

TOPIC: -

MAJOR ENVIRONMENTAL POLICIES AND PROGRAMME. GANGA ACTION PLAN, TIGER PROJECTS IN MAHARASHTRA, DRINKING WATER IN RURAL AREAS, ENVIRONMENT LAWS.

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INTRODUCTION: -

Policy is the sum total of the values to which a person or a group of persons or institutions social, legal and governmental - consider as important in their relation with one another. Environmental policies have to be formulated in the credible of social morals and values - the public opinion representing the views of both the elite expert and lay public. A clear vision should be there reflecting all the conflicting values and the vision is called policy and the translation into legal frame work called law. The goals of the Environmental policy may be formulated in several ways - to protect human health, ensure viability of wild life, preservation of historic monuments, stopping further degradation of the environment etc. The policy is the overall environmental intention and direction forming the backbone and skeletal framework, from which all other environmental components are hung including environmental management systems, audits, assessments and reports.

India though has a long way to go to attain environmental quality of the same kind to those enjoyed in developed economies, has made one of the fastest progress in the world in addressing its ecological issues and improving its environmental quality between 1995 through 2010. Environmental policies in India have been evolved considerably over the past three decades. The policies have been responsive to the emerging concerns of both local and global origin. Policies have covered a wide-range of issues such as air and water pollution, waste management, biodiversity conservation (The Policy Statement for Abatement of Pollution, 1992; The Forest Policy, 1988). However, the policies have traditionally been aimed at environmental protection and geared towards responding to local issues. India faces challenges in economic development, which is to be met from limited resources; with minimum externalities and in presence of an uncertain climate. One of the approaches to overcome this challenge is through the path of sustainable development.

The present national policies for environmental management are contained in The National Forest Policy, 1988, the National Conservation Strategy and Policy Statement on Environment and Development, 1992, Policy Statement on Abatement of Pollution, 1992, Some sector policies such as the National Agriculture Policy, 2000 National Population Policy, 2000 and National Water Policy, 2002 have also contributed towards environmental management. All of these policies have recognized the need for sustainable development in their specific contexts and formulated necessary strategies to give effect to such recognition. The National Environment Policy seeks to extend the coverage, and fill in gaps that still exist, in light of present knowledge and accumulated experience. It does not displace, but builds on the earlier policies. Some of the major environmental policies and programmes are discussed here:

GANGA ACTION PLAN (GAP): -

Ganga, the longest river in India has a unique position in the Indian psyche. Apart from geographical scale and spread, she has played a vital role in the social, cultural, economic and political life of the country. The socio-economic changes in the post industrialization era have adversely affected the flow and quality of the river water leading to pollution of the river. In order to reduce the pollution of this river the Government of India (GOI) has been implementing a pollution abatement program since last 25 years.

