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FOREST COVER AND ENVIRONMENTAL SUSTAINABILITY IN INDIA: A JUDICIAL APPROACH

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ABSTRACT

During the British era, timber was perceived as the only sources of revenue. Prior to 1927, timber was a State's property. Realizing the commercial potentials of forest cover, the Britishers drafted Forest Policy, 1894 so that it becomes easier for them to earn revenue for the State by depleting forest cover systematically. Very soon, the felonious timber trade was witnessed and the need to conserve forest cover was felt immensely due to desertification, climate change, biodiversity change, falling of ground water level and many more. In this light, Forest (Conservation) Act, 1980 was passed to meet the concerns of the depleting forest cover followed by Forest Policy of 1988. Immediate actions were taken to conserve the forest cover however, the appropriate implementation of the same became a question of fact. On the other hand, India being a developing nation, other factors such as industrialization and economic development was also a matter of concern. It was then when the judiciary had to intervene for striking a proper balance between the effective implementation of the laws for the conservation of forest and the development of the nation in every possible way. The Supreme Court very promptly took up the concerns on receipt of like applications in form of PIL (Public Interest Litigations) from different States and Union Territories and directed the concerned authorities for the proper implementation of the laws and laid down several guidelines for all to follow whenever the instance of forest depletion would arise. This paper would discuss how forest cover depletion has left an impact on climate change in India and how judiciary has actively contributed to the sustainable development of forest cover in light of the economic growth and industrialization of India.

KEYWORDS: Sustainable Development, Forest Cover, Timber, Public Interest Litigation, Climate Change.

Introduction

In contemporary India, timber is a major source of economic development and infrastructural needs. And forest is the major source of timber. So basically, on one hand forest is the reserves of numerous natural resources and on the other hand it is the reserve of industrial resources and thereby, it is extremely important to strike a balance in the felling of trees for the requirement of timber and to maintain the ecological balance. However, illegal timber trade persists as the regulated timber trade fails to meet the market demand for timber. There are various doctrines and theories besides the legislative framework to curb the menace of illegal felling of trees on which the judiciary has relied on from time to time to bring out sustainable development of forest cover. It has to be borne in mind that trade no doubt brings economic development but it must not be at the cost of the society. Therefore, social responsiveness of trade remains a crucial objective. Social responsiveness of trade is subject matter of both law and economics. In legal sense social responsiveness of trade aims at framing laws and policies for the better enforcement of the same so as to ensure social responsibility and on the other hand economics deals with the market forces including the non-market forces to secure social responsibility (Sethi, 1979). Having pointed out this, it is very unfortunate that very often the instances of illegal felling of trees arises which directly affects the ecological balance or sometimes under the veil of economic development unscientific or indiscriminate felling of trees disturbs the ecological balance. On this note, on many occasion the judiciary either by suo moto manner or on the receipt of any petition from any public spirited person or NGOs have intervened into such nuisance and have drawn a line between the illegal practice and needful requirement so as to uphold the principle of sustainable development. Coastal ecosystem is one of the most significant ecosystems which contain the mangrove forests. Human interventions in such a dynamic ecosystem consisting of the mangrove forests is considerably on the rise over the past few decades. Rise in the number of shrimp culture industries and deforestation in the areas of mangrove vegetation and various other activities pose a great challenge for survival of mangrove forests. As we are aware that in the current scenario global warming is a serious issue. Due to global warming, there has been an alarming increase in the global temperature. Mangrove forests are considered to be secret weapon in our fight against climate change since they have huge potential in storing carbon within their root systems. However, such significant ecosystems are constantly under threat due to the anthropogenic activities by the human beings which includes deforestation, developmental activities and tourism (Krishnamurthy, 2014). Indiscriminate felling of trees and lopping especially for fuelwood, timber and fodder in areas near to human habitation, converting mangrove lands for aquaculture, discharge of industrial effluents into rivers, creeks and estuaries, human habitation, encroaching on the mangrove forest land, lack of interests amongst private landowners to conserve and develop mangroves in their lands, illegally collecting mangrove fruits on a large scale, traditionally using dragnets while fishing that often destroys regeneration of mangroves, movement of barges giving rise to very strong waves many a times damaging young mangrove seedlings are all a matter of huge concern (Mani, 2010).

