# Chapter-1

## INTRODUCTION

**Table of Contents**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3. Background</td>
<td>2</td>
</tr>
<tr>
<td>1.4. Resource Conservation: Historical Concerns in India</td>
<td>4</td>
</tr>
<tr>
<td>1.3. Resource Management: Problems in India</td>
<td>8</td>
</tr>
<tr>
<td>1.4.1. Population and Resource Management</td>
<td>10</td>
</tr>
<tr>
<td>1.4.2. Poverty and Resource Management</td>
<td>12</td>
</tr>
<tr>
<td>1.5. Economics and Natural Resources Market</td>
<td>14</td>
</tr>
<tr>
<td>1.4.1. Property Interest in Natural Resources</td>
<td>14</td>
</tr>
<tr>
<td>1.4.1.1. Private goods</td>
<td>15</td>
</tr>
<tr>
<td>1.4.1.2. Public goods</td>
<td>15</td>
</tr>
<tr>
<td>1.4.1.3. Common goods</td>
<td>16</td>
</tr>
<tr>
<td>1.5. Environmental Justice</td>
<td>18</td>
</tr>
<tr>
<td>1.5.5. Environmental Justice as Distributive Justice</td>
<td>18</td>
</tr>
<tr>
<td>1.5.6. Environmental Justice as Procedural Justice</td>
<td>19</td>
</tr>
<tr>
<td>1.5.7. Environmental Justice as Corrective Justice</td>
<td>19</td>
</tr>
<tr>
<td>1.5.8. Environmental Justice as Social Justice</td>
<td>19</td>
</tr>
<tr>
<td>1.6. Modern Age of Environmental Law</td>
<td>20</td>
</tr>
<tr>
<td>1.12.1. Five Year Plans and Conservation strategies</td>
<td>21</td>
</tr>
<tr>
<td>1.13. Perspectives of Resource Conservation</td>
<td>26</td>
</tr>
<tr>
<td>1.13.1. Equitable Perspective</td>
<td>26</td>
</tr>
<tr>
<td>1.13.2. Human Use Perspective</td>
<td>28</td>
</tr>
<tr>
<td>1.13.3. Managerial Perspective</td>
<td>27</td>
</tr>
<tr>
<td>1.14. Research Problem</td>
<td>29</td>
</tr>
<tr>
<td>1.15. Hypothesis</td>
<td>32</td>
</tr>
<tr>
<td>1.16. Research Questions</td>
<td>32</td>
</tr>
<tr>
<td>1.17. Limitation of the present work</td>
<td>33</td>
</tr>
<tr>
<td>1.18. Methodology</td>
<td>34</td>
</tr>
<tr>
<td>1.19. Importance of the present research work</td>
<td>37</td>
</tr>
</tbody>
</table>
1.1. Background

Environmental law in India traverses back and forth between the triple domains, of use, regulation and conservation, between the rights of nature and the rights of man, at once contradictory and asymmetrical. It is a composite bundle comprising a miscellaneous assortment of laws, both statutory as well as that, which emerges from the Court, the combined efforts of legislative and judicial acumen. Laws governing the conservation and use of natural resources in India involve multiple domains of concern – from water, air, forests, wildlife, hazardous substances and pollution, to issues of land use, industry, mining, irrigation, town-planning, energy, agriculture, waste, health and intellectual property rights. They concern wetlands and wastelands, the protection of fragile coastal areas, monitoring the purity of water and air and, fundamentally, the traditional rights of the local communities and the continuation of cultures. In this vast legal gridiron, conservation laws form but a miniscule cluster of acts, rules and notifications, but having a far-reaching impact upon the lives and livelihood of the people dependant upon these resources.

Conservation and Preservation of environmental quality is the cry of the day. Environment is integral to the overall process of development. It includes the relationship and interdependence that exists between people and natural resources. During the last century, with the growth of population, the environment has been subject to a harsh treatment by various human activities based on the development of scientific knowledge. The result is that mankind has altered the characteristic feature of this earth and it’s surrounding. It is said that if the present course of environment degradation continues, then it will destroy the capability of our environment to support a reasonably civilized human society. In turn, modification of the physical environment has important socioeconomic consequences, that effects the quality of life. Environmental change is thus the product not only of natural events, but also of the application of development models, practices and life-styles. Therefore there is strong need to protect and preserve our nature.

Addressing the Stockholm Conference on Human Environment held in June, 1972 Mrs. Indira Gandhi had said:

1 The basic premise on which the present thesis was researched is on the fact that, in India none of the environmental regulations either State or Central, obligate on conservation policies and perspectives. Though one Act in its title states of Conservation [Forest Conservation Act 1980], it nowhere states about conservation or preservation or management perspectives towards Forest conservation. That, environmental legislation still look from the ‘command and control regime’ and not from the ‘conservation and preservation’ angle, is a disturbing trend. The present research shall project the possible conservation policies existing in the Indian environmental jurisprudence.

2 ‘Sustainable Development’, is a popular poster among environmentalist. Though tough to define and explain, its significance in policy making cannot be ruled out. As ‘all Development comes at a cost’, hence any policy towards conservation must minimize the possible environmental degradation it might cost. Hence ‘Development’ has a price on the environment, the degree or magnitude might differ. To what extent the ‘environment’ must pay for ‘Development’ and how the balance should be maintained from exploitation to extraction and to conservation to regeneration should be the main aim of any sustainable development policy.
“It is time that the Natural resources of the earth must be safeguarded for the benefit of the present and future generations through careful planning or management. Nature conservation including wildlife must therefore receive importance in planning for eco development”.

It is needless to say that the definition of ‘environment’ is not exhaustive but inclusive one. The expression ‘environment’ originates from air, water and land. It includes human being, other living creatures, plants, micro-organism, flora, and fauna etc. without which the concept of environment will be fruitless.

The Constitution of India calls upon the State ‘to protect and improve the environment and to safeguard the forests and wildlife of the country’. It also imposes a duty on every citizen ‘to protect and improve the natural environment including forest, lakes, rivers and wildlife, and to have compassion for living creatures’. The Constitutional provisions are backed by a number of Acts, Rules and Notifications. The Environmental Protection Act, 1986 is the umbrella legislation; it filled gaps in the legislative coverage, which until then had been done on a sectoral basis. In addition, there are specific laws, which deal with the protection of forest and wildlife, land use, and the prevention and control of water and air pollution. viz., the Forest Act, 1927, the Forest Conservation Act, 1980 and the Wildlife Protection Act, 1972, The Water Act, 1974, the Air Act 1981, and the all encompassing Environmental Protection Act, 1986. It is estimated that there are nearly 200 enactments with provisions relating to environmental protection. But unconsciously these Acts hardly implement the concepts of conservation and regeneration of natural resources and concentrate on regulating extraction, use and exploitation.

In India, there are various policies that talk of sustainable development and thereby strive to describe the balance between short-term economic goals and environmental conservation. Nevertheless, two overarching principles relating to sustainable development may be borne in mind.

3 Art. 48 A.
4 Art. 51 A (g).
5 Most of the recent notifications on ‘Regulation of developmental activities affecting the environment’ have come from Sec. 3 of the Environmental Protection Act 1986. This section [3] has given the central Government the flexibility and also autonomy over ‘State’ subjects in the Constitution to enact and legislate on any subject for the overall benefit of protection of the ‘environment’. Sec. 3 states the power of Central Government to take all such measures as it deems necessary or expedient to protect and improve quality of the environment and preventing, controlling and abating environmental pollution. This power under sec. 3 (3) also includes the power to issues order in the official gazette; constitute an authority for the purpose the Act.
The first principle that must be followed in determining the use patterns of nature and natural resources is that their **carrying capacities** must not be exceeded. This, of course, means that the carrying capacities for each of the eco-systems, species and sites must be determined.\(^6\) The second principle is the **principle of equity**. This implies that natural resources must be so used and conserved that the benefits of their use and the costs of conservation are equitably shared.

In order to appreciate and understand conservation of natural resources one has to analyse historical concerns towards resource conservation, the problems of resource management, the issues in relation to property rights over natural resources and finally the aspect of environmental justice, which is probably the aim of any policy.

### 1.2. Resource Conservation: Historical Concerns in India

*The environmental scene in India today is one of hope as well as concern. The positive aspect is that the country is still one of the richest in the world, in terms of biological diversity and natural habitats.*\(^7\) With its geographic, climatic and biological diversity, India has a unique environmental heritage. India represents almost all types of habitats of the world - ranging from the snow clad peaks of the Himalayas to the hot Rann of Kutch, from the deserts of Rajasthan to the tropical ever green forests of Kerala and the north-east, innumerable mountain ranges, plateaus, wetlands, river systems, coastal areas and the oceans.\(^8\)

The Indian tradition of love, respect and reverence for nature handed down the ages, becoming an integral part of the Indian psyche, has also contributed to the rich biological diversity of the country. The images of rhino, elephant, bull etc. found on Indus Valley seals speak of the sense of human fascination for wildlife during that period. Historically conservation of biological diversity was an ardent article of faith in India. This faith was reflected in daily lives of people and also enshrined in myths, folklore, religion, art and culture. Considerable importance was attached to mountains and rivers in ancient India.\(^9\)

Himalayas have been considered the abode of the God, where many pilgrimage spots exists even today. Rivers are worshipped and are considered to be the manifestations of Hindu

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\(^6\) There is no study on any of the ecosystem and their carrying capacity. Such a study would help Economist to analysis and determine the nature and extent of exploitation of each resource.