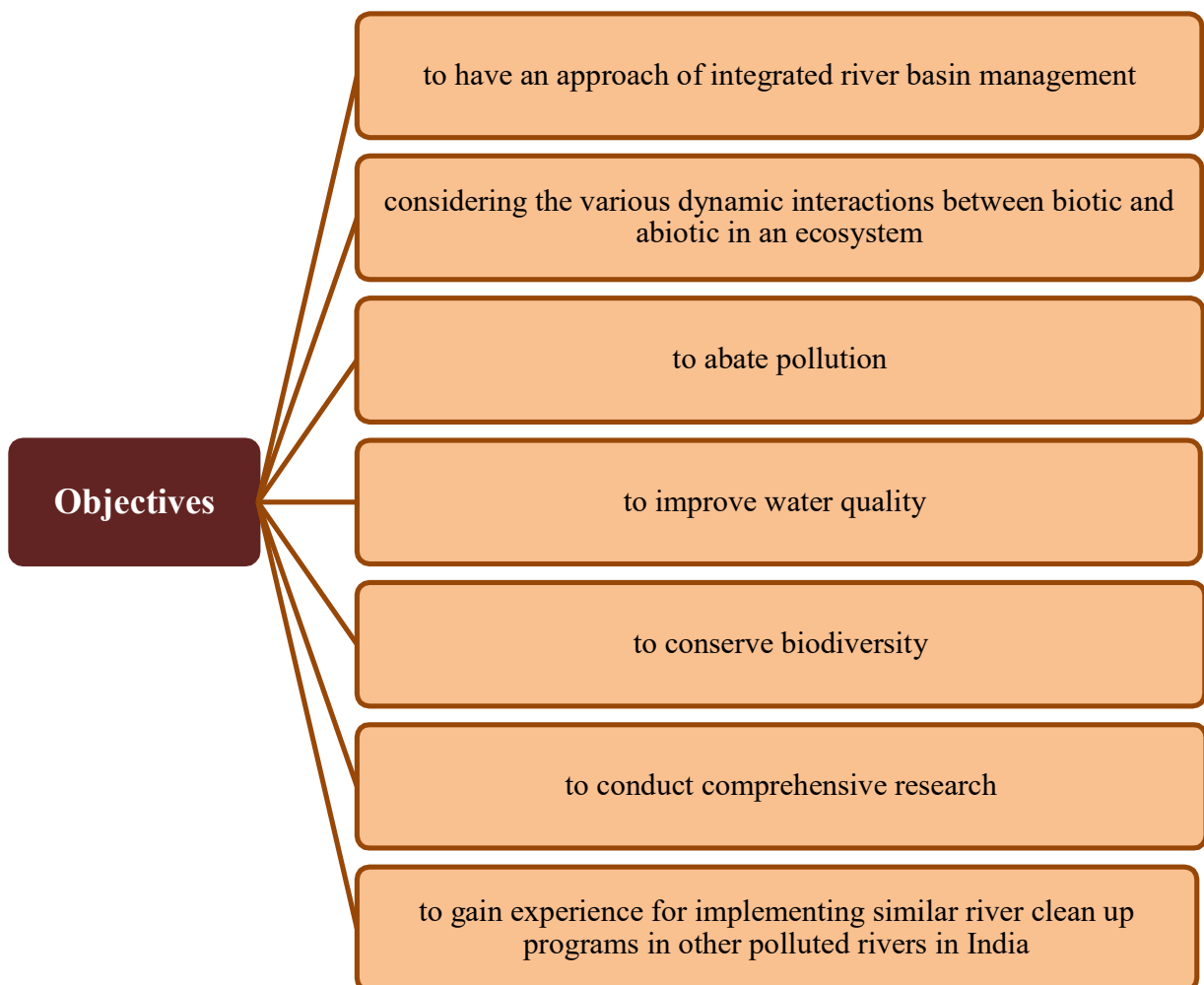
Ganga Action Plan is inertia in taking action to reduce the level of pollution stemmed largely from a widespread belief that the Ganga, as a holy river, had the ability to purify all that came into contact with it. Although there is some scientific evidence for the Ganga river's high capacity to assimilate (i.e. biodegrade) a large level of organic waste input, including pathogens, but no river can sustain its self-purifying power with this kind of over-use, misuse and abuse of its waters.

The Significant milestone of the plan are:

- ✚ The Ganga Action Plan (GAP) originated from the personal intervention and interest of our late Prime Minister Mrs Indira Gandhi who had directed the Central Board for the Prevention and Control of Water Pollution, now Central Pollution Control Board (CPCB) to do a comprehensive survey of the situation in 1979.
 - ✚ After five years, CPCB published two comprehensive reports, which formed the base from which the action plan to clean up the Ganga, was developed.
 - ✚ Department of Environment, in December 1984, prepared an action plan for immediate reduction of pollution load on the river Ganga.
 - ✚ The Cabinet approved the GAP (Ganga Action Plan) in April 1985 as a 100 per cent centrally sponsored scheme.
 - ✚ To oversee the implementation of the GAP and to lay down policies and programmes, Government of India constituted a Central Ganga Authority (CGA) in February 1985, later renamed as the National River Conservation Authority (NRCA) in September 1995, under the chairmanship of the Prime Minister Mr. Rajiv Gandhi.
 - ✚ The Government also established the Ganga Project Directorate (GDP) in June 1985 as a wing of Department of Environment, to execute the projects under the guidance and supervision of the CGA.
 - ✚ The Government renamed the GPD as the National River Conservation Directorate (NRCD) in June 1994.
 - ✚ GAP was launched in 5 major cities along the river. These five cities included Kanpur, Haridwar, Varanasi and Allahabad.
 - ✚ Prime Minister Manmohan Singh on November 3, 2008 decided to declare Ganga a 'National River' to achieve the objectives of the clean-up operation.
 - ✚ Unlike the original Ganga Action Plan, which primarily focused on municipal sewage treatment, November 2008 decisions were aimed at broad-basing the river management efforts, integrating pollution control with measures for sustainable use of water and flood management.
 - ✚ Through collective efforts of social organizations, the government's Ganga Action Plan now launched Clean Ganga Project with the planning to adopt actions to help to clean up the national river by 2018
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OBJECTIVES OF GANGA ACTION PLAN (GAP): -

