

INTRODUCTION

THE GENESIS

Timber trade is believed to be sine qua non of development. Society has taken timber trade as a granted aspect of development. Although a facet of timber trade is related with economics, its major impact can be observed on the environment. It is a fact that excessive demand for timber inevitably leads to deforestation. The increase of population, the consequent demands of civilization and invention of new technological instruments have led to more and more use of forest products. Million cubic meters of wood in the form of timber are being extracted from the forest everyday by the wood based industries and saw mills for the purpose of trade. Construction of houses, industrial and infrastructural needs and furniture making are important areas where huge quantity of wood is used. Paper mills are the other major consumer of forest produce. The demand of fire wood as energy source also consumes much of the forests especially in places in the proximity of hills and in the rural India where cooking energy is exclusively dependant on firewood. Earlier people were almost completely dependent on forests for their food and shelter, clothing, medicine and other aromatic substances. Almost every need of the day to day life was met by the forest produce.

Artificial products have replaced natural products. However not much substitute for wood has been discovered or invented. Manufacture of numerous products like furniture, door and window frames, false ceiling, wooden flooring are still dependent upon specialized wood based industry and are basically wood centric leading to denudation of vast forest land. These direct and indirect market demands have effected natural vegetation in two ways:

1. With progress of civilization and technology, people are no longer directly dependant on forest for their day to day survival and so they have lost their interest for caring for the forest and other natural resources and vegetation.
2. Absence of emotional attachment to the plants on one hand and the rising market demands on the other generates unscrupulous vendalization of forest and forest produce. Traders have been collecting plant or trees in the form of wood or timber for

the trade and industrial use in uncontrolled and unregulated quantities which in turn affect the forests and vegetation.

Such vendalization has affected and is still affecting the flora and fauna of a nation. Forest is valued not only for the various kinds of flora and fauna but also for the minerals, water sheds, cradles of rivers and biodiversity etc. In short it is a biodiversity reserve of a nation. Therefore control and regulation of timber trade and management of forest is an essential aspect of protection of environment and protection against global warming. Cutting of trees has largely contributed to the global warming which in turn has resulted in the melting of ice-caps and rise in the sea level as well as a change in a climate patterns all over the world.

A significant aspect which has a profound impact on the history of forest jurisprudence is the fluctuating destiny of forest with respect to their legislative location and management. Forest being in the concurrent list, both union government and the state government tend to regulate it which is often contradictory in policy and leads to indulgence of blame game with neither willing to accept responsibility.

The T. N. Godavarman Tirumulkpad v. Union of India⁴ has helped to highlight the pitiable state of India's forest and proceeded to bring about a rational, organised system of forest management. It is a separate issue that the Supreme Court has been accused of over stepping the boundaries of separation of powers. An emerging trend of managing forest is through the smallest unit of government that is the panchayat. Till 1988 the States viewed forest as an important source of revenue and hence argued in favor of timber trade without. Post 1980 the environment consciousness became very strong and took the form of a movement almost. The need to manage the forest scientifically became the need of the hour. On another side there are the forest dependent communities, who are hostile to the state control because to them the forest is essentially their life and livelihood.

From the above discussion it is evident that control and regulation of timber trade in India has a direct impact upon the effective conservation and preservation of the forest and the economy of a nation. The laws relating to timber trade is required to be linked with preservation of forests on one hand and economic demands of development on the other hand. There should be interlinking of schemes and policies for controlling timber trade in India without jeopardizing development and the fundamental right to freedom for practicing

⁴ AIR 1999 SC 2420

any profession and carrying out trade and occupation guaranteed under Article 19(1) (g) of the Constitution of India on one hand and conservation of forest and bio diversity on the other hand.

THE FRAME

Several forest laws and policies have been made in India since 19th century but still effective protection and management of the forest has been eluding the nation, leading to widespread legal and illegal trade of timber in India. Though there is fundamental right to carry on trade, timber trade should, *per force*, be subordinated to the maintenance of ecological balance of environment. Proliferation of the wood based industries in response to demands of development is one the major causes of environmental degradation. The National Forest Policy 1988 was enacted with a view to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which is vital for sustenance of all life forms - human, animal and plant. At present timber trade is not protected, controlled or regulated by any specific statutory law. It is integrated in the Indian Forest Act, 1927, the Conservation of Forest Act, 1980 and the innumerable rules that are framed for the purpose. In addition there are the Supreme Court guidelines laid down in the Godavarman case. Therefore, on one hand there is a scattered legal framework, rules and regulations for controlling of timber trade in India vis-à-vis prohibition of environmental degradation and on the other hand there is an ever rising demand for timber in the market and for development. The question of sustainability of timber trade is the key question.

THE FOCUS

The present research work focuses upon some very specific issues and tries to enquire deep into them:

1. What is the state of India's forest after the T. N. Godavarman Tirumulkpad case⁵ judgments and guidelines given by the Supreme Court?
2. Whether there is a paradigm shift from anti pollution policies to sustainable development policy?
3. How has illegal farming impacted upon the forest coverage in Asia and South-East Asia?