Theories of Sustainable Development concerning Forest Cover and Timber Trade

There are certain theories of sustainable development that concerns the preservation of forest cover as well as the proper management of timber trade so that there is no felonious deforestation and felling of tress. The theories concern the preservation of forest cover and at the same time proper management of timber trade so as to maintain the balance between the societal needs and ecological balance. The theories are as follows –

1. Common Pool Resource Theory –

This theory talks about a common resource base and a particular leader where all people are having mutual understanding to draw resources from this common pool by keeping faith on this particular person who is the leader who manages the drawing of the resources. This person keeps an eye over the drawing of resources and maintains the ecological balance. Thus, in case of timber trade, forest is the base resource and the common pool here is the forest cover. The leader is entrusted with the responsibility to restrict ego-based competition practiced by the timber traders by eliminating excessive profit driven motives and promote healthy competition through trader collaboration and understanding of sharing trade, profit and infrastructure. This would reduce the felling of trees which would eventually reduce the incurrent of societal cost for the keeping the forest cover in optimum level. In other words, the societal responsibility would shift on the shoulders of the leader and he would bear the responsibility of prohibiting indiscriminate felling of trees and planting of more trees in response to the degree of felling of trees to strike the ecological balance. Thus, this theory aims at the better management of timber trade keeping in mind to strike the balance between timber trade and standing timber which would not only maintain the forest cover but also keep sufficient resources for the coming generation for optimum utilization. This is sustainable development of forest cover (Saunders, 2014).

2. Reformation Theory –

By 1980's, the State machineries were highly criticized for its complete failure to protect the environment inspite of its new regulations and legal framework to conserve environment. The NGOs along with other environmentalists actively participated to voice the on-going and persistent problems of environmental degradation. It was found that even though the State had organized the three tier model, national, state and local level, to address the environmental issues, still it did not prove to be an effective design to address the issues. Since, State is the ultimate entity to look after the ecological balance, a lot was being expected from it. Thus, it was resolved to find out the root cause of the failure of the State machineries which could only reveal the reason for its failure. It was found that the machineries failed due to the poor implementation of the laws and policies. However, it was soon realized that the success of the machineries can only be achieved if a reformation can be bought about successfully in the minds of the people. Thereby, mass

campaigns were organized to ensure greater environmental awareness among the local people. The demands for privatization and open market for timber trade was halted immediately. Thus, instead of lamenting on the State failures or criticizing the State machineries, the need of the hour is to come forward and join our hands together for the better protection of the environment by bring a reformation in our minds to conserve the ecology to draw sustainable development (Ackerman & Stewart, 1985).

3. Ecological Modernization Theory –

Undoubtedly, the reformative theory was a step towards the ideology of sustainable development. A series of empirical research was conducted to analyze the success of the implementation of environmental laws and policies and whether it has successfully reduced the depletion of natural resources. It was found that the active participation of environmentalists had created huge impact in terms of awareness of environmental conservation. In fact, it has steeply reduced the utilization of natural resources which has negatively impacted the nation's GDP. In economic term, it is known as decoupling of material flows. Thus, it was realized that in modern society central institutional reforms are absolutely essential to keep the environmental degradation in control with regard to the economic development of the nation. This, theory proposed timber trade by analyzing and rationalizing ecological autonomy. Thereby, separate environmental wing was set up to concentrate on the better implementation of environmental laws and policies as part of green ideologies at the same time when socialism and liberalism was promoted for economic development. For better implementation of green ideology in respect of economic development, attractive schemes were formulated for the corporate sector such as eco-levels, taxes, insurances, and many other, to rationalize timber trade and better environmental management within the corporate sector while planning its economic activities concerning the natural resources. Thus, this theory balanced the reformation of green ideologies by modernizing ecological transformation into institutional economic domain which would bring sustainable development of forest cover at the same time satisfying the current and future needs of the society (Berger et al., 2001).