\(^7\) With two biodiversity hotspots, the Western Ghats and the North East, India is amongst the richest on flora and fauna, next only to the African continent.

\(^8\) India is the only country to have all the five eco-systems in the world.

goddesses. Despite this rich heritage, and traditional wisdom of protecting nature, destruction of environment in India today is acquiring alarming proportions, and has become a matter of concern and debate. The concern arises from the environmental degradation that the country has suffered so far due to human pressure and over exploitation of resources in order to meet the basic needs of food, clothing, shelter, work, education and ensuring better quality of life of the people. Development based on utilization of natural resources, the pressure of population, and the poverty of people, which makes them directly dependent on natural resources, has taken a heavy toll on environmental assets. There has been a considerable degree of deforestation, depletion of wildlife, degradation of land, soil erosion and pollution of the air and water. The threat posed by continuing environmental degradation is no longer hypothetical, and it has serious economic and social implications for the future.

In India, traditionally space, air, water and energy have been viewed as ‘incapable of being bound into property relations’. Engaging religion in sustainable world, Grey Gardner argues that, should religious and environmental groups relation blossom, it could be a historic venture for a better world and Earth to live-in it. As religion is an important source of change within individuals across societies, religious leaders know how to inspire people; how to wield moral authority. Religious cosmologies regarding the natural environment one diverse, and the broad range of teaching might suggest that some religion is naturally “greener” than others.

Hindus regard rivers as scared, and in the concept of Lila, the creative play of the Gods, meanwhile Buddhist environmentalists often stress the importance of trees on the life of the Buddha. Islam concept of Vic regency teaches that the natural world is not owned by humans—but is given to them in trust- a trust that implies certain responsibilities to preserve the balance of creation.

Water has been considered as a sacred common heritage to be nurtured, conserved, used sustainably and shared equitably. For example in Islam, the 'Sharia' or 'way' originally connoted the 'path to water' and provides the ultimate basis for 'rights of thirst' that applies to humans and animals. Various cultures have developed numerous creative mechanisms of water management and ownership through collective and consensual decision-making processes

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10 As resources are in the ‘Common domain’ and ownership is only with the people and State.
ensuring sustainable resource use and equitable distribution, especially in regard to the needs of the poor.\textsuperscript{14}

Economic progress brings with it ‘benefits’ that portend environmental peril and have the potential for causing international discord and possible conflict.\textsuperscript{15} Some experts estimate that today the developing world produces one fourth of all greenhouse gas emissions, and that this could increase to nearly two third by the middle of the next century. Many third world countries have expressed reluctance to slow their economic growth to compensate for environmental depredation caused by the industrialized world. Some developing countries may oppose environmental action because they see in it the opportunity to improve their bargaining position with donors and international banks. Ecological conflicts between the industrialized North and the developing South may, unless handled with care, pose a serious challenge to world peacemakers comparable to the now subsiding cold war. Efforts are now being made to seek unanimous support to limit the production of gases that contribute to the ‘the greenhouse effect’.\textsuperscript{16} The most formidable obstacles to corrective action are the vested economic and political interests of the world’s most advanced nations, as well as those of the Third World who find the pain of adjustment the greatest.

Narrow socio-economic compulsions continue to obscure and overwhelm ecological concerns, largely because of an ever-increasing human population and environmentally unsound economic policies and practices and the lack of political will and strength to stem these forces. The increase in consumption levels is no longer confined to services provided by industrialization are straining to breaking point the equilibrium that once existed between man and nature.\textsuperscript{17}

The earlier evolving social structure in India did not abandon traditional social beliefs and practices while adopting the new dogmas of materialism, which characterize industrial society. The over-exploited natural resource base is further burdened with an enormous and increasing livestock population and free range grazing of unproductive animals, leading consequently to rapid retrogression of natural ecosystems, especially in the absence of developed pastures or

\textsuperscript{14} Dr. Vandana Shiva in http://www.citizen.org/ Water/reports/india/articles, visited May 2003.
\textsuperscript{15} Some experts believe that the real conflict between Israle and Palestine is over the river Jordan, while between India and Pakistan is over the river Indus.
\textsuperscript{16} The Kyoto Protocol is one such effort. India has ratified the protocol in 2004, even though it contributes less than 0.3% to the world greenhouse gases.
\textsuperscript{17} World Charter for Nature, UN Resolution 37/7. 1982; 22 ILM 455 1983.
cultivated fodder. Agriculture is still the backbone of the country’s predominantly rural economy. The limited availability of land cannot sustain its teeming population, where the ownership of land has always represented a uniquely important social dimension; the increasing fragmentation of land holding has led to lower income generations.

In the quest for economic growth, all developmental agencies are concerned only with growth and favorable cost/benefit ratios in utter disregard of the environmental degradation and the consequential phenomenal costs it imposes on society. The development projects are conceived and appraised keeping in view only the immediate needs and gains, with efforts at conservation of environment being either inadequate or disregarded. ‘Environmental costs’ are generally ignored altogether at the policy planning level.

The natural assets of a country contribute to the long-term economic productivity and should be treated as inviolable capital assets. It should be recognized that their worth lies not in their investment cost but in their potential to generate income now and in future, if conserved. However, natural resources like natural forests are regarded as gifts of nature instead of being considered the country’s most valuable capital assets. The intrinsic value of forests and the income they generate is neither accounted for nor are such assets depreciated in the National Budget as these are increasingly exploited and eroded with no provision for replenishment. The Sixth Five year [1980-85] Plan framework document aptly expressed grave concern for the ecological degradation that was occurring in the country. It is imperative that the renewable resources of the country, namely, soil water, plant and animal lives are carefully husbanded to sustain economic development through securing the country’s ecological foundations. The increasing over-exploitation of the natural resources is now dramatically reflected in the serious and widespread soil erosion, siltation, drought and floods and the rapid destruction of forests and biotic resources, which are irreversible and are leading the country rapidly towards an ecological crisis. Calamitously, this is true in a far greater measure today.

It is sometimes suggested that Indian laws has always been more concerned with property rights than the environment, the exploitation of natural resources than their conservation, and the ruthless appropriation of natural spoils than with evolving a common understanding of the totality of the inheritance of nature. Perhaps this indictment is over-written and does disservice
to the many *slokas* of ancient wisdom which revere nature, or the *sastric* and other invocations which placed many common resources within the custody of community and state.\(^{18}\)

Conservation in the broadest sense is probably the most important application of ecology. Unfortunately, the term ‘*Conservation’ suggests ‘hoarding’* as if the idea were simply to ration static supplies so that there would be some left for the future. The aim of good conservation is to ensure a continuous yield of useful plants, animals, and materials by establishing a balanced cycle of harvest and renewal.\(^{19}\)

On the basis of its value in the market, it is customary to divide natural resources into two categories: renewable and non-renewable. Although, it is true that coal, iron and oil deposits are not renewable in the same sense as forest or fish, nevertheless nitrogen, iron and energy sources are renewable just as much as living resources. Human beings need never lack vital materials so long as the biogeochemical cycles operate in such a way that material as well as organisms is ‘reassembled’ as fast as they are ‘dispersed’.\(^{20}\)

1.3. Natural Resource Management: Problems in India

The basic of all environmental problems is to prevent the overuse and abuse of ‘environmental goods’, including clean air, water, and wildlife, by controlling access and use.\(^{21}\)

People are becoming increasingly conscious\(^{22}\) of a variety of problems like global warming, ozone layer depletion, acid rain, famines, droughts, floods scarcity of fuel, firewood and fodder, pollution of air and water and problems from hazardous chemicals and radiation which have adverse effects on the environment. No Nation in the world has been spared nor any citizen untouched. India, at the time of independence, was among the poorest countries with little infrastructure for development.

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\(^{18}\) Raje e v D h a v a n; The wealth of nations revisited; [http://www.india-seminar.com/2000/492/492%20r.%20dhavan.htm](http://www.india-seminar.com/2000/492/492%20r.%20dhavan.htm).

\(^{19}\) Thus a ‘no-fishing’ sign on a pond may not be a good conservation as a management plan which allows for removal of several hundred pounds of fish per acre year after year. The principle of the ecosystem, therefore, is the basic and most important principle underlying conservation.

\(^{20}\) Although ‘hoarding’ may not be the long-time aim of good conservation, there are instances in which complete restriction of use constitutes good conservation. Eugene P Odum; *Fundamentals of Ecology; Law and the Environment a Multidisciplinary reader*; Roberty V Percinal and Dorothy C Alevizatos; Temple University Press, Philadelphia, p. 16.

\(^{21}\) Daniel H Cole; *Pollution and Property; Comparing Ownership Institutions for Environmental Protection*; Cambridge University Press, 2002 p. ix.