⁵ AIR 1999 SC 2420

4. How strong is the legislative framework for controlling monitoring and regulating timber trade in India? How is it being implemented in the state of Tripura?
5. How timber trade is regulated controlled and monitored in other states of India?
6. How does WTO deal with the matter of timber trade?
7. Whether the Forest Conservation Act 1980 is strong enough to protect the natural heritage of the country by preserving the remaining natural forest with vast variety of flora and fauna? What does it say regarding regulation of timber trade?
8. Whether the private saw mills or wood based industry in the state of Tripura is a hindrance to the effective preservation of forest?

OBJECTIVE OF THE STUDY

The main objective of the research is to study of the legal framework for controlling and regulating timber trade in India in general and the State of Tripura in particular. It further seeks to analyze the impact of timber trade upon environmental degradation caused by cutting down of trees illegally. The other objective of the study is to assess the post Godavarman⁶ situation with respect to the timber trade scenario.

HYPOTHESIS

Timber trade in India is largely regulated controlled and monitored with the help of the Forest Act, 1927 and the Forest Conservation Act 1980. There is no specific legislation directly addressing the issue of control and regulation of timber trade in India. Despite a number of legislations to prevent environmental degradation and preservation of forests, illegal timber trade still flourishes and continues. The actual objective of achieving sustainability of timber trade has not been achieved completely.

METHODOLOGY

The present research is based on the review of the legal frame work for regulation control and monitoring of timber trade vis-à-vis forest conservation and its enforcement generally and in the state of Tripura particularly. The research has been carried on doctrinally by reading Books, Articles, Reports Case laws Statutes et al. This part of the study was done by reading

⁶ AIR 2005 SC 4256

in the NBU Law Library and NBU Central Library. The researcher visited the National Library and the NUJS library at Kolkata. He also visited the Library of the Indian Law Institute [ILI, Delhi].

The empirical study was carried on in Kerala, Tripura, Mizoram, West Bengal and Assam. The researcher travelled to these places and personally met the forest officials, timber traders, and other people having an interest in the area. For this purpose the researcher prepared structured questionnaire and interviewed the respondents. The researcher took the help of friends and acquaintance wherever possible in order to reach the respondents. Some of them also volunteered to give opinion.

LITERATURE REVIEW

A few significant literatures reviewed concerning the protection, management and control and regulation of timber trade in India are mentioned below other are reflected in the bibliography.

Divan Rosecrans, Environmental Law and Policy In India, 2nd Edn, 2003, Oxford India paper Backs.

This book highlights the devastating condition of the Indian forest and its effect in the integration of the forest ecosystem upon which both endangered wild life and forest dwellers depends. This book depicts the value of forest resources in the Indian economy. Only 10% of the land area of the country is covered by forest. The author examines the development of law and policy governing the use of Indian forest. This book covers the legal controversy over mining and forest land as exemplified by the Dehradun Valley Litigation. This problem has engaged the Indian judiciary to strike a balance between forest destruction and Industrial need and forest conservation.

P. Leelakrishanan, Environmental Law in India, 2nd Edn, 2006, Lexis Nexis Butterworth.

This book shows us the importance of forest in maintaining ecological balance and how it renders the climate equable, add to the fertility of soil, prevent soil erosion and promote perennial stream flow in Rain fed Rivers. This book covers firstly; the idea of protection of Indian reserved forest by mentioning some important cases, secondly; forest as a source of revenue, thirdly; about the conservation of forest and last about the sustainable use of forest

in respect of right of forest dwellers and tribal rights to minor forest and livelihood.

S.Santhakumar, Introduction To Environmental Law, 2nd Edn, 2005, Wadhwa And Company.

Sanjay Upadhayay, Vidheh Upadhayay, Forest Laws, Wildlife Laws and the Environment (Hand Book on Environmental Law), 1stedn, 2008, LexisNexis Butterworth's.

A.K.Tiwari, Environmental Laws In India, 2006, Deep & Deep Publications.

To lead a joyful and healthy life one needs to have a clean and healthy environment. These books speaks about the activities of the persons which have impact on the environment especially on forests, needs to be regulated. To elucidate this important point these books refers some judgments given by Supreme Court and high court. These books states that the National Forest Policy 1988 emphasized new strategy of forest conservation in view of ever increasing demand of forest produce. Preservation, maintenance, sustainable utilization, restoration and enhancement of natural environment were brought within the purview of definition of conservation. These books have given the importance on maintenance of proper eco-system that the natural environment does not get disturbed for which existence of forest and biological diversity is essential. An idea of the concept of reserved forest, village forest, private forest land and protected forest land are well mentioned in these books. The authors of these books have highlighted on some statutory framework on forest and also on a serious problem that all statutory framework like Forest Acts and Policies are not well enough for the promotion of afforestation.

Mr. Sunil Ambwani, Environmental Justice: Scope And Access, A.I.R. 2007 Journal 49.