The objective, at the time of launching the Ganga Action Plan in 1985, was to improve the water quality of Ganga to acceptable standards by preventing the pollution load from reaching the river. Later, in 1987, on the recommendations of the Monitoring Committee of GAP, the objective of the Plan was modified to restoring the river water quality to the Designated Best Use class of Ganga, which is “Bathing Class” (Class B). Overall the key objectives are:



A plan of action was developed in order to achieve these objectives,

- Firstly, those actions that addressed the major, direct causes of pollution in the Ganga were identified as “core sector” schemes. Core sector schemes included the interception and diversion of domestic wastewater including the construction and rehabilitation of sewers and pumphouses,
- Secondly those that address indirect sources or sources deemed to be direct but of a lower impact were called “non-core sector”. This scheme consisted of the installation of crematoria, river front development and aesthetic improvement, implementation of low cost sanitation systems, and miscellaneous activities such as water quality monitoring, research programmes, and identification and management of waste from grossly polluting industries.

TIGER PROJECTS IN MAHARASHTRA:

Tiger is National heritage of India. Government of India created a scheme known as "Project Tiger" from 1stApril, 1 973. In this scheme initially 9 areas were identified which were natural habitat of Tiger; having potential to increase the population of Tigers. Today there are 26 "Project Tigers" in India.

Objectives:

1. To conserve the natural habitat of Tiger through better Wildlife Management in Tiger Project areas.
2. To conserve and protect the Tigers
3. To increase their population and to check them from becoming extent.
4. To preserve for all times, area of biological importance as a national heritage for the benefit, education and enjoyment of the people.

The Maharashtra forest department and its wildlife wing have come under tight scrutiny and given their gloomy demonstration when it comes to conserving tigers. The latest figures showed a 30% rise in the population of tigers nation-wide, while Maharashtra recorded a 12% increase. According to figures released by the Ministry for Environment and Forests, the population of big cats in Maharashtra stood at 190 from 169 in 2010. The state, particularly Vidarbha region, was publicized as destination for tiger-centric tourism and Nagpur, the tiger capital of India.

It is ironic that in four years, the population of tigers in the state rose just by 21 despite spending crores and building several wildlife sanctuaries and tiger projects. In this period, the state even restricted industrial activities and gave liberal promotions to forest officers and created more posts for protection and conservation of wildlife. The National Tiger Conservation Authority (NTCA) rated Tadoba, Pench

and Melghat tiger projects and in fact, Tadoba was probably the first tiger reserve in the country, where 32 cubs were spotted since January 2010 and most of them have survived. The NTCA rated Tadoba, Melghat and Pench tiger projects from good to very good for protection, conservation and effective management of wildlife there while Sahyadri is from fair to good.

As per the scientific assessment the tiger reserves recorded

- 🚩 Tadoba-Andhari Tiger Reserve (TATR) recorded 74-88 tigers in 1727 sq km
- 🚩 Melghat recorded 30-39 in 2,246 sq km
- 🚩 Sahyadri 20-22 in 540 sq km;
- 🚩 Nagzira-Navegaon 20 in 765 sq km;
- 🚩 Bor 12 in 560 sq km;
- 🚩 Pench (MP & Maharashtra) 53-74 in 2,547 sq km;
- 🚩 Kanha 45-75 in 1,837 sq km;
- 🚩 Bandhavgarh 47-71 in 1,579 sq km
- 🚩 Satpuda-Bori 42-46 in 1,541 sq km.