\(^{22}\) Racheal Green’s book *‘The Silent Spring’* Universal Publication, India; gave the world its first experiences of the use of chemical like DDT and its effect on the environment, especially health of the people.
The literacy rate has increased, death rate has come down. Every indicator of quality of life has shown betterment. It was in the early seventies that along with the rest of the countries in the world India realized another disheartening trend. The same effort that helped bring people above the poverty line also put great pressure on the natural resources of the country. Irrigation facilities also produced salinity in the land.Industrial development provided products but also polluted water and air. Medical facilities improved the health of the people but increased the population, thereby increasing the demand for the products of nature. Poverty is the fundamental cause which makes people over exploit the natural resources of the country like land, forests and water for meeting their basic needs, for employment, for shelter, for fuel and fodder for their cattle. As Mrs. Indira Gandhi put it in her address to the Stockholm conference, ‘poverty and need are indeed the greatest polluters’. The basic causes for the deterioration of natural resources have been identified as: Population explosion, Over Industrialization, Unplanned Urbanization, Coal burnt thermal power generation, Poverty, Deforestation and An expansion in the use of efficient new technology with its associated demands on space, food and natural resources. “Ten years after the adoption of Agenda 21, the primary challenge remains to ensure that access to resources for human development is in balance with human number; to extreme poverty; and to advance equality between genders. Many women in developing countries still lack access to resources, services and the opportunity to make real choices. They are trapped in poverty by illiteracy, poor health and unwanted high fertility. All of these, contribute to environmental degradation and tighten the grip of poverty. If we are serious about sustainable development, we must break this vicious circle”.

1.3.1. Population and Management of Natural Resources

24 The speech continued “on the one hand the rich look askance at our continuing poverty-on the other, they warn us against their own methods. We do not wish to impoverish the environment any further and yet we cannot for a moment forget the grim poverty of large numbers of people. Are not poverty and need the greatest polluters? 1972 Stockholm Conference on Human Environment.
25 The Researcher considers that among all, poverty and population explosion have greatly contributed towards resource degradation and over use and exploitation.
26 See AIR 2000 Journal section 178 at p. 178.
One of the major concerns of a democratic set up, in a country like India, is that the vast majority of the population has little or no education and awareness and are therefore exploited by the few who have these advantages. The solution to problems such as these lies in the social movements, which seek to represent the oppressed majority of the population. The State and its machinery, which is often touted as being for the people, are at the best of times lethargic. It needs to be woken up from its deep slumber by the people.\textsuperscript{28}

Homo sapiens are the only species that has shown an ever-increasing rate of population growth. Other species do not show this tremendous population increase because the environment regulates them.\textsuperscript{29} Man has not only over come the nature but also dominates it with his technological evolution.

Society cannot increase beyond its ability to acquire natural resources or to dispose safely of pollutants. We must remember that interactions with other species and other humans may determine the world’s carrying capacity. When, how and what laws or principles are employed by the international legal system to reach an optimum sustainable society is matter of grave concern.

One need not be an ecologist, scientist, demographer, politician, economist or lawyer to understand the dangers implicit in an uncontrolled degradation of the environment. Achieving a world population restricted to the optimum number of people that the earth can adequately sustain presents problems that are difficult to solve.

In an effort to improve welfare and standard of living of its population every country is putting and exhorting so much pressure on the environment and natural resources that the carrying capacity may not be longer than over 60 years.\textsuperscript{30}

Human kind however, is the only species that can substantially alter its environment. The carrying capacity theory states that as the population approaches the level of optimum sustainable size or carrying capacity, environmental resistance becomes greater and greater. The available resources and other limiting factors in a given area determine the carrying capacity.\textsuperscript{31}

\textsuperscript{28} Supreme Court in Indian Council for Enviro Legal Action v Union of India AIR 1996 SC 1446.
\textsuperscript{29} With modern medicines death rate have come down, while birth rates have increased. State of the World Report 2003.
\textsuperscript{31} Ibid, p. 12.
For decades, population planners focused on how to keep the world's poorest women from having more babies. In order to slow the unprecedented rate of population growth, these planners created vast international programs geared toward sterilizing women, implanting them with intrauterine devices, handing out contraceptives, and imposing quotas on family size. Despite the relative success achieved by family planning programs, experts predict that the world's population will grow from its current five billion to six billion in only eleven years.

India as a nation is faced with too much and too fast rapid change. And the question arises, Can the seventh largest country in the world and Asia’s second largest nation with a current population above 1 billion people sustain the rapid changes without completely destroying its resources of humans, land, water and wildlife habitats? The population boom is leading to water problems, air pollution, deforestation and destruction of other wildlife habitats etc.

1.3.2. Poverty and Resource Conservation

A popular poster viewed on the recently concluded WSSD summit read

When some people go hungry

32 Though India was the first country to start a population control programme in 1951, it was not actively pursued till 1965. In 1970, India also was the first country to offer cash/gift incentives for voluntary sterilization by male. While the government increased the legally permissible age limit for marriage from 15 to 18 in females and 17 to 21 in males, the measures has not brought about the desired result of control environmentalist would agree.

33 Barbara Crossette, U.N. Is Facing Angry Debate on Population, N.Y. Times, Sept. 4, 1994, at A1, A16. The increase from one billion to two billion people took the world approximately 123 years. Id. Prompted by concerns about the effects of overpopulation and over-pollution on the planet and the relative deterioration of the quality of life, the International Conference on Population and Development (ICPD) brought representatives from around the world together to work toward solutions for the greater global good. In September 1994, political leaders, field workers, and representatives from non-governmental organizations (NGOs) agreed in Cairo, Egypt, that socio-economic development and birth control techniques must be combined in order to stabilize population growth. The less developed countries, largely of the southern hemisphere, wanted to reach agreement with the North on issues of the inequities which affect high levels of population growth. Poor countries, overwhelmed by the sheer number of births, struggle to provide basic education, health services, and jobs. Although industrialized nations consume about seventy-five percent of the planet's resources, over ninety percent of future population growth is expected to occur in the developing world. The Cairo Conference was the third United Nations Conference on population in twenty years, yet it was the first population meeting to include the word "development" in its title. Over 20,000 government delegates, UN representatives, non-governmental organizations (NGOs), and media representatives gathered in Cairo for nine days to negotiate the content of a reformed World Population Programme of Action that will shape population policies for the next two decades. Delegates from 179 countries and seven observers[7] adopted by consensus a broad-ranging strategy aimed at limiting the growth of the world's population in order to prevent it from exceeding 7.27 billion people over the next twenty years.

34 The Earth Democracy Movement is inspired by the timeless Indian concept of Earth Family - Vasudhaiva Kutumbakam, that recognizes that humans are part of the web of life, and not above and apart from it; that our production and consumption patterns, our technologies and trade systems, our laws and policies can ensure justice, sustainability and peace only if they are contextualised by and embedded in the Earth Family.

35 Mrs. Indira Gandhi had said in 1972 [Stockholm] "Poverty is the biggest threat to human environment". CEERA Documentation, NLSIU.

36 World Summit on Sustainable Development 2002, Johannesburg, South Africa.
It is not food which is in short supply. It is justice.

For many years human kind has justified the exploitation of natural resources with the argument that there are plenty of resources available and that, there use is essential for growth. In the name of growth and progress, forests have been felled, water polluted and air contaminated.

Human settlements must be managed sustainably, to ensure that they and their environs are capable of sustaining life. It is proposed that the equitable distribution of land and its fruits is an element of sustainable development, as is the eradication of urban poverty. Most countries provide for property rights in their Constitution. In fact, in many countries this is one of the strongest and most championed private rights of an individual. Where the State proposes to relieve individuals of their property for development projects or for town and country planning provision is made for ‘fair’ or market value compensation. Over the years, there have been many disputes in the Courts and in the political arenas over the nature and quantum of compensation. A right to housing is beginning to appear in some Constitution so is the right to development.

A ruthless exploitation of natural resources created droughts and now the experiments with atom and the entry of nuclear weapons in the space threaten even the existence of ozone and the very atmosphere without which man cannot live at all. The assimilative capacity of the environment for wastes is seriously challenged by the pattern of population distribution. Currently, about 30 percent

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37 Down to Earth, June 2003.
40 Chameli Case [Supreme Court-Unreported], The Hindu, September 14th 2004.
42 See AIR 1997 Journal Section at p. 34-35.
of the country’s population lives in urban areas\textsuperscript{43} and this is projected to reach 40 percent in the not too distant future.\textsuperscript{44}

Ecology denotes the relationship between organisms and their environment and those between people and their environment. Unplanned and unscientific development without vision for the future shall have dire consequence on the natural resources available within the country. The consequences of interference with ecology and environment have now come to be realized. Natural resources have got to be tapped for the purposes of social development but one cannot forget at the same time that tapping of resources has to be done with requisite attention and care so that ecology and environment may not be affected in any serious way. There may not be any depletion of water resources and long-term planning must be undertaken to keep up the national wealth. It has always to be remembered that these are permanent assets of mankind and are not intended to be exhausted in one generation.\textsuperscript{45} It is obvious that nations of the world, including India adopt some strict legal method for population control before calamity strikes.