This article states that the earth and atmosphere is a common heritage. The environmental issues take in to account the human being and not the state as a unit. It is a global issue. The Stockholm Declaration recognized that man is the part of the nature and life depends on it. In this article it is mentioned that the declaration in the United Nation conference on Human Environment from 5th to 16th June, 1972 at Stockholm considered the need for a common outlook for common principles to inspire and guide the people of the world in the preservation and enhancement of the human environment. Mr. Sunil Ambwani includes that more recently the Supreme Court invoked the public trust doctrine evolve methods for arriving at next present value to be paid by the state of the diversion of forest land to non-forest use to be paid to Compensatory Afforestation Fund Management and Planning Agency

(CAMPA), in T. N. Godavarman⁷ issued directions for management of forest and the matter of imported Contaminated Waste was dealt in Research Foundation for Science case⁸. For the protection of environment especially the subject matter related to forest this article includes Article 48-A and Article 51(A) (g) of the Indian Constitution. This article concludes that environmental justice is a part of socio-economic development of the society. The apex judiciary has made gigantic progress in distributing environmental justice. The order passed by the Supreme Court has provided healing touch in many places, like hills, coastal areas and forests. The courts however are not the forum to solve all environmental problems. The judiciary has to be equipped with the whole gamut of environmental related issue.

Shaber Ali, Environmental Jurisprudence: Indian Scenario, A.I.R.2004 Journal 88.

In this article the writer pointed out that man loves nature and nature in turn nourishes man. Nature and man are independent so man cannot survive without nature. This article also point out that environmental crisis is global in nature and more recently there has been a major concern over the environment protection and environmental development. The rapid economic development, technological and scientific advancement have increased their impact on natural environment. They have added to the environmental degradation and ecological imbalance has created a fear in the mind of the developing and developed countries which resulted in Stockholm Conference in 1972 to deal with the aspect of the environment. In order to understand the concept of environmental jurisprudence in Indian society Mr. Ali discusses this aspect in ancient period, pre-historic period, historic period and post-independence era.

Ragevandra Kumar, “Environment, Legal and Juridical Scene”, AIR 2002 Journal 223

During the last few decades the environmental degradation has become the global concern and has aroused the conscience of world polity and it has become the challenge for the present and future as well. At this juncture this article states the very crucial factors contributing to degradation in environmental quality. One of these factors is deforestation which is directly linked with increasing industrialisation and pollution. The clearance of forest has disastrous consequences. As a result of clearance of forest certain wildlife species have become extinct. This article has also highlighted the constitutional position related to protection of forests in the form of fundamental rights and directive principles of state policy.

⁷ AIR 2005 SC 4256

⁸ 2005 SCC 675

M. Bulfin, Timber and Timber Products Trade, 1966-1973, Irish Journal of Agricultural Economics and Rural Sociology, Vol. 5, No. 2(1974/1975).

Despite the fact that details of the value of timber products imported into the Republic of Ireland were readily available from statistical abstracts no measure of the volume of timber involved was available. This paper provides the first guesstimate of the volume involved in the timber products imported, and of the per capita utilization of wood raw material in this country. The period covered is 1966-1973 inclusive. Using various conversion factors the copious timber import categories are converted to one basic unit, i.e. a true cubic foot of Wood Raw Material Equivalent (WRME). Once the value and volume of imports is known, calculations of the land area necessary to produce all or part of this volume can be carried out in a more realistic fashion. This paper concentrates, particularly, on softwood imports as these involve an average of 86.3 % of the value and 88.2% of the volume of total timber imports. The value of total timber merchandise has risen from \$22 m in 1966 to \$67 m in 1973 while the volume of softwood imports raised from 34.7 m cu. ft. to 56.5 m cu. ft. WRMS. Per capita consumption of timber products rose from 16.6 cu. ft. to 25.8 cu. ft. Timber product imports represent between 5 and 6% of our total annual import bill.

Brent Sohngen, Robert Mendelsohn, Roger Sedjo, A Global Model of Climate Change Impacts on Timber Markets, Source: Journal of Agricultural and Resource Economics, Vol. 26, No. 2 (December 2001).

More than a few papers have now estimated the impact of climate change on national timber markets, but few studies have calculated impacts globally. Further, the literature on impacts has focused heavily on changes in productivity and has not integrated movements of biomes as well. Here, a dynamic model of ecological change and economic change is urbanized to capture the impact of typical weather change on world timber markets. Climate change is predicted to increase global timber production as producers in low-mid latitude forests react quickly with more productive short- rotation plantations, pouring down timber prices. Producers in mid-high latitude forests, in contrast, are likely to be hurt by the lower prices, dieback, and slower productivity increases because of long-rotation species. Consumers in all regions benefit from the lower prices, and the overall impacts of climate change in timber markets are expected to be beneficial escalating welfare in those markets from 2% to 8%.

Rogera. Sedjo, Sustainable Forestry in a world of Specialization and trade, Edition 2005, springer publication.

