

**A STUDY OF THE LEGAL FRAMEWORK TO CONTROL AND  
REGULATE TIMBER TRADE IN INDIA WITH SPECIAL  
REFERENCE TO ITS ENFORCEMENT IN THE STATE OF TRIPURA**

**THESIS SUBMITTED FOR THE AWARD OF THE DEGREE OF DOCTOR OF  
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## DECLARATION

I do hereby declare that the Ph. D. theses entitled A STUDY OF THE LEGAL FRAMEWORK TO CONTROL AND REGULATE TIMBER TRADE IN INDIA WITH SPECIAL REFERENCE TO ITS ENFORCEMENT IN THE STATE OF TRIPURA submitted by me under the supervision of Prof. (Dr.) Gangotri Chakraborty, Department of Law, University of North Bengal, is the result of my original investigation and has neither been published in any form nor been submitted either in part, or in whole, for any degree at any University. I have incorporated the suggestions made by the panel members during the pre-submission seminar of my Ph. D. theses.

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### CERTIFICATE

This is to certify that Sri Ripon Bhattacharjee has pursued research on the topic entitled A STUDY OF THE LEGAL FRAMEWORK TO CONTROL AND REGULATE TIMBER TRADE IN INDIA WITH SPECIAL REFERENCE TO ITS ENFORCEMENT IN THE STATE OF TRIPURA under my supervision for more than two years and fulfilled the requirement of the Ordinances relating to the Doctor of Philosophy of the University of North Bengal. He has completed his work and the thesis is ready for submission. To the best of my Knowledge and belief, the thesis contains the original work done by the candidate and it has not been submitted by him or any other candidate to this or any other University for any degree previously. In habit and character the candidate is a fit and proper person for award of Ph. D. degree.

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## ABSTRACT

India has been concerned about its forest boundary since 1894 but the approach has undergone a sea change. In 1894 the forest and forest produce was considered to be a source of revenue for the State. Eventually there has been shift in thinking. Progressively it was realised the even if forest produce has been and continues to be a source of revenue for the State, the trade in forest produce needs to be controlled and regulated. Several methods and modalities were devised to control and regulate trade in forest produce. Unfortunately until recently, such measures were not highly successful until very recently. The rules laid down were largely circumvented and evaded. Timber, a major forest produce, was also subject to such rules laid down under the Forest Act, 1927 and the Forest Conservation Act, 1980.

With the concept of development and the increasing global population, the demand for timber has increased many folds. All trade have an impact on natural resources directly or indirectly but timber trade impacts the natural resources in a big way. Consequently, global climate change, decrease in forest cover and biodiversity loss have become subjects of international concern. As a result of centuries of dreadful exploitation many natural forest and bionetworks are now gravely in danger.

The focus of this theses is to deal with one of the most important and major cause of deforestation, namely, timber trade. Therefore the sustainability of the national and international timber trade are crucial to the survival of biologically rich forests' ecosystems. Timber trade is not confined to domestic trade only it has a international market. The international trade regime also fails to focus on issues relating to timber trade. Processes like non-tariff barriers and technical barriers to trade could have been utilize effectively for sustainable management of timber trade and prevention of illegal trading in timber. Unfortunately that is not being done

It was the Supreme Court which played a positive and proactive role in cubing indiscriminate and illegal timber felling. Although the Supreme Court judgement is accused overstepping the boundaries of separation of power it has had a positive effect upon control and regulation of timber trade. The British in 1894 realized the tremendous commercial potentiality of the forest. They formulated a Forest Policy in 1894 where in trade in timber and forest produce was encouraged as a means of earning revenue for the state. This approach was rejected in 1955 Forest Policy. The shift from commercialization to conservation occurred in 1988 Forest Policy. The period from 1894 to 1988, almost a century, is the story of abuse and vandalisation of forest. As a result by 1988 India became acutely conscious of forest depletion and the resultant climate change, biodiversity change, desertification, fall in ground water level, so on and so forth. Urgent and immediate intervention on war footing was required tom protect forest. It was only 1995-1996 the Supreme Court systematically dealt with the issue of deforestation and from 1995 -2004 has laid down guidelines, looked at a large number of Interlocutory Application and addressed the concerns of each constituent states of the Union of India in the *Godavarman Tirumulypad v. Union of India*<sup>1</sup> and the

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<sup>1</sup> (1996) 9 S.C.R 982

Environment Awareness Forum v. State of Jammu and Kashmir<sup>2</sup>. This time the focus of the judges was forest, saw mills, encroachment, mines, dams, infrastructure project and other innumerable demands for development at one hand and preservation of the jungle on the other<sup>3</sup>. In this process varying social, economic, political, and constitutional issues came up for consideration.