\textit{Bio-economics}, a concept introduced as a branch of Environmental Economics, evaluates every birth of a new life to have serious implication on nature.\textsuperscript{46} It may contribute to natural resources—human resources [a positive impact], but it may have adverse effect [negative impact], which may be greater. Every birth creates burden on the society with the pressure on resources to cater to his/her need. The cost of each birth is enormous and the only method to enhance the economic ability like housing, urban life, transportation is to keep track of each of such needs with the Gross Domestic Product. Unless society makes adequate planning towards management of population pressure, natural resources will be depleted at a pace, which might deprive the future generation of access to vital resources for basic survival.\textsuperscript{47} Poverty too,

\begin{itemize}
\item \textsuperscript{43}Draft Environmental Policy 2004.
\item \textsuperscript{44}The researcher believes that ‘begging’ India’s urban curse is found only in Cities. People in villages always have found gainful employment. Landless labourers too have and had jobs in villages and begging even to this date cannot be found in any village across the country.
\item \textsuperscript{45}Rural Litigation and Entitlement Kendra v State of Uttar Pradesh AIR 1987 SC 359 at p. 364.
\item \textsuperscript{46}http://en.wikipedia.org/wiki/Bioeconomics. Bioeconomics is the theory of economic exploitation of living resources, dealing with two dynamic systems: population dynamics and the dynamics of economic systems.
\item \textsuperscript{47}Deforestation is the resultant pressure of population on and over resources. While other Natural resources do not create pressure on their counter parts the same is not true of human resources. Human being greed allows them to exploit, utilize and overuse natural resources.
\end{itemize}
builds in exploitation and unequal distribution of goods and resources among the have’s and have not’s. 48

1.4. Economics and Natural Resources Markets

Natural resources market is unique in many ways. In fact, it is so unique that a specialized body of law has arisen to address many of the failures of the unregulated resources market. 49 This law of natural resources entails common law doctrine, statutory and administrative regulation, and constitutional law limitations on government action.

Natural resources and the energy produced from many of these resources are fundamental to society. Economics analysis is both a policymaking tool, and a means of explaining the distribution and allocation of these resources. Understanding the distribution and allocation of natural resources in turn allows policy makers and decision makers, such as lawyers, judges, administrators, and legislators, to formulate laws and policies regarding the use of natural resources and the production of energy.

Economics is the study, of the distribution of scarce resources in the face of basic human needs and unlimited wants. The usual economics course starts with the assumption of a workably competitive market. Too often, however, the property characteristics of items bought or sold in the market are assumed and consequently, ignored. To ignore the many attributes of ‘property’ can be dangerous for lawyers and policy makers in natural resources economics because natural resources have unique property characteristics. Before one can understand the natural resources market, one must therefore understand the nature of the property interest that make up this market. 50

1.4.1 Property Interests in Natural resources

Natural resources market are comprised of parties who discover, own, develop, use, transfer, sell, purchase or protect economically valuable natural resources. As with other markets, the natural resources market does not operate efficiently in the absence of legally enforceable rules. If the market were law-free, there would be no principled way to establish ownership, enforce

48 For more see www.oberlin.edu/economic/courses/syllabi/Fall2004. People will continue to use wild living resources and increasing human populations could further deplete these resources.
49 For more see Conclusion Chapter; Natural Resource Accounting: New Dimensions in Environmental Law.
transfers, resolve disputes among market actors, or internalize the external ‘social’ costs of natural resources development.\textsuperscript{51}

There are three types of ‘goods’ the stuff of economic analysis relevant to natural Resources Law—private goods, public goods and common goods.

1.4.1.1. Private Goods

Private goods fit the usual understanding of property. A ton of coal, a cord of wood, even a thousand cubic feet of natural gas [stored in some container] can each be considered a private good. Such goods can be owned, used and transferred in the lay and legal senses of those terms. The traditional concept of private goods means that property rights and duties can be defined completely; that owners of property can exclude others from using that specified property; and that property can be transferred easily from one owner to another. Private goods, then are characterized by completeness, exclusivity and transferability.\textsuperscript{52}

All natural resources do not share these characteristics. Indeed, the natural has above been qualified as being containerized. Absent containerization, natural gas does not share all of these property attributes. The inability of a particular natural resource from being owned completely, or the inability to exclude others from it, or the inability to easily transfer ownership, requires economic analysts to talk and think differently about some natural resources.\textsuperscript{53}

1.4.1.2. Public Goods

Air, sunlight and wind cannot be owned in the same way that a ton of coal or an acre of timber can be owned.\textsuperscript{54} Because ownership, a person’s legal rights and duties relative to a particular good, cannot be completely defined, such goods have different economic effects.

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\textsuperscript{50} There is growing debate over the introduction of Market Based Instruments to check pollution like polluting tax or carbon tax.
\textsuperscript{52} In India, though ‘right to property’ though not a fundamental right, is a Constitutional right under Art. 300 A of the Constitution, mining lease upto 30 years are legally given under the Mines and Minerals Rules 1955. The lease gives exclusive private property rights to use, exploit and extract resources in that given region.
\textsuperscript{53} Jan G Laitos and Joseph P Tomain; Energy and Natural Resources Law, West Publishing Company, Minnesota, p. 4.
\textsuperscript{54} We also attribute such goods as under the Public Trust doctrine
First, dominion [control] over these resources is difficult, and in many instances impossible. No one can capture the sun or control the wind, even though energy from these resources can be harnessed. ‘Rights’ to air, sunlight and wind cannot be defined completely. Second, because dominion or control is difficult or impossible, so too is transfer. No one can sell you the wind, even though someone can sell you a kilowatt of electricity generated by a windmill. Finally and most perplexing for economic analysis, one person cannot exclude another person from also using some resources. Further, because ownership cannot be completely defined or easily transferred and because persons cannot be excluded, the products created by public goods are very difficult to price accurately. In fact, public goods are too often undervalued and, consistent with economic theory, over consumed.  

Under valuation and over consumption have two interrelated effects—waste and externalities. Waste occurs because apart from capital costs, public goods do not cost anything; they will therefore be consumed disproportionately to their ‘real’ value. Externalities occur because, even though wind and sunlight have zero costs, the users who construct windmills and solar collectors may obstruct views or use land in ways that generate social costs. These costs are not included in the price of the energy generated from the windmill or solar collector. Social costs are the result of over consumption of law or zero resources. These social costs are called externalities precisely because they are not included in, and are external to, the price of the product.

1.4.1.3. Common Goods
Common goods refer to a separate category of resources that are frequently migratory. Natural resources such as oil, natural gas, and water do not stay in one place, rather, they migrate in light of geophysical constraints. Common goods need to be ‘captured’ before an owner can exercise dominion or control over such a good. Similarly, since for common, migrating goods a complete definition of property rights is difficult, it is also difficult to transfer these resources, or exclude others from their use.

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55 ‘Water’ as a commodity was free, until the country passed the Water Cess Act in 1975. Today, not only is water precious, it has a value price to be paid.
56 ‘Groundwater’ is a common good. One who mine’s it over his/her land owns the amount of water he draws. He ought not to complain when his neighbour draws the same water by a borewell his land.
57 Surface water which may be compartmentalized, extracted and used may also amount to ‘common good’.
Two attributes, the need for capture and the inability to exclude others, combine to produce waste and create what is known as ‘the tragedy of the commons’. To understand this phenomenon, consider an underground reservoir of oil. From the surface, the dimensions of the reservoir are not known and, not surprisingly, the reservoir does not honor any legal boundaries established on the surface. In order to obtain economic benefits from the oil, the surface owner will drill into the reservoir. The legal [and economic] incentive to drill is known as the rule to capture, which holds that whoever ‘captures’ the resources keeps it. Thus, the reward goes not to the frugal interest holder who keeps the oil in the ground, but to the persons who drill and capture it. A landowner is encouraged by the rule of capture to bring the resource to the surface before a neighboring landowner or lessee does.

The ‘tragedy’ is that such common natural resources are over consumed [waste] rather than used in response to market demand. When there is over consumption of a resource, the free market in that resource is in disequilibrium and government regulation is usually necessary to correct the defect.

Ownership

The rule that plants belong to the owner of the soil in which they grow is of long standing and is common to United State, U. K, New Zealand and Indian laws. Indeed the proposition that plants growing in the soil belong to the owner of the soil appears to be such a basic idea that it is more or less taken for granted and any discussion and dispute has center on is its application between those holding different interests in the land.

In England and Wales the position is different, as wild plants are expressly excluded from the law of theft and criminal damage. For theft, it is provided that a person who picks flowers, fruit or foliage from a plant growing wild, or who picks any fungus growing wild, does not steal them, unless he does so for reward or for sale or for some other commercial purpose. A theft charge is therefore possible only of there is a commercial motive or if an entire plant is uprooted and taken as opposed to merely parts of the plant being removed. For criminal

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58 Apply this same logic to underground water.
59 The invention of borewell technology has seen the drilling of water from ground levels upto 500 feet below the earth’s surface.
damage, no offence is committed of the only property affected is any fungus growing wild or the flowers, fruit or foliage of a plant growing wild. Again, therefore the uprooting of a plant or its total destruction may give rise to prosecution, but lesser damage cannot.  

1.5. Environmental Justice

Environmental Justice is the challenge of all democratic governments. In determining a nation’s rank in political civilization, no test is more decisive than the degree in which justice as defined by the law is actually realized in its judicial administration. Environmental Justice refers to those cultural norms and values, rules, regulations, behavior, policies and decisions to support sustainable communities, where people can interact with confidence that their environment is safe, nurturing and protective. Environmental Justice may be defined as an obligation to:

1. Protect all persons from Environmental degradation; 2. Adopt a public health prevention of harm approach; 3. Place the burden of proof on those who seek to pollute; 4. Obviate the requirement to prove intent to discriminate; and 5. Redress existing inequities by targeting action and resources.