Since Adam Smith economists have identify that specialization provides the basis for a modern economy since it promotes increased productivity, lower costs and intra regional and international trade. Industrial forestry seems to have recognized this economic reality and in the past fifty years has been moved from obtaining almost all of its industrial wood from the logging natural forests to the production of over one-third of society's industrial wood production from a trees cropping regime of planting, growing and harvesting intensively managed forests. However, much of the modern ecological movement is opposed to specialization and stresses the concept of individual forest sustainability for a spectrum of outputs, an approach directly the opposite to that of economic specialization. This paper attempts to reconciled these inconsistent approaches by recognizing the substantial differences in the outputs mix generated by different forests, referring to the commonly accepted Brundtland Commission definition of a sustainable system and applying this concept to the multiple outputs of the various forest

A.K.Tiwari, Forest Conservation And The Law: Some Observation, A.I.R. 2001 Journal 121.

This article states that forests are green lungs of the earth. They are main component of the biotic components of natural environmental system and the stability of environment and ecosystem largely depend upon the status of forest of the region concerned. This article also states that the major cause of rapid rate of deforestation in India is the increasing pressure of biotic communities including both human population and animal on our forest resources as with only 2% of the total land of the world India supports 15 percent of the total world population of human beings and 13 percent of the total number of cattle of the world. Some legislative measures and constitutional concerns are thoroughly discussed in this article by which conservation of forest can be maintained and deforestation can be stopped, but on the other hand it says that legislative measures to prevent deforestation and degradation of environment are not the only weapon available for the battle against the destruction of forest in India.

On this burning issue judiciary should play a vital role related to deforestation and degradation. If we see the earlier and recent judicial decisions related to the matter of destruction of forest and environmental degradation than we can find out that judiciary also playing the role of ultimate savior of natural environment but on the other hand development process is a very big oblique to stop the environmental degradation and deforestation. There

is a very big problem to make a balance between the development process and environmental degradation.

Paras Diwan And Peeyushi Diwan, Conservation Of Forest: An Imminent Danger And Need For Saving Forest, In Paras Diwan & Peeyushi Diwan (Ed), Environment Administration Law and Judicial Attitude, 2ndedn, 1997.

In this article it is mentioned that to protect the human environment and maintain ecological balance, it is necessary that India should preserve one third of its land area for forest. At present it has only 22 percent of its land covered with forest. The substantive provision mentioned in this article indicates some guidelines issued under Forest (conservation) Act for the implementation of the provision regarding cultivation of various cash crops to be related as non-forest purpose were not followed properly and therefore the Act was amended in 1988 but the punishment made under this Act is not very stringent. This article includes some state laws for the protection of forest but unfortunately devastation of forest continues. They are being exploited indiscriminately. Deforestation continues. This article also states the tribal people right in forest products, which satisfies their needs from the forest. The Policy Document of the Government of India has added this right of tribal people.

Robin R. Sears and Miguel Pinedo-Vasquez, Forest Policy Reform and the Organization of Logging in Peruvian Amazonia Change, Development and Change, Volume 42, Issue 2, April 2011,

Reform in the forest sector in Peru resulted in a new forestry law, developed with substantial input from international conservation and donor organizations. While it incorporates the principles of sustainable forest management, biodiversity conservation and livelihood improvement, inconsistencies remain between the regulatory mechanisms and actual practices and outcomes in the field, leading some to consider the legal framework a failure. This article suggests that problems in the sector persist because the legal and regulatory frameworks do not incorporate existing local institutions, norms and practices — all of which are rooted in complex historical social, political and economic relationships. Based on information from interviews, data on movement of timber and analysis of secondary information, the authors examine the local structure, actors and dynamics of the concession forestry system in the Peruvian Amazon. The article focuses on how financial, social and political relationships in the network of actors, and particularly the patronage system, have helped actors in the sector adapt to the new policy framework. It is proposed that any further

reform in the forest sector must be based on a keen understanding and appreciation of the praxis of timber extraction in the region.

Brent Sohngen, Robert Mendelsohn and Roger Sedjo, Forest Management, Conservation, and Global Timber Markets, American Journal of Agricultural Economics, Vol. 81, No. 1 (Feb., 1999)

This article develops a global timber market model which captures how timber supply reacts to future predicted increases in the demand for timber. Higher future demand is expected to increase prices, increase investments in regeneration, increase establishment of plantations, and expand output. Dynamic market responses imply a greater reliance on plantations in productive regions, allowing large areas of natural forest in low-valued regions to remain largely intact. Sensitivity analysis suggests that price, harvest, and management are most sensitive to the rate of demand increase, the interest rate, the cost of plantations, and access costs of natural forests. Two forest conservation strategies are examined which predict the system-wide implications of forest conservation in Europe and North America. The policies indicate that whereas set asides can induce net conservation, harvests increase elsewhere, particularly in natural forests

Lauren Flejzor, Reforming the International Tropical Timber Agreement, Review of European Community & International Environmental Law, Volume 14, Issue 1, June 2005,

This article will explain the historical development of the ITTA, and look critically at why new issues are proposed for inclusion under the successor agreement to the ITTA 1994. It will also analyze the constraints of operationalizing the ITTA using the ITTO, in the context of the global forest policy arena.