Illegal logging is rampant in South, East and South East Asia wherein the illegal root of transition lies. This is an open secret. Yet very little has been done to prevent illegal trafficking in timber. This criminal activity does not even figure under the conventional criminal justice system both at the national and international level.

The empirical experience of the research shows that except in Kerala there is illegal trade in timber in the other states investigated such as West Bengal, Assam, Tripura, and Mizoram. Tripura has made strict laws following the Godavarman judgment but has not been able to root out corrupt practices detrimental to the forest. It has been noticed that in all the states under investigation there is an expansion of private timber estates but there is also the tendency of encroaching/converting the reserved forests into private forest. Kerala reflected least illegal activity. The States of West Bengal and Mizoram have a major problem of corruption in the form of illegal timber felling and there is a route for timber smuggling through Mizoram to China via Myanmar.

An ideal situation is banning of timber trade. However, reality would be different. So it is desirable to have a sustainable timber trade. All natural forest should be left untouched. The forest must do its own selection and survival without human interference. Timber required for infrastructural purposes may be obtained from these plantations. Timber trade in India, if it has to survive, must be done through scientific processes without affecting the natural forest canopy. Advocacy and sensitization are important weapons of change. Not only the common man but also those charged with the duty to protect the forest must also be sensitized. The media can play an important and crucial role in this regard as it is playing in other sensitive issues like Sanitation, Swaccha Bharat Abhiyan, and Sarva Siksha Abhiyan etc. It is also important to involve the youth in forest [policing so that there is a community interest in the conservation, preservation and the expansion of forest canopy. Poverty is another reason for vandalisation of forest. Forest policing by the civil youth will augment income. Government may devise schemes to that effect. Law directly addressing the issue of timber trade is needed.

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<sup>2</sup> AIR 1999 SC 1495.

<sup>3</sup> A "Jungle" is unplanned, uncontrolled and unregulated growth of trees, shrubs, creepers, undergrowth etc hosting a vast biodiversity. A "Forest" is a planned, organized, controlled growth of trees, plants etc.

## PREFACE

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. But with population growth an urgent need is felt to control and regulate trade in forest produce.

In this theses I have chosen timber as the particular forest produce whose trade according to me requires control and regulation urgently.

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**ABBREVIATIONS**

- **NGO:** Non Government Organization
- **UNEP:** United Nation Environmental Programme
- **GNP:** Gross National Product
- **(FAO):** Food and Agriculture Organization
- **NEAB:** National Afforestation and Eco-development Board
- **ICRAF:** International Council for Research in Agro-forestry

- CBD: Convention on Biological Diversity
- SFM: Sustainable Forest Management
- UNCED: United Nations Conference on Environment and Development
- WTO: World Trade Organization
- JFM: Joint Forest Management
- UNDP: United Nation Development Programme
- CITES: Convention On International Trade In Endangered Species
- CSD: Commission on Sustainable Development
- UNGA: United Nation Global Action
- ECOSOC: Economic and Social Council
- WSSD: World Summit on Sustainable Development
- IPF: Intergovernmental Panel On Forests
- IFF: Intergovernmental Forum On Forests
- ITFF : Task Force on Forest
- UNFF: UN Forum on Forest
- (CPF): Collaborative Partnership On Forest
- ITTO: International Tropical Timber Organization
- ITTA: Tropical Timber Trade Agreement
- UNCTAD: United Nations on Conference on Trade and Development
- IPCC : Inter-governmental Panel on Climate Change
- IUCN: International Union for the conservation of nature
- IIED: International Institute for Environment and Development
- WWF : World Wide Fund
- WP: Writ Petition
- HPC : High Power Committee
- MoEF: Ministry of Environment and Forest
- CEC: Central Empowered Committee
- APFA: Arunachal Pradesh Forest Authority
- NPV: Net Present Value of the Land
- SPV: Special Purpose Vehicle
- FSI: Forest Survey of India
- TDB: Travancore Devaswom Board
- TP: Transit Pass
- PGCIL: Power Grid Corporation of India Ltd.