The main tiger projects in Maharashtra state are:

1. **Melghat** was declared a tiger reserve and was among the first nine tiger reserves notified in 1973-74 under the Project Tiger. It is located in northern part of Amravati District of Maharashtra State in India. Presently, the total area of the reserve is around 1677 km². The Melghat tiger reserves has been awarded first prize among all tiger reserves in the country for village relocation from core area.
2. **Tadoba Andhari Tiger Reserve** is a tiger reserve in Chandrapur district of Maharashtra. Total area of the reserve is 1727 km². There are 88 tigers, as of August 2016 in the reserve, and 58 in the forests immediately outside the reserve. Tadoba reserve covers the Chimur Hills, and the Andhari sanctuary covers Moharli and Kolsa ranges. It's bounded on the northern and the western side by densely forested hills.
3. **Sahyadri Tiger Reserve** is a reserve in the state of Maharashtra. It was created by the Indian government in 2008 and is a part of the ecoregions of North Western Ghats which constitute rich evergreen, semi-evergreen and moist deciduous forests.
4. **Bor Tiger Reserve** is a wildlife sanctuary which was declared as a tiger reserve in July 2014. It is located near Hingani in Wardha District in the Indian state of Maharashtra. It is a home to a variety of wild animals. The reserve covers an area of 138.12 km² (53.33 sq mi) which includes

the drainage basin of the Bor Dam. Bor Tiger Reserve is centrally located among several other Bengal tiger habitats. It has become the 47th tiger reserve in India.

DRINKING WATER IN RURAL AREAS: -

Water deprivation of the poorest is a widely recognised phenomenon all over the world. It is estimated that over one billion people across the world do not have access to safe, clean drinking water, although as a basic human need it is an integral constituent of the right to life. Reducing this number by half by 2015 is one of the United Nations' Millennium Development Goals for which India has committed to achieve. Water scarcity, which is broadly understood as the lack of access to adequate quantities of water for human and environmental uses, is considered to be one of the most important global risks for society. Global water demands are expected to increase in the future because of increasing populations, urbanization, and industrialization. In addition, aspects of climate change and anticipated increases in extreme weather events are expected to contribute to increases in the frequency, severity, and duration of droughts which can exacerbate water availability problems.

The average annual per capita water availability was 1816 m³ in 2001, which decreased to 1545 m³ in 2011. India country is facing water stress and the demand for water is continuously increasing. India's drinking water crisis has become severe over the past decade. Increasing demands on available water resources for intensive agricultural practices and industrial use, together with deteriorating water quality, constrain drinking water availability despite massive outlays for drinking water and sanitation infrastructure. Although most of the water supply and sanitation schemes by India's government have penetrated into rural areas and covered many households (about 74% of rural householders are fully covered), many households (about 26%) had no drinking water facilities until 2009. Moreover, there are growing concerns about the sustainable use of groundwater and surface water with respect to emerging issues of inequity of water distribution and access. Although the government assures that drinking water is available in most rural areas, the quality of that water supply is a problem. Currently, a large proportion of India's rural communities is consuming water that does not meet the WHO drinking water quality standards.

The rural population of India comprises more than 700 million people residing in about 1.42 million habitations spread over 15 diverse ecological regions. It is true that providing drinking water to such a large population is an enormous challenge. The health burden of poor water quality is enormous. The problems of chemical contamination (fluoride, arsenic, iron) is also prevalent in India

➡ **Points to ponder:**

- ✓ According to State of the World's Water 2017, 63.4 million of rural population is living without access to clean water.
- ✓ Groundwater is the major source of water in our country with 85% of the population dependent on it.
- ✓ It is estimated that around 37.7 million Indians are affected by waterborne diseases annually.
- ✓ 1.5 million children are estimated to die of diarrhoea alone.
- ✓ 73 million working days are lost due to waterborne disease each year.
- ✓ The resulting economic burden is estimated at \$600 million a year.
- ✓ 1,95,813 habitations in the country are affected by poor water quality.
- ✓ it is estimated that by 2020 India will become a water stressed nation.