Brendan Fisher, David P. Edwards, Trond H. Larsen, Felicity A. Ansell, Wayne W. Hsu, Carter S. Roberts, & David S. Wilcove, Cost-effective conservation: calculating biodiversity and logging trade-offs in Southeast Asia, Conservation Letters, Volume 4, Issue 6, pp. 443 – 450.

The Sunderland Biodiversity Hotspot of Southeast Asia is widely regarded as one of the most imperiled biodiversity hotspots due to high degrees of endemism Coupled with extensive logging and forest conversion to oil palm. The large financial returns to these activities have made it difficult to conserve much of the region's lowland primary forest, suggesting a large trade-off between economic interests and biodiversity conservation. Here, we provide an

empirical examination of the magnitude of this trade-off in Borneo. By incorporating both financial values and biodiversity responses across logging regimes, we show that selectively logged forests represent a surprisingly low cost option for conserving high levels of biodiversity. In our study, the standing value of timber dropped from \$10,460 ha⁻¹ to \$2,010 ha⁻¹ after two logging rotations, yet these forests retained over 75% of bird and dung beetle species found in primary unlogged forest. We suggest that the conservation of selectively logged forests represents a highly cost-efficient opportunity to enlarge existing protected areas, improve connectivity between them, and to create new, large protected areas.

G. J. Nabuurs And R. Sikkema, International Trade In Wood Products: Its Role In The Land Use Change And Forestry Carbon Cycle, Edition 2001, Kluwer Academic Publishers.

Accounting harvested timber products and their trade as an integral part of the carbon cycle of a managed forest is a challenging mission. However, an appropriate way is particularly desired now that harvested wood products may be included in Article 3.4 of the Kyoto Protocol. The adoption of a method for accounting for these flows in the IPCC guidelines may have implications for the trade of wood products and thus on global forest management. Four methods of accounting for wood products in an international standpoint are analyzed in the present study. The aim is to obtain insight in the technical and policy implications of the proposed methods. These methods include the present default IPCC method and three alternatives: flow consumption, flow production, and stock change. All four methodologies are applied to the 1990 data of Gabon, Sweden, and The Netherlands. The impact of accounting for wood products using alternative methods has in some cases a large impact on the carbon steadiness of the Land Use Change and Forestry (LUCF) sector. In the case of The Netherlands, it was found that the LUCF carbon balance could be 'converted' from a sink into a source depending on the method chosen. However, the LUCF sector is very small compared to the total national carbon balance in The Netherlands. In Sweden, a country where the forest sector plays an important role, the alternative wood product methods influence the total national carbon balance by 34%. In Gabon, a country with conversion forestry, the impact of alternative wood product methods hardly influences the LUCF carbon balance because the emissions from deforestation are very large. The accounting method may have a large impact on the way countries regard their trade in wood products. It may be possible for countries to buy a sink through the wood products trade, by importing products

faster than they decompose domestically. In the case of Gabon with its conversion forestry (the change from forest into other types of land use, like agriculture), it was found that under the flow consumption method, this country can partly export the carbon sources resulting from non-sustainable forest management. Nor is this latter method consistent with the energy chapter of the IPCC guidelines. The stock change method seems to be a suitable method, combining precise accounting and simplicity. This method is also an incentive for the use of wood in long-life products and bio-energy, and for sustainable forest management.

Cheng Baodong, Song Weiming, Tian Minghua Import analysis of China's major timber products in 2004, 1st Edition, 2006, Springer Publishers.

Timber import is an important and integral part of China's timber trade. According to different kinds of product type, this paper analyzes its import in 2004 separately; based on the conditions of China's timber import trade in 2004, this paper finds out some existing problems and puts forward corresponding countermeasures.

K.P.S.Mahalwar, Deforestation And Environment: A Socio Legal Concepts, In Paras Diwan.Peeyushi Diwan (Ed), Environment Administration Law And Judicial Attitude, 2ndedn, 1997.

This article states that dishonesty, corrupt practices and degradation of character have contributed a lot of Government's failure in enforcement of forest laws. This article refers the forest laws by which deforestation can be protected but there are various lacunas lurking behind such legislation as mentioned in this article that is there are Saw Mills in the country side running in violation of the laws of forest without facing any penalty. Precisely it is concluded in this article that for the protection of forest there is a need of people participation in making and enforcement of law and educates the masses about the human environment and effects of various development activities on environment.

Duncan Brack, Controlling Illegal Logging and the Trade in Illegally Harvested Timber: The EU's Forest Law Enforcement, Governance and Trade Initiative, Review of European Community & International Environmental Law, Volume 14, Issue 1.