- SIT: Special Investigation Team
- CAMPA: Compensatory Aforestation Management and Planning Agency
- GATT: General Agreement On Tariff And Trade
- CTE: Committee On Trade And Environment
- MEAs: Multilateral Environmental Agreements
- DDA: Doha Development Agenda,
- FLEG: Forest Law Enforcement and Governance
- ODA: Overseas Development Assistance
- VCS: Voluntary Certification Scheme
- FSC: Forest Stewardship Council
- PEFC: Programme for the Endorsement of Forest Certification
- TBT: Technical Barrier to Trade
- MEA: Multilateral Environment Agreements
- TREM: Trade Related Environmental Measure
- ITTA: International Tropical Timber Agreement
- FECOFUN: (Federation of Community Forestry Users Nepal)
  
- SAFI: Sarhad Awami Forestry Ittehad
  
- ADB: Asian Development Bank
  
- CFP: Community Forestry Project
  
- EU: European Union
  
- MTMA: Myanmar's Timber Merchants Association
  
- EIA: Environmental Investigation Agency
  
- KFRI: Kerala Forest Research Institutes
  
- AFRI: Assam Forest Research Institute
  
- CCF: Chief Conservator of Forest
  
- VSS: Vana Samrakshana Samity
  
- FTL: Forest Trade License
  
- PCCF: Chief Conservation of Forest

- UCF: Un-classed forests
- (CFC): Clear Felling Cycles

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**Date:**

**Ripon Bhattacharjee**

# **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 India<sup>4</sup> 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

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<sup>4</sup> 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 19<sup>th</sup> 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 case<sup>5</sup> 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?

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<sup>5</sup> 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 Godavarman<sup>6</sup> 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

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<sup>6</sup> 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, 2<sup>nd</sup> 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, 2<sup>nd</sup> 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, 2<sup>nd</sup> Edn, 2005, Wadhwa And Company.**

**Sanjay Upadhyay, Vidheh Upadhyay, Forest Laws, Wildlife Laws and the Environment (Hand Book on Environmental Law), 1<sup>st</sup>edn, 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 5<sup>th</sup> to 16<sup>th</sup> 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. Godavarman<sup>7</sup> issued directions for management of forest and the matter of imported Contaminated Waste was dealt in Research Foundation for Science case<sup>8</sup>. 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.

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<sup>7</sup> AIR 2005 SC 4256

<sup>8</sup> 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<sup>-1</sup> to \$2,010 ha<sup>-1</sup> 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, 1<sup>st</sup> 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, 2<sup>nd</sup>edn, 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 8<sup>th</sup> 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 XII<sup>th</sup> 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 resources<sup>9</sup>. 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<sup>10</sup>. In tropical countries,

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

<sup>10</sup> 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](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 illegally<sup>11</sup>.

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

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### **CONCEPTUAL AND THEORITICAL FRAMEWORK**

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developmental activities, they are accused of causing a host of environment related socio-political problems and of being insensitive to socio-environmental needs. Considerable pressure is put upon the timber traders to improve their socio-environmental accountability. 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 new issues relating to 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.

## **THE FRAME**

Evaluation of any trade and its performance must be on societal and temporal frame. Action or performance of trade becomes relevant only in context of time, societal demands, and state of the environment and conduct of the trading involved. Some activity may be considered socially relevant at one time under a particular set of circumstances and socially and environmentally detrimental at another time. The 1894 Forest Policy considered timber trading to the prime source of revenue earning but under the 1988 Forest Policy indiscriminate timber trading is considered to be one of the prime causes of climate change and environmental degradation. Thus the time frame and the socio-political environment cannot ignore while discussing any trade or business.

