

Analysing The Constitutional Principles And Policy Frameworks For Environmental Conservation And Sustainable Development In India

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1. **Abstract:**

This paper seeks to venture into analysing the constitutional principles which act as the base of the guidelines for the environmental policy framework in India. As India rises economically and rises on the ladder of development, it would be imperative for the government and the citizens, especially in the backdrop of climate change, to look at the environmental concerns and its growing detrimental effect on the quality of life. This paper addresses and examines the problem with significant environmental policies implemented in India in the last few years and provides a new outlook and solutions for the betterment of those policies. The paper tries to provide a solution to the debatable question of dichotomy between the environment and development and provides measures that make sustainable development turn into a living reality.

Keywords: Constitutional principles, environmental laws, Environmentalism, sustainability, Environmental policies, Green Tapism.

2. **Introduction:**

Man at his early stage of civilizational journey had understood the importance of its bond with the environment. All the Great Early civilizations that we know today be it Egypt, China, India all flourished by their healthy coexistence with the environment. The relationship between Indians and the Environment can be traced back to the Vedic times. The importance can be illustrated with the Rig Vedic Hymn “ May plants, the waters and the sky preserve us, and Woods and mountains with their trees preserve us, May the swift wanderer, Lord of refreshments, list our songs, who speeds through cloudy heaven. And may the water, bright, like castles, hear us. As they blow onword from the clover mountain.”¹ There are various instances of environmental conservation that have been carried on from generations, like the preservation of the sacred grove. Thus we see the relationship between the Indians and Environment is so closely knit that even the changes in the environment and the seasons are keenly observed and are celebrated as festivals, which portrays the understanding and respect Indians culturally had for the environment.

The Constitution of India reflects the aspirations of the Indians, and it adheres to the same Principles of Environmental conservation and protection. In today's day and age, with increasing needs, expectations and greed to hold on to the resources, has undeniably taken a huge toll on the environmental balance and sustainability. The Indian constitution addresses the issues with the help of environmental laws, rules and policies. Thus analysing these constitutional principles and revisiting policies can lead the country to a better sustainable future, where development and environment can go hand in hand.

¹ (Rig-Veda 5.41, 11-12).

3. Tracing the roots of the Environmental laws in India.

As a country which is driven by constitutional mandate, the protection and sustainability of the environment cannot be assured without stringent environmental laws guided by constitutional principles and grounded policies. The Indian constitution which nurtures the idea of a welfare state, contains specific provisions for the protection and conservation of environment under the chapters of Directive Principles of State policy and Fundamental Duties. This part of the paper deals with the background or the origins of the Environmental laws in India.

3.1. Pre-Independence:

Awareness regarding Environment has existed since the time of Harappan civilization, where awareness regarding hygiene and sanitation is evident by the construction of orderly streets, underground drains, bath rooms, public baths etc. In Arthashastra various punishments were prescribed for damaging forests, cutting down trees, harming animals, these ethics and rules of environmental conservation were applied to both the kings and the folks. During the Mughal era, the forests were seen as not more than hunting ground, thus the environment conservation activities were largely absent during this period. It was during the period of Akbar that the activity of hunting was limited to the royals.

If we trace the legacy of the Environmental laws and policies in India, the legal journey began in the pre-independence era, where considerable changes in the environmental policies were brought about. From the year 1853 to 1947 several acts were introduced like, Shore Nuisance Act, 1853 which was a law concerning water pollution. The Elephant's Preservation Act -1879, The Fisheries Act-1897, Wild Birds and Animals Protection Act,1912 were acts aiming to protect the wildlife and the aquatic ecosystem. Apart from these the problem of Air Pollution was recognised way back with the acts like The Bengal smoke Nuisance act, and the Bombay Smoke Nuisance act,1912, which were the foremost Anti-pollution laws in India.

Similarly In 1894, India's first policy on forests was introduced, with an aim of protecting the forest, however the policy was carried out with one goal, that was to add revenue to the British empire. Under this policy several forests were classified as reserved forests of the state, but to gain timber from these forests the British changed the status of these forests as unreserved, as and when it suited their business. Having presented the laws, does not mean that the colonial British were a hallmark of "Environmental conservation" but in fact their understanding of the Environment was based on Industrialization and the control of resources, the Britishers saw the natural resources as commodities, which were then oriented towards the market. Thus during

the colonial era, last scale deforestation was carried out to create land for cultivation as to fulfil the demand of raw materials for the factories. Another example is Britishers forcing the natives to cultivate Indigo, which harms the fertility of the land and pollutes the water. India was a colony, and exploitation of its natural resources was seen as a legitimate right by the colonisers.