The destruction of the world's forests is a well-known by-product of the development of modern society. Eighty per cent of the forests that originally covered the Earth have been

cleared, fragmented or otherwise degraded by logging, mining, and clearance for agriculture or urbanization. Although increased public awareness, forest conservation and reforestation initiatives and reductions in air pollution levels have helped forests to recover and grow in developed countries, most of the world's forests – located in the Amazon Basin, Central Africa, South-East Asia and the Russian Federation are still significantly threatened. In tropical countries, logging for wood products is responsible for about one-third of total deforestation (in some countries, the proportion reaches one half or greater). Possibly more than half of all the logging activities in the most vulnerable regions are conducted illegally. Worldwide, estimates suggest that illegal activities may account for over a tenth of the total global timber trade, itself worth over US\$150 billion a year. Since the late 1990s, international attention has increasingly focused on the scale of illegal forestry activities, and their environmental, economic and social impacts. An important part of the debate has been the role of consumer countries in driving the demand for timber and timber products, and hence increasing the incentives for illegal logging. This article examines the efforts of the EU, through its Forest Law Enforcement, Governance and Trade (FLEGT) initiative, to try to exclude illegal products from its imports and to build markets for verifiably legal products.

SIGNIFICANCE OF THE STUDY

There is very little work done from the above perspective relating to rules and regulation related to timber trade in India especially with reference to the state of Tripura. This study will be the first one of its nature.

CONTRIBUTION MADE

The study will significantly contribute to the knowledge bank available on control and regulation of timber trade for effective conservation of forest lands, especially in the state of Tripura and to propose methods for control and regulation of timber trade in India in order to make it sustainable.

DEFINITION OF THE KEY CONCEPTS

FOREST: A large uncultivated tract of land full of tress and Underwood which is managed by human skill. A jungle is growth of trees, shrubs foliage unmonitored and unregulated by human efforts. For the purpose of this research work the word forest covers both forest and jungle.

ENVIRONMENT: Earth, life support systems, all forms of life on planet. The dictionary meaning is surrounding. It includes all external conditions and factors, living and non living that affect an organism or other particular system during its life time. It includes ecosystems, and biodiversity.

SAW MILL: An industry where wood or timber is used to cut in a sawing machine.

TIMBER: Trees, logs, lumber wood etc. It is related to wood suitable for house building, carpentry, or for making furniture. Timber also refers to wood in any of its stages from felling through readiness for use as structural material for construction, or wood pulp for paper production.

TIMBER TRADE: An occupation or business relating to import and export of timber.

ECOSYSTEM: Community of plants, animals, and other organism interacting with one and other and with the chemical and physical factor of its non-living environment.

CHAPTER SUMMARY

INTRODUCTION: This chapter introduces the reader to the behind the screen reasoning for undertaking the present research and the objective and significance of the present research work

CHAPTER 1: CONCEPTUAL AND THEORETICAL FRAMEWORK

The Chapter focuses on developing a conceptual and theoretical frame in order to understand the response pattern under different temporal, environmental and socio-economic conditions vis-à-vis the timber trade. Generally, timber trade has suffered a marked loss of social credibility. While timber traders justifiably take credit for being the backbone of the infrastructural and developmental activities, they are accused of causing a host of environment related socio-political problems and of being insensitive to societal needs. There are several political agenda and vote bank politics behind an apparently harmless policy. Considerable pressure is put upon the timber traders to improve their socio-environmental accountability in the form of corporate social responsibility as well as corporate social liability. The judiciary and the legislature have exerted pressure upon the timber traders for compliance of laws and policies. The type of issues that the timber traders should tackle and the adequacy of their responses have spawned whole new issues of timber trading not only in India but across the world. However a relative lack of development of a conceptual and

theoretical frame work has hampered a systematic study of timber trade and the environmental issues that lead to its success and failure and to respond the societal problems.

CHAPTER 2: CONCEPT OF SUSTAINABILITY AND TIMBER TRADE: AN OVERVIEW OF LAGISLATIVE FRAMEWORK

The focus of this chapter is to deal with the issue of sustainability of timber trade. On one hand the trade is accused of being unsustainable and causing wide spread forest denudation on the other hand timber is the most essential commodity for infrastructural development. These apparently conflicting interests are sought to be reconciled in the light of doctrine of sustainability.

This chapter examines the doctrine of sustainability and its development and growth. The researcher also salutes the Supreme Court for playing a dominant role in ushering in the policy of sustainability in Indian policy framework.

For the first time the 1988 policy expressly addressed the serious issue of forest depletion and disturbance of biodiversity. It spoke of environmental stability and ecological balance. In fact the first seed of sustainability is sown by this policy. The principal aim of forest Policy must be to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which is vital for sustenance of all life forms, human, animal and plant. The derivation of direct economic benefit must be subordinated to this principal aim.

It also examines the Five year plans to see the efforts made by the Indian planners to usher in sustainable development policies and the steps taken by them for the protection of forest and regulation of timber trade in India. The 8th plan demonstrates for the first time the awakening of India to the crisis of environment and the resultant catastrophe. For the first time environment was given due importance under the plan and steps to conserve forest have been taken. The successive plans till the XIIth Five year plan i.e. in the last two decades the planners have become acutely conscious of the environmental crisis.

The statutory frame work is examined at length in this chapter. Important issues of climate change and preservation of biodiversity has also been dealt with at length. The impact of the Forest policy on sustainability is examined at length and the strengths and weaknesses of the statutes have been examined.

The international law regime dealing with environmental sustainability and timber trade and the legally binding and legally non binding instruments have been presented in the chapter and has been examined at length.