## **THE FOCUS**

In order to achieve a meaningful result there must be terminological and conceptual clarity. The present research looks to the legal framework for timber trade in India. Timber<sup>12</sup> here means, wood, wood-product, or log etc. The framework of this research work temporally fits in the time frame of 1980s to 2014 and the contemporary socio-environmental conditions. It does not emphasize any specific or particular social situations or problem and the timber

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<sup>12</sup> Timber means wood, tree, log, wood suitable for building or carpentry, wood products, furniture fashioned out of wood

trade is not assessed in the context of any particular activity. It merely looks at the control and regulation of the trade in the backdrop of resulting deforestation. This approach will enable development of a logical and acceptable canvas for discussion.

## **TIMBER TRADE AND CONFLICT OF SOCIETAL INTEREST**

Trading, ordinarily, is subject to two kinds of social forces: market and non-market. In order to meet the market demands the trade adapts itself to various factors like product demands, service promotion, pricing, consumer expectations, profit and growth etc. All these actions have some non-market social costs such as environmental degradation, unbridled pollution etc. These are the costs that are borne by the society as a whole. Now a social pressure is built up on the trade to minimize these costs and assume greater social responsibility for correcting the negative fallout of the trade<sup>13</sup>.

The response to the non market forces to mitigate the cost, commonly known as social responsibility and social responsiveness, are matters of concern. Trading is an integral part of social life and society is dependent on trade for its existence, continuity and growth. Thus both must strive to achieve to bring their respective goals in congruence. Trade, however, depends on its social acceptance even though the gaps between their respective goals are perpetual. If the gap widens the trade loses its sustainability and social credibility. Its survival becomes threatened as is now happening with timber trade. It is time for the timber traders to narrow the gap with the society and maintain maximum discretionary control over its internal decision making process and external dealings. The core of the controversy lies in the tension between market demands, factors of trading and the cost that is borne by the society.

The behavior in response to the market forces or legal constrains may be termed social obligation. The criteria of legitimacy in the area of social responsibility and social obligation are both economic and legal. This is met by the timber industry by taking some affirmative actions through the process of afforestation on private land holdings and also by contributing towards regeneration of forest and thus becoming socially more acceptable.

Economics and law impacts upon the, competition for resources and procurement of raw materials. The conflict lies in the timber industry trying to free themselves from economic and legal discipline Imposed upon them. Norms in a social system are developed from a

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<sup>13</sup> S. Prakash Sethi, Conceptual Framework For Environmental Analysis of Social Issues and Evaluation of Business response Patterns, Academy of Management Review, 1979, Vol-4, No. 1, Pages 63-74

voluntary consensus among various stake holders like the policy makers, law makers, judiciary, consumer, conservator and the civil society. Under these circumstances law tends to codify socially acceptable norms of trading that seldom lead to social change. These laws rarely operate as instrument of social change or social engineering<sup>14</sup>.

Despite the law and the policy framework, the timber industry fails to meet social expectations. Challenge lies in bringing the timber trade up to a level where it is in parity with currently prevailing social expectations, norms and values. Not aggressive, radical departure from the normal corporate activities. All that is needed is rational responsiveness to the justified demands of the society. Examples of such response are afforestation, prevention of illegal logging, stopping of illegal transit of timber etc. This also determines the long term goal of timber industry. This defining the long term role and goal of the industry is its social responsiveness. The timber industry is also expected to anticipate the changes that are in the offing and how they will impact upon its current activities<sup>15</sup>.

## **THE ROLE OF THE EUROPEAN STATES**

The genesis of exploitation and vandalization of the forest has a deep root in history and can be traced to the period where the western world especially the European Nations started venturing into the unknown land masses occupied by the indigenous and aboriginal people. With the drive for colonization, European states indulged in relentless pursuit of occupying and capturing indigenous land which they justified through developing various doctrines, principles and other rationale such as the white man's burden. The motive behind colonization was discovered new markets and raw materials for satisfying the needs and comforts of the western world. As a result the forests fell victim to European machination.

### **DOCTRINE OF CONQUEST:**

This denoted acquisition of sovereignty over a territory through the use of arms and vanquishing the native power that be in existence. Thus the territory so acquired became a part of the conquerors empire.

