Environment (Protection) Act of 1986.

b) *The Environment (Protection) Rules, 1986*

These Rules lay down the procedures for setting standards of emission or discharge of environmental pollutants. The Rules prescribe the parameters for the Central Government,

under which it can issue orders of prohibition and restrictions on the location and operation of industries in different areas. The Rules lay down the procedure for taking samples, serving notice, submitting samples for analysis and laboratory reports. The functions of the laboratories are also described under the Rules along with the qualifications of the concerned analysts.

c) *The National Environment Appellate Authority Act, 1997*

This Act provided for the 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.

In addition to these, various Acts specific to the coal sector have been enacted. The first attempts in this direction can be traced back to the *Mines Act, 1952*, which promoted health and safety standards in coal mines. Later the *Coal Mines (Conservation and Development) Act (1974)* came up for conservation of coal during mining operations. For conservation and development of oil and natural gas resources a similar legislation was enacted in 1959.

d) *Other related legislations*

- ♣ **Factories Act, 1948 and its Amendment in 1987** was a post-independence statute that explicitly showed concern for the environment. The primary aim of the 1948 Act has been to ensure the welfare of workers not only in their working conditions in the factories but also their employment benefits. While ensuring the safety and health of the workers, the Act contributes to environmental protection. 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:
 - Cause material impairment to health of the persons engaged
 - Result in the pollution of the general environment
- ♣ **The Hazardous Waste laws** - There are several legislation that directly or indirectly deal with hazardous waste. The relevant legislation are the Factories Act, 1948, the Public Liability Insurance Act, 1991, the National Environment Tribunal Act, 1995 and some notifications under the Environmental Protection Act of 1986. A brief description of each of these is given below. Under the EPA 1986, the MoEF has issued several notifications to tackle the problem of hazardous waste management. These include:
 - *Hazardous Wastes (Management and Handling) Rules, 1989*, which brought out a guide for manufacture, storage and import of hazardous chemicals and for management of hazardous wastes.
 - *Biomedical Waste (Management and Handling) Rules, 1998*, were formulated along parallel lines, for proper disposal, segregation, transport etc. of infectious wastes.
 - *Municipal Solid Wastes (Management and Handling) Rules, 2000*, whose aim was to enable municipalities to dispose municipal solid waste in a scientific manner.

- *Hazardous Wastes (Management and Handling) Amendment Rules, 2000*, a recent notification issued with the view to providing guidelines for the import and export of hazardous waste in the country.
 - *The Manufacture, Storage, and Import of Hazardous Rules, 1989* define the terms used in this context, and sets up an authority to inspect, once a year, the industrial activity connected with hazardous chemicals and isolated storage facilities.
 - *The Manufacture, Use, Import, Export, and Storage of hazardous Micro-organisms/ Genetically Engineered Organisms or Cells Rules, 1989* were introduced with a view to protect the environment, nature, and health, in connection with the application of gene technology and microorganisms.
 - *The Batteries (Management and Handling) Rules, 2001* rules shall apply to every manufacturer, importer, re-conditioner, assembler, dealer, auctioneer, consumer, and bulk consumer involved in the manufacture, processing, sale, purchase, and use of batteries or components so as to regulate and ensure the environmentally safe disposal of used batteries.
- ♣ **The Public Liability Insurance Act, 1991 and Rules and Amendment, 1992** were drawn up to provide for public liability insurance for the purpose of providing immediate relief to the persons affected by accident while handling any hazardous substance.
- The Act covers accidents involving hazardous substances and insurance coverage for these. Where death or injury results from an accident, this Act makes the owner liable to provide relief as is specified in the Schedule of the Act. The PLIA was amended in 1992, and the Central Government was authorised to establish the Environmental Relief Fund, for making relief payments.
- ♣ **The National Environmental Tribunal Act, 1995** was created to award compensation for damages to persons, property, and the environment arising from any activity involving hazardous substances.
- 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 National Environment Appellate Authority Act, 1997** provided for establishment of National Environment Appellate Authority (NEAA) to hear appeals with respect to restriction of areas in which any industry/operation/process or class of industries/operations/processes could not carry out or would be allowed to carry out subject to certain safeguards under the Environment (Protection) Act, 1986.
- NEAA addressed cases in which EC is required in certain restricted areas but not granted. It became defunct and the Act was repealed upon the enactment of the **National Green Tribunal Act, 2010**
- ♣ **The Environment (Siting for Industrial Projects) Rules, 1999** lay down detailed provisions relating to areas to be avoided for siting of industries, precautionary measures to be taken for site selecting as also the aspects of environmental protection which should have been incorporated during the implementation of the industrial development projects.

- ♣ **The Ozone Depleting Substances (Regulation and Control) Rules, 2000** have been laid down for the regulation of production and consumption of ozone depleting substances.
- ♣ **The Noise Pollution (Regulation and Control) Rules, 2000 and its Amendment of 2002** lay down such terms and conditions as are necessary to reduce noise pollution, permit use of loud speakers or public address systems during night hours (between 10:00 p.m. to 12:00 midnight) on or during any cultural or religious festive occasion.



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- ♣ **The Biological Diversity Act, 2002** is an act to provide for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the use of biological resources and knowledge associated with it.

3. References and Recommended Readings

Jaiswal, P.S., *Constitutional Provisions and Environment Protection in India*, Environmental Law, Pioneer Publications, Delhi.

Rosencranz, Armin; Divan, Shyam and Noble, Martha L., (Ed.) Tripathi, *Environmental Law and Policy in India - Cases, Materials and Statutes*, The Book Review Literary Trust, New Delhi.

Singh, Jaspal, *Constitutional Safeguards for Environment and Heritage: An Appraisal*.

Divan, Shyam and Rosencranz, Armin, *Environmental Law and Policy in India - Cases, Materials and Statutes*, Oxford University Press, New Delhi.

Rosencranz, Armin; Divan, Shyam and Noble, Martha L., (Ed.) Tripathi, *Environmental Law and Policy in India - Cases, Materials and Statutes*, The Book Review Literary Trust, New Delhi.

Diwan, Paras, *Environmental Administration Law and Judicial Attitude*, Deep & Deep, 1992.

Madden, Chris, *The Beast That Ate The Earth, The Environment Cartoons*, Incline Press, December 1, 2004.