STEPS TAKEN BY THE GOVERNMENT:-

The government has undertaken various programmes since independence to provide safe drinking water to the rural masses, such as:

- The provision of clean drinking water has been given priority in the Constitution of India, with Article 47 conferring the duty of providing clean drinking water and improving public health standards to the State.
- Till the 10th plan, an estimated total of Rs.1, 105 billion spent on providing safe drinking water.
- Government cited the clean and safe distribution of water in the country, access to adequate water as the primary factor.
- As per census-2011 about 30.80% of the Rural Households in the country get tap water and 70.60% of the Urban Households of the country are covered with tap water supply.
- The National Rural Drinking Water Programme (NRDWP) of Ministry of Drinking Water & Sanitation provides technical and financial assistance to the States to provide safe and adequate drinking water to the rural population.
- The Ministry of Drinking Water & Sanitation has prepared a Strategic Plan for coverage of rural households with Piped Water. Under the Plan the following timelines have been laid out:

By 2017: it should be ensured that at least 50% of rural households are provided with piped water supply; at least 35% of rural households have piped water supply with a household connection; less

than 20% use public taps and less than 45% use hand pumps or other safe and adequate private water sources. All services meet set standards in terms of quality and number of hours of supply every day **By 2022:** it should be ensured that at least 90% of the rural households are provided with piped water supply, at least 80% of rural households have piped water supply with a household connection; less than 10% use public taps and less than 10% use hand pumps or other safe and adequate private water sources. Data regarding supply of potable safe drinking water through individual household tap connections is not maintained in the Ministry of Drinking Water and Sanitation.

Table 1: State wise status of access of households with Piped Water connection in rural and urban areas

Rural & Urban Households with access to Piped Water Supply					
<i>SL</i>	<i>State</i>	<i>Rural Households</i>	<i>Coverage with Tap Water</i>	<i>Urban Households</i>	<i>Coverage with Tap Water</i>
1	Jammu & Kashmir	1497920	55.70	517168	87.90
2	Himachal Pradesh	1310538	88.70	166043	95.50
3	Punjab	3315632	34.90	2094067	76.40
4	Chandigarh	6785	95.20	228276	96.80
5	Uttarakhand	1404845	63.90	592223	78.40
6	Haryana	2966053	63.60	1751901	77.50
7	Delhi	79115	59.40	3261423	81.90
8	Rajasthan	9490363	26.90	3090940	82.60
9	Uttar Pradesh	25475071	20.20	7449195	51.50
10	Bihar	16926958	2.60	2013671	20.00
11	Sikkim	93270	82.60	35761	92.10
12	Arunachal Pradesh	195723	59.30	65891	84.20
13	Nagaland	284911	51.80	115054	35.70
14	Manipur	335752	29.50	171400	56.30
15	Mizoram	104874	41.40	116203	74.40
16	Tripura	607779	25.20	235002	54.00
17	Meghalaya	422197	28.70	116102	77.60
18	Assam	5374553	6.80	992742	30.20
19	West Bengal	13717186	11.40	6350113	55.60
20	Jharkhand	4685965	3.70	1495642	41.60
21	Odisha	8144012	7.50	1517073	48.00
22	Chhattisgarh	4384112	8.80	1238738	62.50
23	Madhya Pradesh	11122365	9.90	3845232	62.20

24	Gujarat	6765403	55.80	5416315	85.60
25	Daman & Diu	12750	84.80	47631	72.60
26	D & N Haveli	35408	42.50	37655	50.30
27	Maharashtra	13016652	50.20	10813928	89.10
28	Andhra Pradesh	14246309	63.40	6778225	83.50
29	Karnataka	7864196	56.40	5315715	80.40
30	Goa	124674	77.80	198139	90.20
31	Lakshadweep	2523	31.00	8180	16.90
32	Kerala	4095674	24.50	3620696	34.90
33	Tamil Nadu	9563899	79.30	8929104	80.30
34	Pudducherry	95133	95.00	206143	95.40
35	A & N Islands	59030	77.50	34346	97.90
	India	167826730	30.80	78865937	70.60