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<sup>14</sup> Ibid  
<sup>15</sup> Ibid

It emerges as an example of the White Man's Burden to civilize the non-Christian non-white. In 1452 Pope Nicolas V issued a Bull "Romanus Pontifex" declaring war against all non-Christians throughout the world and specifically sanctioning and promoting the conquest, colonization and exploitation of non-Christian nations and their territories. This Papal Bull permitted Portugal to claim and conquer land in West Africa. The various theological and legal doctrines formulated during and after the crusade considered the non-Christians and non white's enemies of catholic faith and less than human. In the Bull Romanus Pontifex in 1452 Pope Nicolas V directed King Alfonso to "capture, vanquish, subdue the pagans and the enemies of Christ and to put them into perpetual slavery and take all their possessions and property". This forms the basis of human trafficking as slaves and expansion of European dominion by 'discovering' other nations.

Later Pope Alexander VI issued another Papal Bull "Inter Cetera" dated 3<sup>rd</sup> may 1493 in which he granted the request of Ferdinand and Isabella of Spain the right to conquer land. On protest of Portugal another Papal Bull was issued on 4<sup>th</sup> may 1493 that Spain shall not establish dominion over any land which had already been captured by any Christian Lord. This clearly demonstrates the vendalization of forest and aboriginal land by the European Nations under the guise of White Man's Burden. It is a general rule that the conquered must be subjugated to the law of the conqueror and thus began the exploitation of forest. The interpretation of doctrine of conquest was outlined by the permanent court of international justice in the status of Eastern Greenland case<sup>16</sup>. According to decision the doctrine of conquest operates as a cause of lack of sovereignty when there is a war between two states and the conqueror state establishes sovereignty. Exploitation of forest therefore becomes an incidental .consequence of the conquest where the conqueror does not develop any attachment to the conquered land or its people.

### **DOCTRINE OF DISCOVERY:**

At the centre of doctrine of discovery lies the adventures of Christopher Columbus who was authorized to take possession of the land he discovered that were not under the dominion of Christian rulers. This process of capturing indigenous and aboriginal land had a religious

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<sup>16</sup> (1933), 3 W.C.R 148

connotation to it because it asserted that the Christian nation had a divine right based on the Bible to take absolute title and authority over the Christian inhabitants and their land. In 1823 the doctrine of discovery was adopted into the U.S. Law in *Johnson v. McIntosh*<sup>17</sup>. Chief Justice John Marshall observed that Christian European Nations had assumed ultimate domain over the lands of America during the age of discovery and due to this reason the native indigenous people lost their right to complete sovereignty as independent nations and had only the right to occupy their land. The court held that –

- i. The principle of discovery was acknowledged by all Europeans because it was in their interest to do so.
- ii. The nation making the discovery had the sole right of acquiring the soil and establishing settlements on it.
- iii. The rule regulated the nations among the competing interests of European powers, and
- iv. The original inhabitants had the right to retain possession of their lands but were without the powers of alienation except to the discoverers who had obtained exclusive title by virtue of making the discovery.

This resulted in reduction of tribal sovereignty and reduction of tribal control over natural resources of which the forest happened to be the most important one. The forest dwellers and the native who had the mechanism for protecting the natural forest lost control over it and the forest was vandalized by the outsiders.

The doctrine of conquest differs from the doctrine of discovery. In conquest the conquered is vanquished and in discovery sovereignty is acquired over uninhabited territories.

### **DOCTRINE OF OCCUPATION:**

It was believed that discovery conferred imperfect title and occupation completed the same. It was a requirement that land so discovered and occupied had to be terra nullius. It means uninhabited land. But it was interpreted to mean a claim based on discovery was incomplete until accompanied by the “effective occupation” of the region by the discoverer. The term effective occupation included the notion of uninterrupted and permanent possession. It would then mean only the native aboriginal people could show continuous uninterrupted occupation

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<sup>17</sup> 21 US (8 wheat 543) 1823

of land forest. But it was further interpreted that certain tribal land or land belonging to the native would fall within the scope of “uninhabited” if the people of the area exhibited and unwillingness to exploit the land in a civilized fashion<sup>18</sup>.

#### **DOCTRINE OF ADVERSE POSSESSION:**

This doctrine is again linked with doctrine of discovery and occupation. Ordinarily adverse generally means that one can acquire title to another’s land if one openly occupies it for an extended period of time and the original owner acquiesces to ones presence. In order for such claim to be valid there must be de facto exercise of sovereignty which is peaceful and unchallenged.

Therefore over the year those who vandalized the forest occupied unquestionable absolute title that allowed them to exploit the forest at their sweet will<sup>19</sup>.