3.2. Post -independence:

In the initial decades of India's Independence few environmental laws were prevalent like The Factories Act 1924 and Indian Forest Act, 1948. These laws had limited reach and were unsuccessful in their implementation. In 1952 the National Forest Policy was introduced with an aim to have a check on land degradation and to increase the national forest cover to one-third of India's geographical Area. However, during this period Environmental problems rarely came up in the discussion as the focus of the government was prioritised to the immediate problems of poverty, food security, national security, education, agricultural reforms and economic stability. Thus in the initial decades of independence we see a focus on the country's economic capital rather than on the country's natural capital.

The years from the 1970s and 1980s saw a strong political commitment towards recognition and tackling environmental issues. It was during this period that the words and aspiration of 'forest environment and wildlife' got entered in the Indian constitution. In order to turn these words into action stringent forest and wildlife laws were enacted by the parliament like the Wildlife Protection Act 1972, Project Tiger was launched in 1973, in addition to this Principle of regulation of pollution and environment were also introduced. The international conferences marked the turning point in the environmental legislations in India, in order to fulfil the commitments made at the stockholm conference, 42nd amendment was brought about in 1976 by the article 48A and 51A, and environmental protection was made a part of concurrent list, which provided both the Centre and State legislation on this issue.

In the later decades several environmental laws were enacted like The Forest Conservation Act-1980, Water Prevention and pollution control act-1974, The Air Prevention and Control Act- 1981 etc were carried on, in the wake of commitment towards the Stockholm declaration and the Bhopal Gas tragedy, the Environment Protection Act- 1986 was enacted which acted as an umbrella legislation for improvement of Human Environment and prevention of several waste, E-waste Hazards, plastic waste etc. Biological Diversity Act of 2002, Energy Conservation Act of 2001 etc act were carried on. The Central and State Pollution Control Boards were established to implement the objectives of these acts. Similarly in 1985 the Ministry of Environment and Forest was established to effectively plan the environmental policies.

It's important to note that having traced the trajectory of the environmental laws in India and principles we see that the responsible institutions largely lack in their implementation, the air qualities index of prime cities like Delhi, Mumbai still continue to be in a bad state, due to the bad drainage system the rivers in many town and cities have turned to drains, this arises the question of does the polluter actually pays the price? Even when there are laws enacted, the ways of successfully implementing those still hold a challenge and this is not just the state of India but the world, where conferences of climate change are undertaken by the world leaders but hardly the goals are completed. The solution for this is to act at a micro-level not to eliminate but to reduce the harmful effects of human activity and look towards sustainable development. This paper aims to have its share in suggesting solutions to what India can do at legal and institutional level.

4. Analysing Constitutional Principles and legal cases:

In the Indian Constitution there are several Directive Principles which act as guiding lines for the Parliament in making Legislation. Until 1976, Environmentalism was not included in the constitution. However when the 'Socialist' word was added in the preamble by the 42nd amendment of 1976, it now meant that the social issues are of immense importance.² Thus to live in a pollution free environment and having a decent standard of living became a responsibility of the state, thereby aiming to achieve social development along with the urbanisation and Industrialization became an objective of the state. Thus several constitutional principles were established through which the policies can be made to ensure the sustainability and protection of the environment.

There are several provisions and principles in the constitution dealing with the protection of the environment and some of the salient provisions are follows:

Article 253 of the constitution empowers the Parliament to make laws relating to the environmental protection which can be applicable to the whole of India or any territory of the country for the implementations of the agreements signed in conventions or with any other country or countries. There is a case pertaining to this article which is Vellore Citizens welfare forum vs. Union of India, where the Supreme court held that it is important to incorporate the international conventional laws in the municipal laws, only if they are not contrary to them, this is an important and accepted principle of law. In addition to this during this case the court also observed that the "Precautionary Principle" and "The Polluter Pays Principle " are essential features of sustainable Development. The problem with these principles is that there are weak measures to implement that on people and the industries which pollute. In many cases the fine that is collected is quite less or none. The implementation of these principles is something the government must seek to work on in future.