4. Network and Flow Theory –

This theory aims at achieving four main objectives. Firstly, it undertakes globalization into consideration by measuring time and space. Secondly, it promotes hybrid of social sciences and technology bringing forth socio technical system pushing behind the outdated distinction of social science and materialization. Thirdly, the concept of traditional market, state and civil activities were treated as obsolete and new innovative arrangements and measures were welcomed. Fourthly, it was doubted whether the new innovative arrangements or measures would wither away the sociological aspect and the authoritative power of the State. To address the probable threats, the theory of network and flow in relation to environment on one hand attempts to analyze the rational flow of capital as well as goods to maintain ecological balance and on the other hand analyzes the varied concepts of environment like biodiversity, natural resources, wastes, energy, etc.

in perspective of degrees of changes in the environment. Scientific approaches were designed keeping in view of social sciences to systematically address the varied reasons of environmental degradation so as to bring reformation in all concepts of environment to ensure better conservation of the ecology. These concepts were never assessed before so this time the requirement demanded to focus the flow of these concepts and analyze the environment networks. Thus, this way the demand and supply for timber could be better analyzed in light of use of proper scientific technology so that there is neither over utilization or waste of natural resources nor disturbance or minimal disturbance to the other components of the environment. This would also try to seek sustainable development (Gonzales, 2012).

5. Facilitation theory-

Coastal populations largely depend on the mangrove ecosystems for various economic products like fish farms, shrimp ponds, products from timber and the array of services which they provide like coastal stabilization, attenuation of waves, and nursery habitats for variety of fish species. Such services derived from both natural as well as converted mangrove areas must not be minimized. It is also suggested that it might not be prudent or feasible to restore the former mangrove regions to mangrove forests in every case. Therefore, the best decision shall be to incorporate a mix of conservation, restoration and exploitation. Whether mangrove restorations are done in mangrove habitats or in non mangrove habitats, it is more likely that restoration to be successful only when they assume positive rather than being negative. Though positive interactions like planting foundation species for initiating development of the ecosystem are a key factor for restoration, yet other positive interactions are hardly accounted for, in terms of marine restoration designs. Hence, competition amongst the seedlings must be minimized for fostering growth and establishment. Therefore, a space needs to be maintained between the seedlings for maximizing light availability and minimizing competition amongst neighbours. However, it is predicted through the experiments on wetlands and the ecological theories that mangrove seedlings have better chance to survive when planted in clusters. This theory aims in facilitating enhancement and mangrove restoration as a positive approach towards tackling of the issue of indiscriminate felling of trees and conversion of mangrove forest lands for various purposes (Gedan, 2009).

Doctrines of Sustainable Development concerning Forest Cover and Timber Trade

Law is dynamic as it has to constantly do justice to the societal changes. Environmental forces too are natural resources which are out of human control. As society change with time, new ideologies and scientific innovations creeps in and so do the demand and supply increases steeply. To meet the market forces and at the same time to keep the human urge into control, the State faces the constant challenge to control the same. Thereby, with time the State too has to renovate their laws and policies. In context of environment too, the State has to keep a constant vigil upon the implementation of its laws and policies and the human activities so that it is capable of addressing and

mitigating any gap or nuisance immediately so that neither the natural resources nor the economy of the nation gets jeopardized. To modify the laws, the major question that arises is when the law must be modified and to decide this certain doctrines are relied upon to uphold the principle of sustainable development (Myneni, 2021).

1. Doctrine of Distributive Justice –

Rawls was the main advocate of this doctrine who said that though ideally there has to be equality in the distribution of natural resources, however, the government must undertake practical steps while allocating resources wherein the least advantageous group must get the greater share in the natural resources. In other words, this theory demands reasonable classification in terms of allocation of natural resources.

2. Doctrine of Model Fair Distribution –

This doctrine was developed by Ronald Dworkin wherein he proposed that all people have equal share in natural resources as a matter of their birth right, however, due to economic inequalities, few are in a better position than others to make the highest bid and take over greater share in the natural resources. However, due to this economic advantage they often tend to misuse or waste the resources at the cost of the others where these persons not only deplete the resources for their selfish needs but also jeopardize the needs of the disadvantaged group of people. Thus, this doctrine proposes a compensatory scheme wherein the allocation of resources must be done on the basis of intrinsic value and not on materialistic value which will not only push away the economic inequalities but also enhance the wellbeing of the societal interests.