1.5.1. Environmental Justice as Distributive Justice

Distributive justice has been defined as ‘the right to equal treatment, that is to the same distribution of goods and opportunities as any one else has or is given’. Aristotle often credited with the first articulation of the concept and explained it as involving ‘the distribution of honor, wealth and the other divisible assets of the community’, which may be allotted among its members. The focus of this aspect of justice should be on fairly distributed outcomes, rather than on the process for arriving at such outcomes. Distributive Justice in

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61 Theft Act 1968 Sec. 4(3).
62 Criminal Damage Act 1971 [U.K], Sec. 10(1).
63 In the words of Prof. Sidgwick, V D Mahajan, Jurisprudence and Legal Theory, Fifth Edition, Eastern Book Company 2004, p. 128, Blackstone wrote: ‘Justice is not derived from the king as his free gift but he is the steward of the public to dispense it to whom it is due. He is not the spring but the reservoir from whence right and equity are conducted by a thousand channels to every individual.’
66 Lloyds on Jurisprudence, p 98.
67 Assets include the air, water and land and all other resources connected with it.
environmental context would not mean redistributing pollution or risk. Instead, it would advocate equal protection for all and the elimination of environmental hazard and the need to place equitably distribute burdens resulting from endangering activities.

1.5.2. Environmental Justice as Procedural Justice

Procedural injustices have been the most common complaint of the third world nations in international environmental negotiation. To a lot extent the notion was true till Kyoto and not the long failures in the WTO talks, which suggest that the third world nations have been slowly asserting the rights to negotiate, and not just bulldozed.

That is a right, not to an equal distribution of some good or opportunity, but to equal concern and respect in the political decision about how these goods and opportunity are to be distributed. It involves justice as a function of the manner in which a decision is made and it requires a focus on the fairness of the decision-making process, rather than on its outcome. Environmental justice complaint raises both ex ante and ex post considerations of procedural fairness. Looking at the process in advance of its use [ex ante] they question whether the decision-making and public participating procedures are fair to all concerned or whether they favour one side over the other. Also looking back [ex post], the complaints question whether the completed decision-making process did, in fact, treat all with equal concerns and respect.68

1.5.3. Environmental Justice as Corrective Justice69

This involves not the just administration of punishment to those who break the law, but also a duty to repair the losses for which one is responsible. The term ‘corrective’ is more appropriate than compensatory justice because environmental justice seeks more than just retribution or punishment of those who violate legal justice—because the former term may imply that, provided compensation is paid, an otherwise unjust action is acceptable.

1.5.4. Environmental Justice as Social Justice

This is the goal of Environmental justice. ‘Social justice’ is ‘that branch of the virtue of justice that moves us to use our best efforts to bring about a more just ordering of society—one in which people’s needs are more fully met’. Social justice influences works in two ways. The same underlying racial, economic and political factors that are responsible for the environmental threats to the community also likely play a significant role in why the area may suffer from other problems like inadequate housing, a lack of employment opportunity, poor schools etc. In turn, the presence of undesirable land uses that threaten the health and well being of local residents and provide few direct economic benefits negatively influences the quality of life, development potential and attitudes of the community and may lead to further social and economic degradation.

1.6. The Modern age of Environmental Law: Overview

Although it is not possible to specify a precise date or event, the modern age of environmental law can tentatively be said to have begun some time in the early 1970s. The statutory regime in India is overlapping, an admixture of colonial economist legacy and post-Rio ecological consciousness. An apt illustration would be, on the one hand, the forest laws constituting the timber extracting Indian Forest Act, 1927 and, on the other, the biodiversity conscious Forest Conservation Act, 1980 or the Biodiversity Act 2002 and the Wildlife (Protection) Act, 1972. In the interim are numerous state legislations, the various rules governing the transit and felling of timber, grazing and non-statutory notifications relating to joint forest management and coastal regulation zone. To this must be added the constitutional provisions protecting the natural, economic and cultural rights of the tribal communities who form the most ancient of forest dwelling and dependent societies.

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70 Environmental Justice suffer the greatest setback when the international and intra-national inequalities in property rights, power and income lead to unequal access to natural resources and unequal distribution of the burden of pollution. For more see Joan Martinez Alier, The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation, Oxford University Press, New Delhi.

71 Ibid, p. 10.


73 There are stated to be over 200 central and state statutes which have at least some concern with environmental protection, either directly or indirectly. The plethora of such enactment’s has, unfortunately, not resulted in preventing environmental degradation which, on the contrary, has increased over the years. Indian Council for Enviro-Legal Action v. Union of India, 1996 (5) SCC 281, 303.

74 But Britain’s position as the cradle of the Industrial Revolution led to the very early development of public controls specifically related to environmental protection. The most significant provisions were developed in response to public health problems in the mid-nineteenth century, culminating in the landmark Public Health Act 1875. Britain can boast what is normally considered the world’s first national public pollution control agency, the Alkali Inspectorate, which was established by the Alkali Act 1863 to control atmospheric emissions primarily from the caustic soda industry. Water pollution controls followed in the Rivers Pollution Prevention Act 1876, although these proved to be virtually unenforceable in practice.

75 Intrinsically, the regime entwines with laws relating to the acquisition of land – the omnipotent Land (Acquisition) Act, 1894, the numerous land revenue codes and tenancy laws. It encompasses laws empowering local institutions to own, govern and manage natural resources within their jurisdiction, such as the 73rd and the
The duplicity in State policy is partially reflected in the laws and in their implementation. Environmental degradation, including species depletion, is caused by industrial and commercial intrusion in natural habitats. This includes mining activity, constructions such as jetties, large roads, bridges, tourist resorts, factories and refineries, large mechanized trawlers and other infrastructures for aquaculture, plantations and farm forestry and the nefarious operations of poachers, timber traders, contractors and middlemen. Ironically, they bypass or obtain clearance under the Forest Conservation Act, which disallows ‘non-forest’ or ecological destructive activities in environmentally fragile areas without permission from the central government.

1.6.1. The Five year Plans and Environmental Protection

From 1952, national programmes for sanitation, public health, nutrition, water supply and housing were given high priority, but the issue of environmentally sustainable development received little recognition in the planning process until 1968. Then, in the fourth Five year Plan [1969-70 to 1973-74] the following observation was made:

*The physical environment is a dynamic, complex and inter-connected system in which any action in one part affects others. There is also the interdependence of living things and their relationships with land, air and water. Planning for harmonious development recognizes this unity of nature and man. Such planning is possible only on the basis of a comprehensive appraisal of environmental issues, particularly economic and ecological... it is necessary, therefore, to introduce the environmental aspect into our planning and development.*

The Fifth five year Plan [1974-79] stressed that the National Planning Commission should be involved in all major industrial decisions, so that environmental goals would be taken fully into account. The Plan also emphasized that the pursuit of development goals would be less likely to cause a reduction in the quality of life if a link and balance between development planning and environmental management was maintained.

In the Sixth Five Year Plan [1980-85] an entire chapter on ‘Environment and Development’ was included that emphasized sound environmental and ecological principles in land use, agriculture, forestry, marine exploitation, mineral extraction, fisheries, energy production and human settlements. It provided environmental guidelines to be used by administrators and resource managers when formulating and implementing programmes and lay down an institutional structure for environmental management by the Central and State Governments.

Although the document was alarmist in approach, it provided a good starting point from which to address the degraded environmental conditions in India. In a section on ‘ecology and environment’ it mentioned the following causes of the reduction in environmental quality: (1) there was no consideration of the costs of environmental

74th Amendments to the Constitution of India and the Panchayat (Extension of Scheduled Areas) Act, 1996 which attempts to herald a statutory regime for tribal self rule.
76 For example *The Samatha case*; AIR 1997 SC 3297. The Supreme Court referred to the Stockholm Declaration of 1972 and along with it cited Indian scriptures. While stopping mining in the forest area in *Doon Valley case* (RLEK), the Supreme Court quoted from the *Atharva Veda* (5.30.6) to the following effect:

“Man’s paradise is on earth; this living world is the beloved place of all; it has the blessings of Nature’s bounties; live in a lovely spirit.”
77 Take the example of the National Quadrangle Highway project.
78 *The Goa Foundation case* of violation of CRZ AIR 1992 Bom 471.
79 The *S Jagannath case*, or popularly called the *Aquaculture case*. AIR 1997 SC 811.
80 For more see K I Vibute, Environment, Development and the Law: The Indian Perspective, Journal of Environmental Law, Vol. 7 No. 2, Oxford University Press, 1995..
82 Planning Commission, Fifth Five year Plan, 1974-79, part II [New Delhi, 1974].
83 O. P Dwivedi; *India’s Environmental Policies, Programmes and Stewardship*; St Martin’s Press, INC. p. 65.
degradation at the policy making level; (2) there was no long term perspective in development planning; (3) all agencies tended to maximize their own profits and ignore the costs they were imposing on society at large; (4) while a community may be dependent on a resource for its subsistence both then and in the future, and thus had a stake in its conservation, entrepreneurs were only interested in quick profits, even when this led to the destruction of the resource base; (5) the need to eke out a subsistence living had led to the cultivation of marginal land, the overgrazing of the national resource base; and (6) mining, brickmaking and similar activities had damaged soil productivity and scenic beauty. Thus the protection of ecological assets was one of the goals of the Sixth plan.

The basic approach taken by the Seventh Plan [1985-90] was to emphasise sustainable development in harmony with the environment, as the federal government had recognized the negative effects that development programmes were having on the environment, and the pressure on project planners and managers to pursue their developmental activities single-mindedly and thus lose sight of environmental and ecological imperatives:

> Realization concerning these aspects has been with us for only a relatively short period of time, about a decade and half. The damage being done to the environment, because of the large size of the population and its increase, and scale of developmental activities, is of such magnitude that urgent remedial measures are called for.