² <https://moef.gov.in/wp-content/uploads/wssd/doc2/ch2.html>

Article 47 puts obligation on the State authorities that it is their duty to improve public health and their standard of living. To interpret this law further in the context of the environment, individuals cannot take up environmental development projects which harm the society as a whole. Further **Article 48-A** directs the protection of environment specifically in matters of safeguarding forests and wildlife, which proves to be the salient Principle of the Environmental law in India.

The case of Rural Litigation and Entitlement Kendra vs. State AIR 1988 was one of the First cases of its kind in India which involved the issue of environment and ecological balance, where the supreme court gave a verdict to curb illegal mining. **Article 19 (1)** also restricts any such occupation or profession which hamp[ers the society and environment, serving as an important environmental law.

5. Environmental Laws- Challenges and Recommendation:

5.1. The National Green Tribunal Act 2010:

This act fueled the establishment of a separate judicial body for dealing with the cases pertaining to the pollution and environmental harm in an effective way and to settle cases in a time bound manner. The question arises that if this act gives out a special provision of establishing a tribunal for environmental issues then why is India lacking in solving environmental issues? The can be answered if the lacunas of implementation of this act is looked into. No doubt we have established a National Green Tribunal, these authorities face a problem of effective decision making. In India, the problems of the environment are mostly overlooked, which can be seen in the fact that in NGTs there is lack of regular appointments and a shortage of personnel. Zonal benches of NGT have been virtually non-functional with no regular hearing. The other challenge that is faced by these tribunals is that even when it has jurisdiction over all the matters of the environment, various High courts freely invoke their inherent powers and dispose of matters without referring to the NGT, thereby subverting the possibility of having an specialised and effective body regarding environmental concerns.

Recommendations: To tackle these challenges, it's important to revive the authority of NGT, there should be specified demarcation of their jurisdiction and should have a foremost special authority to deal with environmental issues. As per NGT Act, NGT's sanctioned number of judicial members is 10 members, however at present it has only three judicial and three expert members. There should be a combined mechanism between the judicial and administrative body to ensure that the personnel are appointed in sufficient numbers, so the problem of looming vacancy is dealt with.

5.2. The Wildlife (Protection) Amendment Bill, 2021:

India is a country of rich natural terrains, with varied species of plants, animals, birds, however there was a challenge of illegal poaching of animals, deforestation etc in order to counter this issue. The Wildlife (Protection) Act of 1972, was passed to ensure the protection of India's Biodiversity and Wildlife. This act has power to categorise the species into six schedules to label them as endangered and to provide varied degree of protection. A Wildlife (Protection) Amendment Bill of 2021, is aimed at expanding its scope of security to ensure that India fulfils its International commitments of securing Biodiversity.

Theoretically the provisions of the act are quite specific in nature, however there are several challenges when it comes to implementation and upgradation. One of the lacunas is that there is not proper coordination between different governmental departments like forest department, police, customs etc, which makes the enforcement difficult. The next lacuna is that the act mentions several punishments and penalties, but these penalties for the wildlife crimes are not stringent and even fines are often too low. The offenders can easily get away with it. Another challenge is that of lack of local participation.

Recommendations: In this decade, the Government has made significant improvement in the wildlife habitat and the act has been largely successful in its cause like protecting Tiger and several animals and birds which were previously considered to be highly endangered are now part of 'not endangered' list. However to counter the lacunas, few legal changes are needed, like increasing the current amount of penalty which is just Rs. 25,000, the amount of penalties needs to be substantially increased to lakhs so that it has an impact on the offender. It is recommended, that the Government should add a provision of including the locals in the implementation process, as nowhere the act mentions the community participation, the community participation is detrimental in curbing the wildlife crimes and protection.

5.3. The Air (Prevention and Control of Pollution) Act 1981:

In order to fulfil international commitments India passed several laws in order to handle and manage sustainable development and to reduce the harmful effects of human activities on the climate. This act was passed by the Government to improve the air quality and to regulate pollution levels.

The challenges to this act are similar to the challenges which are discussed above like poor implementation, no proper mechanisms for accountability, corruption amongst the accountable authorities, lack of research about the causes and impact of Air pollution, lack of stringent punishments to the offenders and so on. Even after several decades of implementing the act, the

air quality of most cities in India like Mumbai, Delhi, Bangalore, Kolkata continues to be degraded.