3. Doctrine of Compensation and Doctrine of Rehabilitation

The term compensation implies to the price that is to be borne by one if any loss is sustained for the activity of such person. Whereas, the term rehabilitation refers to the restoration of the environment back to its normal position as if no injury was incurred. Both the doctrines go hand in hand because it is very difficult to ascertain exactly how much damage has been incurred so as to calculate the compensation as well as to ascertain whether the price that has to be paid as compensation would be sufficient to recover the loss. Moreover, this is also very difficult to determine or anticipate whether it would be possible to restore to its status quo ante appropriately after sustaining the damage and even if it is determinable, the implementation of the same would be time consuming which might frustrate the implementation of the same. Nevertheless, both the doctrines are extremely significant to bring out environmental justice otherwise it would amount to the gross violation of human rights therefore despite of the technical impracticability the doctrines must be strictly applied and the Court must adhere to them while imparting justice. The word environmental justice is not limited to legal sense only, it demands societal, economical and political justice too as its interrelation cannot be denied. Again timber is such an environmental concept on which social, economic and political aspects are interdependent and therefore the depletion of the same has to be necessarily borne by the whole society

both economically and politically. Thus, timber trade demands proper regulating laws, policies or schemes to ensure ecological balance and economic development securing environmental justice.

Landmark Judgments Upholding the Principle of Sustainable Development with regard to Forest Cover

Right to clean and wholesome environment is our fundamental right under Article 21 of the Constitution of India. And Indian judiciary has from time to time intervened and upheld the right to clean environment (Rai, 2010). Though, the concept of sustainable development was first coined in the Stockholm Declaration, the contribution of Indian judiciary upholding the doctrine was first witnessed in *Ratlam Municipality vs. Vardhichand*, AIR 1980 SC 1622. However, this case is an example of striking the balance between conservation of wholesome environment and human development and under no circumstances the State can take the plea of budgetary constraints to keep the environment clean as it their statutory duty to look into the dignity, decency, welfare and health of the people of which decent environment is an integral part (Jadhav, 2006).

Keeping this principle in mind the Supreme Court thereafter has passed numerous judgments upholding the spirit of sustainable development by balancing the development of the State and the wellbeing of the people. In a landmark case, *Vanwasi Sewa Ashram vs. State of Uttar Pradesh*, the State Government planned to set up a thermal plant removing the forest cover area in the Mirzapur district of UP. However, that area was under the inhabitation of the tribal people of that district and they were utilizing a considerable portion for cultivation purposes for their living. The Court directed the constitution of Board of Commissioners after the institution of series of criminal and eviction cases against the tribal people to ensure the proper implementation of the Court order. The Court ordered that the tribal people must not be evicted from the land since they were dependent for ages on forest and its products, however, it has to be also borne in mind that they are not very scientifically trained or skilled to make proper extraction from the forest reserves so it may land up depleting the forest resources. Thus, proper vigil must be undertaken by the Board to ensure that indiscriminate felling of trees is not done by the tribal people. On the other hand, the Court acknowledged the setting up of thermal plant in light of the socio-economic development of the nation but it was allowed only under the condition that it must operate peacefully without disturbing the lives of the tribal people and at the same time causing minimal destruction to the forest reserves. This way once again, the Court upheld the principle of sustainable development in context of forest cover (Doabia, 2017).

Narmada Bachao Andolan vs. Union of India, AIR 2000 SC 3751, is yet another landmark case which had widened the scope and meaning of the term “forest” beyond its dictionary meaning. The Court ruled that the term forest would include all those land which has an entry as forest land in the government records irrespective of the ownership granted to any individual.

Furthermore, the Apex Court ordered that all activities or ongoing activities in forest land must be immediately stopped and further restricted unless such projects or activities are approved by the Central Government. The instant case was about constructing a dam under Sardar Sarovar Project over River Narmada which had posed a threat of displacing a large number of tribal people inhabiting that area and the destruction of natural resources of the adjacent area which would eventually disturb the bio-diversity. The Supreme Court once again applying the principles of precautionary principle and sustainable development ordered the construction of the dam for the socio economic development with strict adherence to minimum risk and destruction to the natural resources to maintain the ecological balance (Pandey, 1996). A similar view was adopted by the Supreme Court in *M.C. Mehta vs. Union of India* AIR 2004 SC 4045, saying that even in mining activities the concerned project managers must comply with the rules of sustainable development to prevent any irreparable damage to the environment and maintain the ecological balance (Satarkar, 2008).

In *M.C.Mehta vs. Kamal Nath*, AIR 2000 SC 1997, the Apex Court invoked the principle of Doctrine of Public Trust and ruled that few natural resources such as water, air and forest are the storehouse of potential reserves and therefore, they cannot be made available neither for private ownership nor commercialization as it may pose a dangerous threat of unjustified usage and indiscriminate extraction causing ecological imbalance especially when these reserves concern the welfare of the society at large (Kumar, 2011).