While examining the issue of sustainability of timber trade the researcher feels The growing importance of timber production and exports, the continued use of forest damaging (“conventional”) logging practices, the multiple use values of most timber species, the ongoing regional economic crisis and structural adjustment programmes have all contributed to this regional Phenomenon . These pressures may result in the near future in the liquidation of timber stocks and the degradation of forests, along with rural livelihood opportunities. Faced with this situation, timber companies may simply move to other regions where commercial species are still available. The local people, however, lack such mobility and will consequently remain in poverty.

Every coin has its two sides. It is an undisputed fact that every concept has its own advantages as well as disadvantages. The basic tenet of sustainable development is a balancing concept between industrialization and ecology of this planet. In this present century we cannot ignore the importance of industrial development. However, it is pertinent to note that development should not occur at the cost of environment. There is a never ending debate between trade and environment. Obviously, trade is found to have some adverse effect on outweigh the importance of the environment, but at the same time, it is not possible to stop trade at any cost. Therefore, emphasis should be given to the sustainable use of forest resources, while not neglecting the importance of trade. After the analysis of its positive and negative impact, focus should be on the positive impacts while neutralizing the negative impact.

CHAPTER 3: SUPREME COURT ON REGULATION OF TIMBER TRADE WITH SPECIAL REFERENCE TO GODAVARMAN CASE

This chapter focuses only on those decisions of the Supreme Court that have had a direct impact on timber trade of this country. The Godavarman case is at the focal point since till date this is the most important and perhaps the only case of its kind not only in India but also in any developing country. This chapter also deals with other cases which have had an impact upon forest and issue of protecting the same from various illegal activities. This chapter also focuses on other case which has direct or indirect effect on timber trade. The objective of this chapter is not only the study of those cases which have the direct or indirect impact upon

forest or timber trade but also to critically assess the impact of those cases on timber trade in India and the consequences both conceptual and actual.

CHAPTER 4: LOCATING TIMBER TRADE IN INTERNATIONAL TRADE: - A CONSPECTUS OF WTO REGIME

The focus of this chapter is to provide a concise background to the main issues at stake in the interaction between the WTO system in international timber trade and sustainable development and to bring to the fore the disputed relationship between sustainable development and liberalization of international trade. It has been argued that trade liberalization is crucial to economic and social development and environmental protection; and, conversely, that is harmful to one or all of these three pillars of sustainable development or at least , that it gives a much greater focus to economic growth at the expense of the social and environmental dimensions.

CHAPTER 5: ILLEGAL LOGGING IN SOUTH, SOUTH EAST ASIA, AND CHINA: A SKETCH

Illegal logging has emerged as a worldwide concern in the last decade. The problem occurs on a global scale, but is most notable in developing countries. Though most illegal timber is used domestically, 5–10% of the total global forestry trade is estimated to be comprised of illegal timber, with a greater percentage originating from countries in South and South East Asia. Around half of the tropical wood imported into the European Union is estimated to come from illegal sources. Asia is a region experiencing rapid economic development, with the forest sector being part of this growth. This development is creating opportunities for employment and trade, but unfortunately it is also increasing the threat of rapid deforestation. Illegal logging is understood to be one of the main drivers of deforestation in the region together with poorly planned conversion of natural forests and oil-palm production. Increasing demand for wood product, for both domestic use and export, puts pressure on and increases competition for land and forest resources⁹. The destruction of the world's forests is a well-known by-product of the development of modern society. Eighty per cent of the forests that originally covered the earth have been cleared, fragmented or otherwise degraded by logging, mining, and clearance for agriculture or urbanization¹⁰. In tropical countries,

⁹ Mikaela Nilsson Rosander, *Illegal Logging: Current Issues and Opportunities for SIDA/SENSA, Engagement in Southeast Asia*, 2008, Bangkok, Thailand

¹⁰ Hiroyuki Ishi, 'We Must Stop Deforestation by Human Beings and Start Implementing Forest Conservation', *JICA Network Going Green* (July 1999), found at <http://www.jica.go.jp/english/publication/network/1999/net_9907/01.html>.

logging for wood products is responsible for about one-third of total deforestation (in some countries, the proportion reaches one half or greater). Possibly more than half of all the logging activities in the most vulnerable regions are conducted illegally¹¹.

Illegal logging takes place when timber is harvested, transported, bought or sold in violation of national laws. The harvesting procedure itself may be illegal, including corrupt means to gain access to forests, extraction without permission or from a protected area (such as a national park), cutting of protected species, or extraction of timber in excess of agreed limits. Illegalities may also occur during transportation, including illegal processing and export, wrong declaration to customs and avoidance of taxes and other charges. Several major timber producers and exporters are developing countries, and suffer particularly from illegal logging. Compared to industrialized countries, resources for law enforcement are limited, corruption is more widespread, international companies, which offer investment, are proportionately more powerful, and civil society is weaker. Allocation of timber harvest rights has often been used as a mechanism of mobilizing wealth to reward allies and engender patronage.