Recommendations: In order to make this act more effective, firstly the fine and the punishment must be increased, for now the act assigns the punishment of imprisonment of 1 year with additional fine of Rs. 5000, however taking into the consideration of the major polluters which are industries the fine seems much low and then can easily get off. The legal punishment in case of failure to comply with the rules of the Central Pollution Control Board is much lower, and thus there is a need to make changes in this regard. There is a need for not just regulated air pollution but also a scheduled developmental plan. For example in Mumbai, several developmental constructions like Metro, coastal road, reconstruction and redevelopment of buildings etc are going on simultaneously. The problem isn't the developmental plans, but the implementation of several projects at the same time has led to more degradation to the already critical air quality of Mumbai. It needs an hour for the government to plan the developmental projects considering the environmental implications, and an authority is established to supervise the environmental effects.

5.4. The Hazardous Waste Management Regulations:

One of the most contributing factors towards the degradation of the environment is poor waste management, therefore in order to manage and handle the waste several rules have been made. Hazardous Wastes (Management, Handling and Transboundary) Rules, 2008 guides regarding the production, import, and damage caused by the hazardous chemicals. Similarly there is a law of Biochemical waste (Management and Handling) Rules 1988, which provides guidelines to ensure proper disposal and handling of infectious wastes.

Some of the challenges in front of this law are inadequate mechanisms to follow the rules, poor infrastructure of waste segregation, unaccountability of the citizens, no stringent fines and even if there are then there are poor mechanisms of collecting fines and penalties.

Recommendations: One of the major challenges in recycling is that the waste that is collected is not segregated properly. At times it is seen that still people in many parts of the country don't keep separate bins for dry and wet waste, therefore rules can be made regarding that, that if any colony, house, building fails to comply with waste management rules, that colony, building, house would be subject to fine. The municipal and local authorities must ensure that this rule is well implemented. There is also a case where people keep separate bins for solid and wet waste; however, the garbage vehicle personnel fail to segregate the garbage in the vehicle, which makes

the waste non recyclable. Either municipality can provide separate vehicles for wet and dry waste or ensure that the garbage is well segregated in the same vehicle. In addition to these, there should be strict fines for the industries who fail to comply with the legal rules under these acts.

No law can be truly meaningful unless the citizens participate in the cause. It's also a duty of the Government to bring about innovative policies to tackle the prevalent environmental problems as well as to carry out preventive measures for the Country's future. The next part deals with the policy analysis of the government towards environmental sustainability.

6. Analysis of the policy framework:

Aim of a policy is to bring change, Policy can be termed as an action plan taken by a government or any institutional body to carry out certain fixed goals and objectives. It is directed towards a particular cause and its success lies in its proper implementation and achievement of its goals. A country is highly regarded and judged with its ability to form and implement policies, thus it is an important pillar of governance. For a healthy future of any country, preservation and conservation of the environment is a major task, nation building and development cannot be considered to be truly successful without keeping in mind sustainability of the environment. Countries from the last few decades have become aware of environmental degradation and climate change, and India is no exception in that.

In the case of India, Under the Modi government since last ten years, several policies have been made to counter the environment problems. The effectiveness of those policies is a question of analysis, therefore In this section of the paper we will probe into some of the important recent environmental policies and shall analyse the policy framework undertaken by the government in the last ten years.

In recent years we see various environmental issues and factors being paid attention towards but the focus of environmental policies has been the area of clean and green energy. It includes various initiatives like Net Zero-Carbon emission by 2070, production of green hydrocarbon power, National Hydrogen Mission, solar ambition projects, promotion of Afforestation, use of electric vehicles and so on.

6.1. National Hydrogen Mission:

On 75th Independence day, Prime Minister Narendra Modi announced this initiative, and on 4th January 2022 the Union Cabinet approved the policy with the aim of making India hub for the production and export of green hydrogen, as hydrogen and Ammonia envisaged to be the future fuels and can replace the fossil fuels used in industry, clean aviation, marine and road

transportation, for decentralised power generation. Since limiting fossil fuels is a major need for achieving environmental sustainable energy, this scheme includes all energy sources like solar, wind, and electricity together. One of the major aims of this scheme is not only to reduce the dependency on petroleum products, but also to place India as a biggest global hub in the future. Numerically speaking the initial outlay of the policy is Rs. 19,744 crores,³ It also includes the outlay of Rs. 17,490 for the Strategic Interventions for Green Hydrogen Transition programme, and about Rs.400 crores for Research and Development. This policy is launched with the aim of developing the Hydrogen production capacity with the renewable energy capacity, reduction of fossil fuels imports, to achieve over eight lakhs crores of Investments, creating jobs, Indigenisation and promotion of hydrogen fuel run electric vehicles.