Source: Census of India, 2011

Thus, the table reveals that there is clearly an urgent need to provide adequate drinking water to our rural population. There is also necessity to take steps to protect our poorer populations from unnecessary health risks, medical expenditures and morbidity caused by consumption of unsafe water. It has been estimated for instance that improved quality of water supply reduces diarrhoeal morbidity by 6% to 25%. Hygiene interventions including hygiene education and promotion of hand washing can lead to reduction of diarrhoea cases by upto 45%. Improvements in drinking water quality through household water treatment such as chlorination at a point of use, can lead to a reduction of diarrhoeal episodes by between 35% and 39%. And an integrated approach of providing water, sanitation and hygiene reduces the number of deaths caused by diarrhoeal diseases by an average of 65%.

ENVIRONMENTAL LAWS: -

Environmental law plays a very crucial and important role in regulating the use of natural resources and in protecting the environment. There should be effective legislations to protect the environment or else the need for resources by the growing population will create havoc on the environment. Legislation also serves as a valuable tool for educating masses about their responsibility in maintaining healthy environment. The success of environmental legislations mainly depends on the way they are enforced. The constitution of India obligates the state as well as citizens to protect and improve the environment.

Objectives of Environmental Laws:

The key objective of environmental laws is to:

- Preserve and protect the nature's gifts from pollution.
- To protect the man's fundamental rights of freedom, equality and adequate conditions of life in an environment of quality that permits a life of dignity and wellbeing.

ENVIRONMENT RELATED ACTS: -**The Water (Prevention and Control of Pollution) Act of 1974 and Amendment, 1988**

The Water (Prevention and Control of Pollution) Act was enacted in 1974 with an objective to provide prevention and control of water pollution, maintaining or restoring of wholesomeness and purity of water (in the streams or wells or on land) and establishment of Central and State Boards. Prior to its amendment in 1988, enforcement under the Water Act was achieved through criminal prosecutions initiated by the Boards, and through applications to magistrates for injunctions to restrain polluters. The 1988 amendment strengthened the Act's implementation the pollution provisions. Failure to comply with the directions of the Act shall, on conviction, be punishable with imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or with both.

The Air (Prevention and Control of Pollution) Act of 1981 and amendment, 1987

To implement the decisions taken at the United Nations Conference on the Human Environment held at Stockholm in June 1972, Parliament enacted the nationwide Air Act with objectives to improve the quality of air and to prevent, control and abate air pollution in the country. The 1987 amendment strengthened the enforcement machinery and introduced stiffer penalties. Notably, the 1987 amendment introduced a citizen's suit provision into the Air Act and extended the Act to include noise pollution. Failure to comply with the provisions of this Act or directions shall be punishable with imprisonment for a term which shall not be less than one year and six months but which may extend to six years and by imprisonment for a term which may be extended to Ten Thousand Rupees or with both.

The Environment Protection Act, 1986

It was the Bhopal Gas Tragedy which necessitated the Government of India to enact a comprehensive environmental legislation, including rules relating to storing, handling and use of hazardous waste. On the basis of these rules, the Indian Parliament enacted the Environment Protection Act, 1986. This is an umbrella legislation that consolidated the provisions of the Water (Prevention and Control of Pollution) Act of 1974 and the Air (Prevention and Control of Pollution) Act of 1981. Within this framework of the legislations, the government established Pollution Control Boards (PCBs) in order to prevent, control, and abate environmental pollution. The purpose of the Act is to implement the decisions of the United Nations Conference on the Human Environment of 1972, in so far as they relate to the protection and improvement of the human environment and the prevention of hazards to human beings, other living creatures, plants and property. The main objectives of the Act are to improve the quality of environment, to lay down standards for emission or discharge of environmental pollutants from various sources, handling of hazardous substances and the prevention of accidents. For each failure or contravention, the punishment included a prison term up to five years or fine up to Rs. 1 lakh, or both.