#### **DOCTRINE OF CESSION:**

A treaty is an international agreement concluded between States in writing and governed by international law, whether embodied in single instrument or one or more related instruments. Bilateral contracts are formed by exchange of promise in which promise of one party is consideration supporting the promise of the other party. Such treaties and bilateral agreements may incorporate provisions that take away the independence of the native people and the land/forest is ceded from the control of the native folks<sup>20</sup>.

#### **DOCTRINE OF SOVEREIGNTY:**

Sovereignty means supreme, absolute and uncontrollable power by which an independent State is governed, supreme political authority, the supreme will, paramount control of the constitution and the frame of government and administration. Tribal sovereignty refers to the right of tribes or of federally recognized native notions to exercise limited jurisdiction within and sometimes beyond reservation boundaries<sup>21</sup>.

#### **DOCTRINE OF EMINENT DOMAIN:**

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<sup>18</sup> Dr. S.R.Myneni, Environmental Law, Edn- 2008, Asia Law House, p.160-194

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

In “Dominium Eminens” (Supreme Lordship) was used by Hugo Grotius in 17<sup>th</sup> century to describe the doctrine of ‘Eminent Domain’ in the power of government to appropriate private property for its own use without owners consent. The terms ‘condemnation’ or ‘expropriation’ and taking refer to the act of a government exercising its power of eminent domain.

The term condemnation is used to describe the act of governance exercising its powers of eminent domain to transfer title of property from rightful owner to itself. In common law legal systems the eminent domain is the inherent power of the State to seize a citizens private property, expropriate property or right in property or right in property without owners consent<sup>22</sup>.

## **THEORIES OF ENVIRONMENTAL JUSTICE**

The doctrine of Distributive Justice in relation to the utilization and natural resources can be understood with the help of Distributive Justice that becomes an issue when people realize that the distribution of resource benefits and burdens are affected by government activities as there are continuous making and changing of laws that affect the economic benefits and burden. Every society than is always faced with a choice about whether to stay with the current laws and policies or to modify them.

Distributive Justice Theory contributes practically by providing guidance for these unavoidable and constant choices. These operate both at the national and the international level. It can be used more as a virtue than a vice but in reality it often is otherwise depending upon the degree of equality existing in a given society. It means that a person should have the same level of material goods and services. It is justified on the ground that people are owed equal respect and equality in use of natural resources and in material goods and services is the best way to give effect to this ideal.

Rawls proposes two principles of justice:

- (a) Each person has equal claim of to a fully adequate scheme of equal basic rights and liberties which the scheme is compatible with same scheme for all and in this scheme the equal political liberties and only those liberties are to be guaranteed their fair value.

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<sup>22</sup> Ibid.

- (b) Social and economic inequalities must satisfy two conditions- (i) they are to be attached to position and offices open to all under conditions of fair equality of opportunity; and (ii) they are to be greatest benefit to the least advantaged members of the society<sup>23</sup>.

Rawls difference principle allows allocation that does not conform to strict equality so long as the equality has the effect that the least advantaged in the society are materially better off than they would be under strict equality. In other words there is a need for reasonable classification. Resource based principle prescribe equality of resources and does to prescribe a patterned outcome and that outcome are determined by the extent people are able to access and use resources freely.

Most prominent resource based theory is developed by Ronald Dworkin<sup>24</sup>. He proposes that people begin with equal resources but end up with unequal economic benefits as a result of their own choices what constitutes a just material distribution is to be determined by the result of a thought experiment designed to model fair distribution . If everyone has equal purchasing power and each uses that power that bid in a fair auction, for resources best suited for their life plans and use them as they see fit. Although people may end up with a different economic benefit they consciously exercise their choice.

Many resource theorists including Dworkin add to this system of equal resources and ambition sensitivity to inequalities in natural endowments. They note that natural inequalities are not distributed according to people choices nor are they justified by reference to some other morally relevant fact about people. Dworkin proposes a hypothetical compensation scheme in which he supposes that before the hypothetical auction people did not own natural endowments.

Welfare based principles are motivated by the idea that what is of primary moral importance is the level of welfare of people. They do not believe the primary distributive concern should be material goods and services which have no intrinsic value and are valuable only in so far as they increase welfare. Hence the distributive principle should be designed and accessed according to how they affect welfare.