By the late 1980s it had dawned on the Country that poverty and underdevelopment, as opposed to development activities, had led to many of the country’s environmental problems and that such problems could no longer be sidestepped. That is why the Seventh Plan recognized that ‘the nation’s planning for economic growth and social well-being in each sector.


Global environmental problems do not occupy priority positions in the government’s policy. However, various measures have been undertaken which have direct relevance for these issues, for instance the promotion of renewable energy programme and afforestation activities. A few such measures undertaken specifically under the Eighth Five-Year Plan include the following:

- Various afforestation schemes were undertaken during the Eighth Plan period. However, on an aggregate basis, there was a reduction in the forest cover to the extent of 5482 km² between the two assessments of 1995 and 1997.
- An ongoing scheme is in place for the promotion of R&D in various aspects of environmental conservation. This includes research projects in climate change.
- Demand-side measures for energy conservation resulted in significant reduction in specific electricity consumption in major energy-intensive industries, such as cement, steel, and pulp and paper.

The encouragement of new and renewable sources of energy has direct implications to the problem of climate change. The Eighth Plan targets were achieved in the case of socially oriented programmes like biogas, improved chulhas, and low-grade solar thermal devices. However, with the exception of wind power, the programmes for renewable power production fell short of their targets.

Objectives of the Ninth Five-Year Plan (1997–2002)

The Ninth five-year Plan has also acknowledged the increasing importance of global environmental issues. One of the stated objectives of this Plan is ‘to ensure environmental sustainability of the development process through

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84 India Planning Commission, Sixth Five Year Plan 1980-85, section on ecology and environment [New Delhi, 1980].
86 Ibid, p. 387.
social mobilization and participation of people at all levels'. However, the strategy for environmental protection in the Ninth Plan relies less on direct action and more on the programmes and policies of various sectors such as energy, transport, and education, water\textsuperscript{88} etc. These include the following.

- The annual reports of the Departments of Power and Coal and the Ministry of Petroleum and Natural Gas are required to give a balance sheet of carbon dioxide generated and sinks created by their activities.
- Various demand- and supply-side measures for energy conservation are to be undertaken.
- Environmentally benign energy systems are to be encouraged with liquefied natural gas being promoted as an environment-friendly source of energy.\textsuperscript{89}

Environmental concerns, as outlined in the Fifth, Sixth, Seventh and Eight Five Year Plans, have resulted in the creation of several environmental institutions and laws, which reflects the broadened scope and importance accorded to the environment in overall development activities. Thus the present five-year plan [tenth five year plan] continues the efforts and policy vision of the previous plans. The tenth plan has been discussed in the specific chapters as and when its implication has been traced.

1.6.2. The Development of Environmental Law

The term ‘environment’ means different things to different people. Some would consider the term to refer to the basic elements of the earth, such as the air, land and water. Some definition, particularly in the context of which this thesis is presently speaking of the environment, consider the environment to consist only of those natural resources upon which human being place a value, that is aspect of the earth, sky and waters that can be polluted or used up.

The definition of environment in the Environmental Protection Act 1986 encompasses environmental challenges of different kinds as it concerns with the inter-relationship of human beings with others noted in the definition.\textsuperscript{90} Manifestly, environmental law involves conservation of indigenous resources so that, they can be better made use of in the present day society as well as in the future generations.\textsuperscript{91}

The area of environmental law is taken to encompass a broad range of legal elements of Government policy and private sector endeavor. It thus taken to cover environmental planning [also known as physical planning], pollution control and environmental health, environmental and social impact assessment, resource management and conservation and the protection of

\textsuperscript{87} GoI 1997.
\textsuperscript{88} The Ninth Plan (1997-2002) re-articulated the shift from perceiving water as a social good to be provided free by the government, to acknowledging that water is a scarce economic resource that should be provided according to the standard of service that users are willing to maintain, operate and finance.
\textsuperscript{89} Government of India Report 1997.
\textsuperscript{90} Sec. 2 (a) of the Act.
natural and cultural heritage. Environmental law has close links with a number of other areas of law; administrative law, tort law [especially negligence and nuisance], property law and criminal law are all relevant to a proper study of environmental law. Source of environmental law include legislation, judge-made law [i.e. common law precedents and those derived from the interpretation of legislation] administrative orders, policy directives and administrative practice. The word ‘environment’ is of broad spectrum that brings within its ambit ‘hygienic atmosphere and ecological balance’. ‘Environment’ is a difficult word to define. Its normal meaning relates to the surroundings, but obviously that it is a concept, which is relatable, to whatever object it is surrounded. Einstein had once observed, ‘The Environment is everything that isn’t me.’ Man has the fundamental right to freedom, equality and adequate conditions of life. In an environment of equality that permits a life of dignity and well being and bears a solemn responsibility to protect and improve the environment for present and future generations.

India has nearly 500 environmental laws and there is need to evaluate these legislative developments. All the contemporary legal systems of the world recognize that law plays a vital role in translating a ‘policy’ into ‘practice’. Environmental law, which is basically a law regulating human actions—which are damaging or threatening the environment and ‘punishing’ the doers of, and/or ‘compensating’ victims of, such actions, cannot be an exception to this accepted principle.

Environmental law, as the juridical articulation of environmental policies and programmes, can possibly play the following roles:

1. It can provide for institutional mechanism for the allocation of natural resources and their use in developmental process.
2. It can set standards of quality of the environment.

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91 This refers to the principles of sustainable development accepted as key element in the reconciliation between the values of environment and needs of development in modern times.
93 See Art. 47 of the Constitution, which directs States to maintain and protect public health of the people.
94 In K M Chinnappa v Union of India AIR 2003 SC 724 per Arijit Pasayat J.
95 P Leelakrishnan, Environmental Law Case Book, LexisNexis Butterworths, p. 5.
97 Both Central and State.
99 The protection and improvement of the ‘environment’ here would mean both ‘natural’ and man-made. As per Sec 2 of the EPA 1986.
3. It can set guidelines for location and operation of new technology to ensure the introduction of eco-friendly practices and thereby maintain quality of the environment.

4. It may mandate people’s participation in decision-making processes in matters pertaining to development and the environment.

5. It may provide for the payment of adequate compensation to victims of environmental pollution and degradation on the basis of tortious liability or polluter-pays principle.\(^{100}\)

1.7. Perspective in Resource Conservation

The main concern of this research work would rest on the question whether or not legal instruments in India adequately address the concerns of conservation?. Whether the policies have any perspectives to protect and preserve?. Thus it is emphasized that mere statement of policies would not serve any purpose unless and until they follow guidelines and perspective of conservation. In assessing the adequacy of the coverage of the legal instruments in India, for all the elements of the environment listed above, the effort in the forthcoming chapters would be to ensure that all the three major perspectives on the basis of which conservation is/should be attempted are addressed. These perspectives have been developed based on ideology, economic imperatives and demand for justice. The perspectives are:

1.7.1. Equitable Perspective

Conservation activities must promote and be in consonance with accepted equitable perspectives. Some of the important equitable issues relating to conservation efforts are listed below:

*Social Justice and Equity*: Conservation efforts must ensure that the costs and benefits of conservation are equitably distributed. Special attention has to be paid to the poorer and weaker segments of society and to gender based concerns.\(^{101}\) It must be ensured that the costs of conservation, especially in terms of denying access to natural resources, should be borne inequitably by the local communities living in and around bio-diversity rich

\(^{100}\) K. I Vibute; Environment, Development and the Law: The Indian Perspective; Journal of Environmental Law Vol. 7 No. 2; Oxford University Press 1995.

\(^{101}\) Art. 38 (2) of the Constitution directs State to strive to minimise the inequalities in income and endeavour to eliminate inequalities in status, facilities and opportunities not only amongst individuals but also groups of people residing in different areas or engaged in different vocations.
areas. This is so because, in many cases, these communities themselves have been instrumental in protecting the bio-diversity of such area over hundreds of years.

Rights of future generation: At the same time, the right and opportunities of future generations, yet unborn, cannot be sacrificed to meet the consumption needs of the present generation.

Rights of animals and other non-human living creatures: There is no reason to believe that the earth was created for human being alone. The right of other creatures to exist happily on this earth and to prosper and flourish must also be recognised.

1.7.2. Human Use Perspective

While dealing with bio-diversity, one must understand the nature of all living things, at the level of genes, species and ecosystems. The conditions under which bio-diversity is sustained and nature thrives must be studied and such an understanding must form the basis of any conservation. In a crowded yet bio-diversified rich country like India, some of the main biological issues relating to conservation efforts are listed below:

Acceptable levels of disturbance and human use: In a densely populated country like India, it is not always desirable to prohibit all human use and disturbance from large areas. However, human use and disturbance might not be conducive beyond a point to the maintenance of bio-diversity. It is therefore essential to ensure that the levels of use and disturbance in bio-diversity conservation areas remain within the limits of acceptability.

Minimum viable population: To ensure that a specie thrives and flourishes and that, as a specie it retains its genetic variability, we should ensure that its population must not fall below a minimum number. This can be achieved either by ensuring that in any area, the population of all species is above the required minimum, or by linking smaller than required population through physical and/or genetic corridors.

Minimum viable size: In order to maintain minimum viable population and to ensure that ecosystems are conserved in large enough patches to be viable, it has to ensure that conservation areas are not smaller than the minimum required size.