The Noise Pollution (Regulation and Control) Rules, 2000

The increasing ambient noise levels in public places from various sources like industrial activity, generator sets, loud speakers, vehicular horns etc. have harmful effects on human health. It was the need of the hour to come with a law which would regulate and control noise producing sounds with the objective of maintaining the ambient air quality standards in respect of noise. Therefore, the Central Government framed 'The Noise Pollution (Regulation and Control) Rules, 2000'. The Rules explain the objectives in these words, "Whereas the increasing ambient noise levels in public places from various sources, inter-alia, industrial activity, construction activity, generator sets, loudspeakers, public address systems, music systems, vehicular horns and other mechanical devices have deleterious effects on human health and the psychological well-being of the people, it is considered necessary to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards in respect of noise."

The Wild Life (Protection) Act of 1972 and Amendment, 1982 & 2006:

The Act is meant to prevent the rapid decline of wild animals and birds in the country. Poaching of certain animals has been completely prohibited under this Act. The Wild Life Act provides for state wildlife advisory boards, regulations for hunting wild animals and birds, establishment of sanctuaries and national parks, regulations for trade in wild animals, animal products and trophies, and judicially imposed penalties for violating the Act. The Wildlife (Protection) Act 1972 was amended by the Parliament in

2002. The main objective of this Act is “to provide for the protection of wild animals, birds and plants and for matters connected therewith or ancillary or incidental thereto with a view to ensuring the ecological and environmental security of the country.” The Act was further amended in 2006 to set up of a Tiger Task Force in tiger reserve hotspots.

The Forest (Conservation) Act of 1980

After independence, the Government of India adopted the National Forest Policy wherein it emphasized on the need of protection of forests and categorised forests of India. Alarmed at India’s rapid deforestation and resulting environmental degradation, Centre Government enacted the Forest (Conservation) Act in 1980. Under the provisions of this Act, prior approval of the Central Government is required for diversion of forestlands for non-forest purposes. The Forest (Conservation) Act was promulgated in 1980 to make certain reforms over the preceding Act of 1927 which imposes restrictions on the reservation of forests or use of forest land for non-forest purposes by States. The state governments are empowered to designate protected forests and may prohibit the felling of trees, quarrying and the removal of forest produce from these forests. The preservation of protected forests is enforcing through rules, licenses and criminal prosecutions. The Act has been passed to prevent deforestation which results in ecological imbalance and environmental deterioration. Any unauthorized felling of trees quarrying, grazing and hunting in reserved forests is punishable with a fine or imprisonment, or both reserved forests assigned to a village community are called village forests.

Biodiversity Act 2000

The Biological Diversity Bill, which was introduced in the Parliament on 15th May, 2000, was referred to the department related Parliamentary Standing Committee for Science, Technology, Environment and Forests for examination and report. The Biological Diversity Bill 2002 has been passed by the Lok Sabha on 2nd December, 2002 and by the Rajya Sabha on 11th December, 2002. The main intent of this legislation is to protect India’s rich biodiversity and associated knowledge against their use by foreign individuals and organizations without sharing the benefits arising out of such use, and to check biopiracy. The Act provides for setting up of a National Biodiversity Authority (NBA), State Biodiversity Boards (SBBs) and Biodiversity Management Committees (BMCs) in local bodies. NBA and SBB are required to consult BMCs in decisions relating to use of biological resources or related knowledge within their jurisdiction and BMCs are to promote conservation, sustainable use and documentation of biodiversity. To conserve the biological diversity, sustainable use of the components of biodiversity and fair and equitable sharing of benefits arising out of the use of the B.D are main objectives of Biodiversity Act.

CONCLUSION: -

India does not have lack of environmental policy but proper implementation is not there. In the current scenario it becomes essential that the Indian authorities should strive to achieve a society where ideals and reality, legislation and implementation, correlate. When the authorities manage to fulfil their role, it enables corporations to better contribute to the society in a positive way.

In the wake of recent damages, concerned authorities have started giving more attention towards environment but what we need is to find out newer ways to deal with old problems. Without active involvement of common people, it is indeed difficult for the authorities to devise and implement proper environment policy. Hence, individual's initiatives are of paramount importance. What we need is to adjustment not deep-seated change.