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<sup>23</sup> John Rawls, *Theory of Justice* (1972) as cited in M.D.A. Freeman (Ed) *Lloyd's Introduction to Jurisprudence* (6<sup>th</sup> Edn 1996) Sweet & Maxwell, p-466.

<sup>24</sup> Ronald Dworkin, "Is there a right to pornography" (1981) 1 *O.J.L.S.*, Vol- I, Also in *A matter of principle* (1985) Ch 17 as cited in M.D.A. Freeman (Ed) *Lloyd's Introduction to Jurisprudence* (6<sup>th</sup> Edn 1996) Sweet & Maxwell, p-434.

For the libertarians, just outcomes are those arrived at by the separate just actions of individual. A particular distributive pattern is not required for justice. Robert Nozick<sup>25</sup> proposes a three part Entitlement Theory. According to him if the world were truly just the following inductive definition would exhaustively cover the subject of justice in holdings:

- (a) A person who acquires a holding in accordance with the principle of justice in acquisition is entitled to that holding.
- (b) A person who acquires a holding in accordance with the principle of justice in transfer, from someone else entitled to the holding is entitled to the holding.
- (c) No one is entitled to a holding except by repeated application of (a) and (b) above.

The complete principle of distributive justice would simply say that distribution is just if everyone is entitled to the holdings they possess under distribution. This refers to injustice in acquisition and transfer. The latter is least controversial and designed to specify fair contract while ruling out stealing, fraud, etc. Acquisition is more complicated and controversial and involves gaining in exclusive property rights.

Nozick is inspired by John Locke's idea that everyone "owns" themselves by mixing one's labour with world self ownership can generate ownership of some part of the material world which increases the value of self ownership. He advocates a system where there are exclusive property rights.

The absence of distributive justice due to greed and mal distribution of power and natural resources within and among nations led to the current sad state of affairs.

Principle of compensation and rehabilitation is another important aspect environmental justice. Compensation is an amount of money paid to make up for the loss or injury caused as far as practicable in equivalent proportion to the loss or injury. In case of land it should be the fair market value. But to assess the value of the lost forest or illegally felled timber and the resultant environmental cost is most difficult if not impossible.

Rehabilitation means restoring the status quo ante. When dams are constructed to control flood, or agricultural power production, the cost suffered by the internally displaced people is

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<sup>25</sup> R. Nozick , *Anarchy, State and Utopia*, (1974) as cited in M.D.A. Freeman (Ed) *Lloyd's Introduction to Jurisprudence* (6<sup>th</sup> Edn 1996) Sweet & Maxwell, p-491

again almost impossible to calculate or it is impossible to restore their status quo ante. The human rights denied are beyond restoration. Both compensation and rehabilitation are rights that are implicitly recognized, but difficult to implement.

Environmental justice may be a political coinage but the relationship and interdependence of factors and components of environment is not new and cannot be denied.

Vandalization of forest is not a new phenomenon. It has been politically, economically and socially planned by the European conquerors and passed on to the native inhabitants as a legacy of White Man's Burden to civilize the non Christian and the non white.

## **ENVIRONMENTAL POLICY AND MANAGEMENT**

This involves the process; tools and institutional arrangements devised and implemented that shape how society human beings interact with the natural world. Such policies often strives to secure and protect natural resources needed for survival, growth and enjoyment such as forest, clean water and fresh air etc. The policies also address the problems created by humans by their over consumption of natural resources. The laws strive to prevent over marketing, over consumption etc. In short environmental policies and laws strive to control and regulate human behavior vis-à-vis resource exploitation.

Framing of environmental law or laws for control and regulation of timber trading involves complex processes, tools and institutional arrangements. There are formal collective choices that precede the framing of policy at various levels such as national regional and local. It also involves the legislature, the bureaucrat and the judiciary. There are adjudicatory fora such as courts and tribunals that interpret the law and / or the policy and the arena of civil society in the form of Non Government Organization (NGO), Voluntary Organization, Informal Gatherings, Private Clubs and Associations that influence and shape the law and policy making. There are also the inevitable interventions of chambers of commerce and trading associations that influence and shape the law and policy making process<sup>26</sup>.