Required ecological conditions: If species and eco-system are to flourish and retain their vigour, it must be ensured that the environment within which they exist is conducive to their growth and survival.
Carrying capacity: To ensure that natural resources are used in a sustainable manner, their use should not exceed their carrying capacity.

1.7.3. Managerial Perspective

Within a complex and ever-changing social structure, where multiple demands and perception have to be reconciled, effective strategies needs to be developed for managing bio-diversity and natural resources, while meeting all the other demands of society. Some of the contemporary managerial issues are listed below:

- Participatory management: In a vibrant democracy like India, it is difficult to conserve nature and maintain bio-diversity without the involvement of the local people who not only live in and around bio-diversity rich areas but also have a stake in its conservation.

- Transparency: It is increasingly being recognised that unless the Government and other sectors of the society are more open and transparent in their functioning, it would be difficult to control corruption and ensure that the benefits of governance and development go to those who deserve it most.

- Decentralization: For local community participation to be meaningful and ongoing and also to ensure that action taken is appropriate to the specific local conditions, power and control over natural resources and conservation processes must be decentralised.

- Social and Economic Stake: It is increasingly being realised that sustainable conservation is difficult, especially when dealing with poor and marginalised communities, unless the concerned community has some long term economic and social stake in conservation. This is even true when sacrifices are made by the poor and benefits are reaped by the rich urban elite.

- Sense of Ownership: This is necessary to build the confidence, in the concerned local communities, that there efforts and sacrifices for the conservation of bio-diversity and natural resources, they are helping to conserve must be recognized with ownership rights.

1.8. Research Problem

Conservation law in India is read as being antithetical to people. It is viewed that resources like water, biodiversity and land are scarce, overexploitation needs to be checked; rational and equitable distribution of scarce resources must be made so as to meet the demands of justice, while at the same time managerial techniques must be...

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102 The Government has recognized this rights of Adivasis' over and above forest resources and has drafted the Scheduled Tribes [Recognition of Forest Rights] Bill 2005. The bill aims at reaching out at communities in the
evolved and effectively implemented. The biggest drawback in the present legal structure is in terms of the perspectives with which these legislation were/are enacted. While during the early days the laws limited their role to abatement of pollution and contamination, the later Statutes were a reaction to the Bhopal disaster. Thus, in India, never was environmental law passed due to a ‘felt need’, but increasing due to the pressure of international commitments and obligations.\textsuperscript{103}

Legal policy in relation to ‘resource management have limited role, mostly in terms of its ‘user right’. The Government, through its various agencies grants license for extraction, use and exploitation of resources, with the sole aim of restricting profit making with a view of avoiding concentration of economic wealth in the hands of few. Probably with the exception of the Forest [Conservation] Act 1980, and the recently passed Biodiversity Act 2002, none of the legislations stipulate any obligation to the agencies of the Government towards conservation, preservation and regeneration of resources. What the country has seem is piecemeal approach, strategies and schemes towards conservation.\textsuperscript{104}

In the face of such drastic difference between intention and achievement, it becomes necessary to step back from the problem, if litigation is to succeed and take a deeper look at the very basis of the operation of environmental laws. Unless we are clear about the fundamentals no light can be thrown on particular problems. The questions that we must ask are: Are our environmental laws based on an appropriate theory which is applicable to the Indian conditions and which will produce the desired result of conservation? Could it not be the case that our failure in environmental protection is not due to the mere technical difficulties in litigation but due to the fact that the legal policies are themselves faulty as a consequence lead to the technical difficulties in litigation? It would be necessary to reflect on the jurisprudence involved in environmental legislation.

A preliminary review of the Environment policy, 1992, National Forest Policy of 1988, the National Land Use Policy of 1987, does not reflect a fair degree of concern for sustainable development and conservation of natural resources. However, there is some inconsistency in these policies. While, the Forest Policy of 1988 refers to conservation of resources and protection of tribal rights, the Industrial policy encourages industries to use forest resources and set up factories in backward areas, which are quite often near forest areas. It also encourages mining of ores as a matter of greater priority than preservation of the ecology. The Water forest region and seeks to make them active protectors of the forest, while strengthening the livelihood possibilities. Mihir Shah, Governance Reform for India’s Forests, The Hindu, Friday May 20, 2005.

\textsuperscript{103} As soon as we became a party to the Basel Convention on Hazardous Waste, we enacted the Hazardous Waste Management Handling Rules 1989, which was only recently brought into force. The Biodiversity Act 2002 was also passed to fulfill India’s commitment under the CBD 1992.

\textsuperscript{104} The example of Project Tiger, Project Elephant and now project medicinal plants in the Western Ghats.
Policy encourages building of hydel and irrigation schemes, which, by and large involve destruction of forests.\textsuperscript{105}

Such variegated and complex legal structures prevail in the administration of natural resource as well. Water, air and land laws, enjoy separate and overlapping legal regimes constituting statutes, case law, government notifications, circulars and orders. Water law, for instance, encompasses laws governing rivers, groundwater, tanks, irrigation, riparian rights, and water harvesting structures such as dams, and the use and accessibility to such structures as well as the quality of the water itself. While there is no single agency of the Government which is responsible and accountable for the management of these resources, the additional problem exist with the multiplicity of agencies which dominate and control the resource. Further, the environmental agencies in the country have also not been assigned specific tasks to undertake conservation. The cleaning of polluted resource is all, that is been done under the various Acts.

The single most important characteristics of the conservation movement have been the way; the attitude towards, and knowledge about nature and resources that has evolved. Twenty years ago the movement emphasis was mainly on mitigating pollution and the destructive use of natural resources. Today we are interested in integrating environmental concerns with the imperatives of economic growth and development. The complexity of the question – between the protection of the ‘rights of the environment’\textsuperscript{106} and the rights of the people shows that the State has less or fewer choice between ‘environment’ and ‘development’. The problem seems to be in terms of creating a balance between the needs of development as well the needs of conservation.

Broadly, problems in relation to conservation of resources in India, can be classified into two categories:

a) Those arising from the conditions of poverty and under development.

b) Those arising as a negative effect of the very process of development.

The problem is also grave with no concert action or policy been spelt out in terms of appropriate and adequate tools for implementation. While there is no dearth of laws, its implementation is often weak, slow and irresponsible. While poor implementation is not unique to the filed of Environmental law, its impact may be too grave for the future generation to face. Resources once exploited cannot be replenished. Thus the legal system cannot react slowly to the increasing pattern of unsustainable resource consumption. Such difficulties in the environmental legal system have failed to awaken the policy makers. While policy is drafted, there is large disparity between the vision and its ground implementation.

\textsuperscript{105} Government budgetary allocation on environment and forests is only 1.13% of total Eight Plan outlay on an All India Basis, the corresponding figure for Karnataka is 0.9%.

\textsuperscript{106} Experts suggest that ‘environment’ as such should also have a ‘right’ of its own. ‘Environment’ itself is one of the main subjects of nature and as such its major component. Thus ‘environment’ must have its own right, even though that ‘right’ may not be based on legal principles, it may be moral and ethical. Justice Douglas of the American Supreme Court in one of the most scintillating judgment endowed legal personality with ‘valleys, beaches, ridges, groves of trees, swamp lands or even air that feels the destructive pressures of modern technology and modern life’. \textit{Sierra Club v Morten}, 405 U. S 727;31 L.Ed 2d 636 at 741.
The resource conservation initiatives taken in India over the years have had very less results due to a variety of factors. These include from legal, social, political and extra legal problems. Another area of conflict between Government and citizens is over resource use in land, set aside for conservation, wildlife protection and national parks. The most common approach has tended to be that the Central Government determines what land and resources are to be set aside for these purposes and the people on the land are required to conform to central rules, even to the point of losing their rights to traditional lands. In many cases hinterland areas, often the last refuge of beleaguered indigenous persons, are set-aside for such purposes with the intent of assimilating the population. This approach must be challenged; let the local people be involved in the policy-making about and management of the land, wildlife and natural resources; let them benefit financially from conservation and develop a mediating approach to conflicts between different land uses. The role of law in developing civic harmony and hence more efficient and equitable provision and utilization of land resources should not be undervalued. Fundamentally, legal processes that provide an opportunity for dialogue between citizens and state though threatening to the status quo, are essential for environmental management for sustainable development of resources and human settlements.\(^{107}\)

Laws are not made with preservation attitude\(^{108}\), but with the attitude to control and command the nature of activities or the sustainable use of such resources. While most of the agencies of the Government have been assigned limited role, many of the departments show no efforts in increasing the productivity of scarce resources.\(^{109}\) The problem is also largely attitudinal as policies do not mandate the requirement.\(^{110}\)

**1.9. Hypothesis**

To follow and effectuate at different perspectives of natural resource conservation, the thesis makes an attempt, at identifying the problem and the attempted solutions through the


\(^{108}\) While the Pollution Control Boards have the duty to prevent and mitigate pollution of air and water, they have absolutely no obligation to persevere, conserve and sustainable use of resources. Though the Environmental Protection Act 1986 mandates such a requirement, on ground results have not changed.

\(^{109}\) Water for example is short in supply in most cities in India during summer. Except some piecemeal approach, long term integrated strategies and policies have not been made. This despite the fact that India has more than 9 major rivers, rich in water resource, yet scarce in availability.