Analysis:

As India aspires to be the third largest economy in the world, it's important that we stay at the par of innovation. When China, US, Japan and EU countries are all set with their Green hydrogen plan, his policy of Green hydrogen will play a crucial role in making India a competing player in the race of energy Production in the coming years. Not only this policy would change dynamics of energy production, but if implemented efficiently would serve as an employment creator and economy booster.

This policy can be well applied in the manufacturing sector, in fact implementing this policy in manufacturing units will result in cutting down cost of energy required and therefore will cut down the cost of production, thereby helping both the business and the consumers. If this policy is applied in large-scale industries like steel producing industries which use nearly 60% coal, it can reduce carbon emission significantly. If applied on a larger scale not only it will make the energy cheaper but also make Industries to emit less carbon in the environment thereby achieving the principle of sustainability.

The policy doesn't talk about the transportation of the hydrogen energy once it is produced which can be a major issue when it comes to connectivity and implementation, in this regard India can tackle this issue with the provision of construction of pipelines for transporting this hydrogen energy. Not only would it be cost efficient but also would be time efficient. The construction of the pipelines should be carried out along with the construction of the hydrogen producing plants, this would make the policy more practical and time efficient in its implementation. Decarbonisation in transportation, by electrifying the public vehicles would be a major step in achieving sustainable development and will connect the programme with a common citizen.

³ <https://mnre.gov.in/national-green-hydrogen-mission/>

Significant step regarding green hydrogen policy was taken on 28 May 2024, where Bharat Heavy Electrical Limited (BHEL) entered into a technology agreement with Bhabha Atomic Research centre (BARC). This agreement was signed with an objective of production of indigenous alkaline transfer electrolyser systems for hydrogen and to commercialise for its application in fertilisers, steel, transportation, refineries etc. This initiative would not only encourage 'AtmaNirbhar Bharat' but also efficient ways for sustainable development. These developments showcase a promising future and seriousness of the policy. Undoubtedly Further steps of the government will prove to be fundamental in its implementation, this would decide if the plan would be successful or just remains on paper.

6.2. Namami Gange Programme:

India is considered to be the land of Rivers, and River Ganga is considered of importance for socio-economic-religious reasons. Thousands and lakhs of people visit the banks of river Ganga, but as is true for any other widely visited destination, even river Ganga faces the problem of water pollution, threat to the aquatic ecosystem, disposal waste and so on.

Indian Government took the initiative of cleaning rivers by establishing the Ministry of Water Resources, River Development and Ganga Rejuvenation, but not many tasks were achieved, then in 2009, during the UPA Government National River Basin Authority (NGRBA) was established with a aim to find solutions to the water pollution in Ganga River. Under this initiative building of sewage treatment plants (STPs), 26 STPs were built, 48 additional STPs were planned across the ganga river, however the plan didn't turn out to be efficient as the outpouring of millions of litres of raw sewage continued, the project was thus unsuccessful.

In June 2014, the NDA Government retook this initiative and was implemented by the National Mission for Clean Ganga. This programme was inaugurated with the budget of Rs. 20,000 crore. The main objective of this policy was conservation and rejuvenation of Ganga.

The aims of this programme was to treat the sewage infrastructure, cleaning river surfaces, afforestation, monitoring the industrial influence and to make the people aware about the cause.

⁴As per the data published on february 2024, Minister of Jal shakti Bishweshwar Tadu told lok sabha that out of 457 projects of estimated cost of Rs.38,430 crores, 280 projects have been completed.

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<https://infra.economictimes.indiatimes.com/news/urban-infrastructure/of-457-projects-under-namami-gange-project-280-completed-minister/107555255>

For the better implementation of the National Ganga River Basin Authority programme Ganga Knowledge Centre (GKC) was established fulfilling the objective of creating and managing resources which included analysis of the data, to foster research, innovation, identifying the research gaps, involving the public, building partnerships with National and international, public and private entities and NGO's. Another such organisation which facilitated this policy is The Centre for Ganga River Basin Management and Studies. This organisation primarily acted as a think tank for the policy, it collected the data to ensure that the project gets implemented sustainably.