Illegal logging and the international trade in illegally logged timber is a major problem for many timber producing and exporting countries. It causes environmental problems, in terms of the depletion of scarce natural resources, the destruction of ecosystems, loss of biodiversity, and loss of carbon sinks. It causes economic and developmental problems, with the loss of billions of dollars each year in government revenues. It also causes social problems, in terms of the disregard for law and the corruption it promotes, which are damaging to governance and social cohesion alike. For all these reasons, the issue of illegal logging has been attracting increased attention from governments of developing and developed countries alike.

The present research deals with the legal framework of timber trading. Trading cannot remain confined within one nation and the status of trade and trading policies of neighbouring country in one way or another impact upon the trading policy and status of another country. Keeping this in mind this chapter tries to take a look into the status of timber trade in some select countries of South and South East Asia.

CHAPTER: 6 EMPIRICAL STUDIES RELATED TO TIMBER TRADE IN KERALA, WEST- BENGAL, ASSAM, MIZORAM AND TRIPURA

This chapter is based on empirical work. Although the focus of the theses is the State of Tripura, but in order to understand the implementation of law related to timber trade, the researcher has done a comparative field study in Kerala, West-Bengal, Assam, and Mizoram also. It focuses on the implementation of the laws relating to timber trade at the ground level in five states of India.

The objective of this chapter is to study the various laws prevailing in different states in addition to the central laws. It may be recalled that matters relating to forest and forest produce figures in item no.17A, 33(a) in List III [Concurrent List] & Item 18, 27, 45 of List II [State List] in schedule VII of the Constitution of India. Therefore each state in addition to the central laws has customized its own laws for the protection of the forest and forest produce within their territory.

During the empirical study the researcher had anticipated a certain degree of fear and resistance from the respondents. In order to reassure them each questioner had an undertaking from the researcher stating that the researcher is a registered Ph.D. scholar in the University of North Bengal and the information given to the researcher shall remain strictly confidential and shall be used solely for the purpose of writing the thesis. The names and/or identities of the respondent shall not be revealed to anyone under any circumstances. The researcher further gave a copy of the filled in questioner to the respondent for the purpose of cross checking the authenticity of his presentation by the respondents if they so desired. Despite such assurances and genuine efforts of the researcher the respondents were not willing to be interviewed. So in order to reach them the researcher met some knowledgeable and influential persons in research organizations such as various forest research institutes like Kerala Forest Research Institutes (KFRI), Assam Forest Research Institute (AFRI) and Local MLAs, Union Leaders, Secretaries of Timber Associations and through them approached the respondents to obtain authentic responses free from fear etc.

CHAPTER 7: LEGAL FRAMEWORK RELATED TO TIMBER TRADE IN THE STATE OF TRIPURA AND ITS IMPLEMENTATION

The framework of this chapter is limited to the state of Tripura. The researcher looks into the legal provisions relating to trade in timber in the state of Tripura both from the substantive and implementation perspective. The focus of this chapter is on timber trade within the state of Tripura and the mechanism for its implementation.

The present research work is with special reference to state of Tripura. The purpose of this chapter is to assess how well and to what extent the laws are amended for the purpose of suiting the need of Tripura and the stringency of their implementation.

CHAPTER 8: WEST BENGAL PANORAMA

This chapter deals with a sketch of the situation in the State of West Bengal. Since this is a descriptive chapter, there is no specific conclusion save for the need for engaging the youth of West Bengal by providing incentive and engaging a civil forest police force.

CHAPTER 9: CONCLUSION

The findings in the concluding chapter are that there is a need to reconcile the three conflicting fundamental rights namely the right to environment, development and trade and business. The researcher is of the opinion that in order to safeguard the rights to development and trade and business in timber it is essential to protect the forest sustainably. Another important finding is that in India there is no law that specifically addresses the issue of timber trade. There are rules bye laws and notifications of the forest department framed under State or Central statutes but not enactment that comprehensively addresses the issue of timber trade. The WTO and the international trade regime too have not framed and any control and regulatory mechanism with respect to such a vital forest produce and non tariff barriers have to be devised to regulate the same. The enforcement of the laws in the State of Tripura is not free from corruption. Although after Godavarman case there is a stricter vigilance a lot remains to be done. Similarly the States of West Bengal and Mezoram have a major problem of corruption in the form of illegal timber felling and there is a route for timber smuggling through Mezoram to China via Myanmar. There is no dearth of law that aim at achieving sustainability in forest management yet the real control and regulation was enforced by the Supreme Court in the Godaverman case. At the end of this chapter the researcher has made certain suggestions through which a better control and regulatory legal framework may be created that will specifically address the issue of timber trade in India. It is not sufficient to have sustainable forest management it is also important to have sustainable trading policies in order to achieve a sustainable development.

CHAPTER: 1

CONCEPTUAL AND THEORITICAL FRAMEWORK

In this chapter a conceptual framework is developed to understand the response pattern under different temporal, environmental and socio-economic conditions vis-à-vis the timber trade. Generally, timber trade has suffered a marked loss of social credibility. While timber traders, perhaps justifiably, take credit for being the backbone of the infrastructural and