There were few prevailing discrepancies in laws and policies too which with time was also rectified by the Supreme Court to conserve forest cover and timber. One such example was the case of *Environmental Awareness Forum vs. State of Jammu and Kashmir* AIR 1999 SC 1495, where “katha” was categorized as minor forest product which was allowed to extract without undergoing the strict procedure to obtain permission. However, “katha” is basically extracted from “khair” tree which is categorized as timber which requires special permission before felling. Thereby, upon the extraction of “katha” from “khair tree” by the *Bekay Katha Pvt. Ltd.*, the Additional Secretary, Department of Forest, J&K, pointed out this discrepancy and sought the Court’s intervention to throw light upon this. Being satisfied with the prima facie evidence, the Supreme Court directed the managing director of the company to abstain its activities since khair tree is timber and the failure of which would amount to deliberate disobedience to law and order (Singh, 2016).

Out of many such cases, the most prominent case which had compelled the Supreme Court to undertake the responsibility of a legislature, executive and judiciary so as to strictly implement the laws and policies to protect and conserve the forest cover was the *T. N. Godavarman Thirumulpad vs. Union of India*, 1996, 9 SCR 982, popularly known as the Godavarman case or Forest Case of India. This case was about the illegal felling of trees in the Nilgiri hills for commercial use of timber. The Supreme Court applying the principles of sustainable development, precautionary principle and polluter’s pay principle altogether drew the dawn of environmental jurisprudence. The Court strictly mentioned that any felling of trees would require

the prior permission from the Central Government. Moreover, the Court ordered the constitution of High Power Committee which was entrusted with the duty of ensuring the effective implementation of the orders. Furthermore, it also ordered the respective State Governments to formulate guidelines for the felling of trees and determine penalties for its non-compliance and get them approved by the Central Government before implementing. Besides these, the Court also directed the Central and State Government to submit an budgetary report during the beginning of each year proposing the budget required for the conservation and development of natural resources so that no plea of budgetary constraints are required to be entertained later (Jain, 2020). Though this case was highly criticized on the account of judiciary's encroaching powers over the other wings of the Government but it was also acknowledged that the Court's bold step had religiously protected the illegal felling of trees and depletion of forest cover which had significant contribution to the nation's legislation concerning environmental protection and sustainable development of timber trade (Singh, 2016).

In *S.Jagannath v. Union of India*, AIR 1997 SC 811, the Judiciary recognized the significance of mangrove forests and the need for protecting them had been stressed in this case. In response to the PIL filed to enforce the Coastal Regulation Zone Notification along with the voice against prawn farming both intensive as well as semi intensive in ecologically fragile coastal regions and for constituting a National Coastal Zone Management Authority for safeguarding the coastal areas and their marine life, the Court referred to the status report of mangroves in India as published by Ministry of Environment and Forests. The report highlighted the vast mangrove forest areas destroyed due to aquaculture, agriculture, development and other uses. The Central Government was directed by the Court to take steps in constituting an authority under Section 8(3) of Environment Protection Act 1986. Such authority shall be given necessary powers for protecting ecologically sensitive and fragile coastal regions. Through this case the Judiciary regulated various activities with regard to shrimp culture which threatens the life of the mangrove forests in India (Singh, 2013).

Conclusion

To conclude, it is worth mentioning that if the environment and the natural resources are not preserved and protected from the felonious approaches, and then there would be a time when no environmental products or natural resources would be available to trade upon. This will ultimately be adverse upon the trade and commerce which would eventually affect the nation's economic growth. Thus, it is extremely important that the laws and guidelines are strict and most importantly effectively implemented so as to ensure better protection of natural resources from indiscriminate extraction which also calls for dedicated political, economical and social responsiveness towards the ecological balance. This can only prove the reality of sustainable development. With regard to striking the balance between sustainable development of forest cover and timber trade, the contribution of the judiciary has proved to be extremely remarkable and the reasonable application of the diverse principles, theories and doctrines were visibly witnessed in the judgments to achieve the same. However, it has to be borne in mind that the

only contribution of the legislature, executive and judiciary is not sufficient unless there is an active role played by the civil society to protect the environment and its natural resources. The spirit of social responsiveness can only be sustained only if there is a rising awareness among the people to conserve the ecology to accomplish sustainable development.

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