Analysis:

This project was implemented in three phases, in regard to the implementation of the project, the project was successful in Haridwar by building enough STPs , however the project seems to be slow in its working as in Varanasi and Kanpur, as after 6 years of the project, two cities got their 1st STP. This shows that on ground the speed of implementation is slow. In Prayagraj it is seen that even after establishing 5 STPs the pollution levels are not depleting, this says that there are other factors that are responsible for the water pollution, which will require a dedicated research by the Namami gange team. Having said that, the project seems to have been successful in places like Haridwar, but in other places there are other reasons for the water pollution, which require other models of solution.

The major drawback of this project is that, more STPs are being built, but it's lacking in its working because of the poor connectivity of the sewage drainage system, the project isn't quite successful in countering the issue of connecting each home to the STP, which results into uncontrolled untreated sewage being poured into river. Therefore, along with building STPs the Namami Gange project should focus on establishing proper sewage connectivity in cities, towns and villages.

The major problem that river cleaning Projects like Namami Gange faces is that the government implements the project on a single river bed, the river surface does gets cleaned, but when the river merges with its already polluted tributaries, or when the tributaries merges into the river, all the work is washed off, example when the STPs are set up on the Ganga river, the river gets cleaned up, however with merging of untreated polluted Yamuna river into Ganga, the objective fails. Therefore in order to counter this, India needs not just a river specific programme but an encompassing programme. The solution can be that in the Namami Gange project, the STPs can also be set up on the tributaries of Ganga with the same intensity, only then it would show the desired and long lasting results. In addition to this the project of river cleaning can be implemented in Pan-India scale, which would need collaboration between centre-states. If this

turns into a pan-India programme it would be a significant step in achieving sustainable development.

7. Addressing the Dilemma of Environment or Development?

The question of Environment and development has been a constant matter of tussle between the environmentalists and the government, be it the Narmada Bachao Andolan by Medha Patkar in 1985 over the Sardar Sarovar Dam, or the opposition to cutting down of trees for Aarey Metro Car Shed in Mumbai in 2019, it's important that a developing country like India enquire into the question of Environment or Development?

In this issue there are two arguments, one argument says that the environment must not be harmed at any cost, while other argue the importance and need for the developmental projects. To take an example of an Aarey in Mumbai, it is clearly evident from whoever travels in Mumbai that the city needs an effective Metro line, as its Railways carry passengers beyond its capacity and the roads are jammed by traffic. Metro is not a luxury but a need for the people. Environmentalists in Mumbai are ignorant towards the fact that Metro is going to be beneficial from an environment's point of view as well as the city will see fewer private cars, increased public transport which will lead to lesser congestion on the road resulting in lesser carbon emission.

It has been a trend in India that most evident "environmentalists" who champion the cause to stop the developmental works or show their concern on social media are mostly the actors, actresses or the rich activists who are not only detached with the ground reality of the conditions the common people who suffer but also they are the ones who travel in luxury private cars in comfort. Environmentalism is not the issue, the ignorance of the people who hail the cause without understanding the genuine argument of the other side is the matter of an issue. It is the effect of this ignorance that "Environmentalism" is used as an instrument for the Anti-Government and Anti-Development agenda.

Environmentalists in Mumbai are ignorant towards the fact that Metro is going to be beneficial from an environment's point of view as well as the city will see fewer private cars, increased public transport, lesser congestion on the road and therefore lesser carbon emission.

Having argued the above point, this paper also makes a point that it should be considered to be a legal duty of the government that it not only compensates the loss of environmental damage which is in this case deforestation but also makes sure that the implementation of that compensation must be done in a timely manner. To conclude this part, the extremes of both

sides are harmful, for the environment and people. There must be a right balance between the two sides for sustainable living.

8. Recommendations:

Even if various environmental policies are run by both the public and private NGOs, On the ground level, especially in many city areas we see environmental degradation, the environmental principles established by the constitution, would just be aspirational sentences, if the common citizen doesn't acknowledge its stake in the environmental conservation and its maintenance.