\(^{110}\) India could learn river conservation from the establishments of the Colorado River Authority. This Authority is entrusted with not only the duty to abate pollution across seven States in the USA, but also to make rational utilization [equitable] but also to take measures for conservation and preservation. One river-one authority, accountable and responsible for the overall development and equitable utilization of water.
intervention of law. ‘Resources’ cannot and should not be treated in parts rather, must be treated equitably for human use with best possible managerial techniques adopted for its maximum use. Law must treat ‘environment’ and ‘resources’ in a more holistic manner. Unless and until an integrated approach is adopted for preservation of resources, the policies may not serve the purpose and aim for which they are enacted. Further there must be concerted effort on the part of various stakeholders in addressing the specific issue of conservation.

1.10. Research Questions

To clarify the interrelationship between environment and development, it is important to ask:

- Is it necessary for developing countries to pay the price of a degraded environment [so called environmental sacrifices] in-order to attain material improvement?
- Is there a basic incompatibility between sound environment and sound Policy, Law and Rule of sustainable development?
- Does sustainable economic growth require the conservation of natural resources as the fundamental base for productive activity?
- Do our laws have the inclination and the answer to the crisis, environment in general and nature in particular is currently facing?
- Is our legal system i.e., the Legislature, Judiciary, Executive and public participation sufficiently equipped to conserve the natural environment for the future generation?
- What better role can Law play in conservation of the natural environment?
- Has International law and community done enough for the preservation of vital resources?
- How far environmental education, public participation, decentralized environmental governance may help in the better management and conservation of resources?
- How far the alternatives like the inter-linking of rivers, privatization of water, inter state water dispute, mining of forest wealth, eviction of tribals from their homeland for preservation of a national park, keenness to relax environmental norms to invite foreign funds, help in sustainable development?

These are few questions which have been on the back of all policy makers, and environmentalist, and which have been the core area of focus for this study.

111 In the Conclusion chapter the researcher has suggested the formation of an integrated approach, with a Special law on Natural Resource Management in tune with the New Zealand Resource Management Act 1991.
112 Environment includes both physical and natural. For e.g. heritage buildings would also be within the definition of environment. For more see sec. 2 of the EPA 1986.
1.11. Limitations of the Thesis

The thesis expresses limitation for not including other natural resources apart from water, land and forest as a matter of study. Among them the prominent one would be:

1. Marine environment, fisheries, seabed, coral reefs, oil extraction etc.
2. Resource from the Celestial bodies and space
3. Natural resources trading between and among Nations, especially under the Trade and Environmental interface.
4. Energy resource, use and consumption
5. Natural resource degradation of air, through climate change and other global warming issues.

Further the limitation of the thesis is that it has not adopted an empirical research of sociological type to the problem at hand.

1.12. Methodology

The present work makes a doctrinal attempt at understanding the various laws, policies and judicial framework, toward natural resources conservation and management. International Conventions, Declarations, Protocols, Constitution, Acts, notifications, Statutes, and Orders, has been the major source of information. The thesis also makes use of reference materials, UN documentation, and judgments as material for analysis. Thus primary data have been case law and Legislation, secondary data have been, textbooks, articles, Internet and other documentations. The study also makes an analytical, critical and comparative analysis of cases, comments and materials from parallel legal systems. Other materials and relevant sources have been analyzed and evaluated.

This thesis has been broadly divided into seven chapters.

The first chapter [present chapter] states the background, introduces the research problem, and frames the hypothesis and research questions. The chapter also raises specific issues for policy makers to consider in resource conservation and management.
The second chapter deals with the evolution of the right to clean and healthy Environment, under the premise of the Constitution of India. Most environmental lawyers only accept a procedural concept of the right to environment; this means that it has a triple content represented by the right to information, the right to participation and the right to administrative and judicial review. This limitation is based on the deep difficulties to reach an agreement on a concept of environment, which can be legally determined and is amenable to judicial control. This right connotes that the enjoyment of life and its attainment and fulfillment guaranteed by the Article [Art. 21] embraces the protection and preservation of nature’s gift without which life cannot be enjoyed. Like access to food and health, access to good environment is also a condition prerequisite for dignified life. In fact, deterioration of environment arises from abuses of economic and other freedoms.

Whether environmental law has gathered enough support from the civil law or a criminal law liability for better resource conservation? What should be the nature of punishment for environmental wrong? Has the law failed in prosecuting the polluter or is it that India is not polluted at all? How can the polluter pays principle find an appropriate place in the criminal legal system? How far the common law remedies can come to the rescue of environmental wrongs? Is compensation or fine enough deterrents to polluter and resource exploiters? are also some of the issues addressed in this chapter.

The chapter on water has been divided into two sections - surface and groundwater. In context of surface water, pollution of the same has been covered extensively, with special emphasis on river water. The attempted conservation strategies adopted, and its success and failures. Groundwater exploitation is a serious matter of concern today and legislations and policy measures taken till date; by the state governments (water is a state subject) have not had the desired effect on the situation. This has been brought out in this section, in context of policy and institutional mechanisms.

Whether the trend of legal development is towards conservation of water? Can ‘Resources’ be in the private domain? Is Privatization of resource a solution? What then is the essence of ‘public trust doctrine’? Can water be managed in a decentralized manner, empowering the Panhayats or should issues like groundwater be regulated Centrally? How successful has been

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113 It is submitted that environmental law is neither civil or criminal. The traditional branches of law have come about to change and environmental law has bought the features of civil enforcement and criminal sanctions.
the implementation and prosecution under the pollution control laws? are some of the issues addressed in this chapter.

*The chapter on forest* is by far the most important, considering the value of forest of all resources. As forest is *The Resource* which binds both water and land together. Without forests, water conservation is next to impossible and land may look simply a dessert. While this chapter looks at pre colonial and post independence legislations, it critically analysis the failure of the legal system to check and balance, between conservation and exploitative policies. While most of our forest policies have resulted in declaration of vast areas of land as national parks, we have shortsightedly thrown out tribal people from their livelihood base, without rethinking about relocation or rehabilitation. What is the actual impact of these laws on the forests? To what extent have they served the interests of the forest dwellers, who are traditionally entitled to the use of forest resources? Where does the responsibility in the protection of these forests lie? Who has the right over the resources in and over forests? Do forest dweller have any right over the forest and its produce? How far the JFM programme has been successful in improving the forest cover in the country? After millions were displaced from Dams, how has the Government embarked on the new problem of eviction of tribal people? These are some of the areas, which have been examined in this chapter.

*The chapter on land*, gives an overview of the land use pattern, which has evolved over a period of time in India. Next, agriculture, forestry and mining being the three most important activities effecting land use and degradation, a sectoral impact of each of these on land has been discussed separately. Land degradation through waste dumping, unplanned management of wasteland, and the issues in forestry encroachment has been legally analyzed. It is true that the law on forest conservation aims at checking deforestation and regulating use of forest for non-forest purpose. Nevertheless, there is no specific legislation against abuse of other land than forestland and against infringement of the fertility and conservation of such lands. Mechanism for regulating Conversion under the Land Revenue Laws [Agricultural land into non agricultural activity] is found to be ineffective, as indiscriminate conversion of paddy fields into garden lands or living units, *dabhas*, educational institutions, goes unhampered in certain regions of the country.

*The chapter* on International initiatives for sustainable development analyses the development of international law for better and effective resource conservation. The issue is whether
international environmental law works; and, if so, how it works, is of critical importance in developing new legal mechanisms for addressing environmental problems and in reforming existing structures. It is not sufficient simply to develop new law. The law must be translated into action and it must lead to real improvements in environmental quality—it must be effective.

Thus, compliance, enforcement, implementation and institutional process and establishment determine the efficacy of international law. The above are issues, which determine the success or failure of international environmental law.

The Chapter on Resource Conservation and Management looks into three important areas, which are crucial to any debate on protection and conservation of our rich resources. First is the need for Information. A policy would never work unless people knew the intention behind its enactment. In India it is well known that transparency cannot be sought in any democratic setup. Unless there is public participation and environmental education the best of conservation plans would look bet on paper and not on ground. Resources are held by the State in ‘Public trust’; hence it is imperative on the Government to carry, disclose and account for all the decision, right or wrong, affecting the community, with the exploitation or management of any natural resource.

Second, resources and their importance differ from place to place. A centralized structure in such a vast country like ours may not work, has not worked in either the case of water conservation [ground water or inter state river water], or forest [with the forest cover reducing than increasing] and land. If the state provides adequate education the locals will be better equipped not only to manage but also to be held accountable for its conservation or depletion. Hence the importance of decentralized environmental management in India need not be over emphasized.

Third, resources like wetlands, grazing lands, waste lands, those which are not in the private domain, which act as catalyst to the major resources are the ones neglected, not cared for. This sub chapter on Common property resources traces the origin and the policy initiative to save the commons.
1.13. Importance of the Present Research Work
Since the problem of conservation is not given any specific attention by the managers of the environmental law, it is important to look at conservation from the viewpoint of people’s need and the use of the other strategies to overcome this shortcoming. The present work would unravel the difficulties faced by the legal system in general and various stakeholders in particular, in relation to undertaking preservation and conservation of the natural resources. The study is also important as it makes an attempt to highlight the need to effectuate new perspective in policy making, so that ‘conservation’ and preservation’ remain the central theme of all decision making. The study will help in identifying the gap in the present legal system, both in terms of legal drawbacks and its implementation failures. The study would also help policy makers and legal scholars to adopt new techniques for effective resource management.