8.1. Policies for uncontrolled-unorganised infrastructure in urban settlements in ecologically sensitive areas:

Urbanisation is essential for the economic development and better living standards of the citizens, however a same model of urbanisation is not suitable for different geographies and terrains. This point can be further explained using the example of Mussoorie. Mussoorie is a town in the state of Uttarakhand, which is ecologically sensitive, as it is a part of Himalayan ecosystem. If we visit the town of Mussoorie, which is a well known hill station, we see several unorganised buildings built across the mountains primarily built using cement-concrete. We see beautiful waterfalls, but are surrounded by all unorganised commercial shops and hotels. This not only has made this place full of garbage and pollution but this over human activities have become a threat to the ecosystem of that mountain. This can be solved using the “Gangtok Model”. Gangtok is a capital city of Sikkim, it is also a Himalayan state, but the township and urbanisation there is sustainable and ecological friendly, the marketplace has been well laid down, there are strict traffic rules so that the carbon emission is regulated, only organic fertilisers are used in plantation to avoid the soil erosion, the beatification of the roads has been made my planting of local trees and plants, the houses and shops are mostly wooden. Thus Gangtok does not try to become Mumbai or Delhi, it stays Gangtok, still providing a better living standard. This is something which can be applied to other parts of India, be it the Himalayan states or the coastal states.

8.2. Role of Public-Private Partnership in Environmental policies:

In the last few decades we have seen the improvement in the efficiency and effectiveness of the projects across various sectors, which are being undertaken and accomplished by the Public-Private partnership. We can involve the Private section in the research and implementation process of the environmental policies. However the concerns remain for potential blurring of the lines between the environmental interests and private profits, but on

other hand involvement of ppp can also lead to better innovative policies, better implementation mechanism, accountability and time-bound fulfilment of the goals. The sectors and policies in which the PPP can work are River cleaning projects, sewage gathering and sewage segregation projects. It is a case that even in various areas of metropolitan cities there is a weak system of garbage collection and segregation, the ppp model can be used in garbage collection, segregation, and treatment. Various apps can be developed with the help of private players regarding tracking of the garbage truck and bins. Apps can be developed which can connect the cleanliness workers and local authorities with the areas infested by garbage. This plan can be made aware and expanded on a large scale by involving the private players and a strong collaboration of the private sector and government. Several tourist spots especially the places of ecotourism can be better managed by the government with the help of private players.

8.3. Adding a clause regarding Establishing Industry compatible with the environment in Environmental Protection Act, 1986:

One of the features of this act is that the Industries that have a potential to cause pollution require clearance from relevant authorities, however the question whether a specific place is suitable to a specific ecological territory has not been specified. This can be explained with an example in the place called Lanja in Konkan Region in Maharashtra which both ecologically and culturally rich, saw the establishment of a chemical factory. Not just the river water that has been polluted, but the Air quality of the place has dropped. In the evergreen region of Konkan this place has turned into a barren land. Sure, establishing a factory can be a sign of getting closer to development but establishing a chemical factory in an ecological sensitive place should be allowed. This is a growing phenomenon in many parts of India, thus there is a need for an addition of a clause in this legislation which will make sure that not just the clearance but also checking the compatibility of a place is also looked at, and failing to do so will lead to punishment.

8.4. Equating smart cities with ecologically healthy cities:

Niti Aayog has prepared a plan for transforming 20-25 cities including Mumbai, Surat, Varanasi and Vizag to make India a developed economy. While doing economic and urban planning it's important that we add other aspects of nature or ecological planning. While planning a city's transformation it is important to make and ensure places which can provide green cover to the city. It has been a proven fact especially during these Heat Waves that having trees lowers the temperature, it's high time for India to act in this direction making sure that the city planning includes the area of green belt so that people live in smart cities and not in a concert oven.

8.5. Collaboration between the Governments and Small-scale nurseries:

There are various Environmental organisations in India, there are small scale businesses of nurseries in villages and towns in many parts across India. Government while carrying out infrastructural work like building of roads, metro stations, are supposed to replant either the same amount of trees or double the trees which are being cut to make roads, stations etc. This policy can establish Cooperative-societies of such small scale nurseries who would provide trees and plants to the government. This would not only help the local nurseries financially but would further encourage several other people to explore the field of gardening and plantation.

9. Conclusion:

As India is progressing further, India also needs to pay more attention towards environmental sustainability. No matter how economically strong humans get, true peace is found only in the arms of nature, therefore along with aiming for a developed country, it's time that we also aim to secure nature's beauty, through the instrument of law, policies, aware Government and most importantly responsible citizens. It's time that we understand and revive our ancient teachings of our ancestors who said "We aspire to live long, our children too should live long and be free from sickness and consumption. We are reared in the lap of Mother Earth. May we have a long life [provided] we are watchful, alert and sacrifice our all for Her."⁵ Hence, Protection and conservation of Environment is not just a constitutional principle to achieve, but it is also a result of cultural and civilisational teaching of Bharat that we need to practise and promote.

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