Science, technology and information impacts upon both the framing of the policy or law as well as their implementations. Implementation or enforcement mechanism has two aspects: "Formal and Informal". The Formal part is taken care of by the formal adjudicatory process

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<sup>26</sup> Tanya Heikkila etc, Digging for Framework, Theories and Models in Environmental policy and Management and Why We Need Them, Presented at the workshop on Policy Process Research and Environmental Affairs Working Group Seminar on 1<sup>st</sup> February 2012.

of the courts and tribunals and the informal shaping takes place by the civil society and the media. The physical environment is both the subject and the object of the process. There are incentives for compliance and sanctions for non compliance of the laws and policies. However, if the sanction is weak and avoidable, the implementation becomes very difficult. In this complex process the societal and economic interest of the nation has also to be balanced.

The tool for obtaining compliance of law and policy is no less complex. They involve imposing of harvesting limits, granting of license, scientific methods of cultivation and harvesting of timber, declaration of protected areas of forest, identification of banned and exploited species and imposition of economic and criminal sanctions. Side by side it is also important to have an educated, aware and sensitive consumer. These factors are generally taken care of by the forest department which acts as the monitoring body. But if the monitoring body is weak then the policy and laws becomes dead letters in print.

## **THEORIES**

Theories are required to study a phenomenon and in the present case the environmental policy and management in the context of timber trading. Theories help to reduce the complexity of the subject and focuses on the understanding of the issues at hand rather than taking an adhoc approach. Different theories help to focus on different aspects of the problem and thereby enable to obtain a fuller picture through multiple comparisons and explanations.

### **THEORY OF COMMON POOL RESOURCE:**

This theory recognizes that users are dependent upon a common pool of resource and there exists a common understanding of the resource system among the users. In such situation there is a common trust and reciprocity leading to a greater autonomy to organize and manage the resource base. In order to do so common organizational experience and acceptable leadership is necessary. The resource base for the timber traders is the forest. The common pool resource would require the planting of a tree for a tree. If one tree is felled by the timber traders they are constrained to plant a tree before felling it. This requires a certain degree of cooperation and commitment among the group and absence of ego based

competition and drive for excess profit. This system involves the use of common infrastructure that is procurement, transition, transformation and distribution of raw materials as well as common use of electricity, transport, machineries and the local green generated infrastructure. There is a built in check and balance in this system. This keeps the pollution and deforestation under control. The timber traders will not wither away, they will survive but they will not be making indiscriminate and exorbitant profits at the cost of the society.

### **THEORY OF REFORMATION:**

Though born in the 1970s, the theory of reformation became very popular in the 1980s. This theory adopted two lines: Analyzing Environmental policies and Movements by Environmental NGOs and protests. Environmental problems and crises are mainly conceptualize as market failure in provision of collective goods and emerging environmental institutions were widely conceived as most important tools to deal with the failures. The establishment of national and local environmental ministries and authorities and the legal frame works and regulations, assessment procedure for major economic projects, and other innovations drove sociological and political sciences interests, analysis, and investigations towards understanding environmental reform processes. Building strongly on Neo-Marxist analytical schemes, the State was perceived to be structurally unable to regulate, control and compensate the inherent environmental side effect of the ongoing timber trade. The environmental crisis was seen as being closely and fundamentally related to the economic demands of the market and the consumers. Notwithstanding this dominant position during the birth of environmental sociology and the politics of environment the State was seen as of critical importance for the control and regulation of timber trading through environmental reforms. The procedure for it was largely normative and design oriented, focusing on the contribution of timber trade to and development of new State oriented institutional layouts vis-à-vis environmental policy and reform. Environmental impact assessment schemes, environmental integration models and policy instruments control an enforcement arrangements were the important aspect of the agenda setting for environmental reform.

Environmental Non Governmental Organizations' and Civil Society Protest formed a second object of the environmental reform process which took into considerations the local issues at its core. Two dominant perspectives that tried to understand the importance of civil society in bringing about social transformations in the core institutions of modern society were the protest against what was being seen as the fundamental roots of environmental crises and also

by taking into account the contribution made by the environmental movements to the actual and necessary reforms of the institutional orders, dominant economic structures, campaign against polluter through lobbying and influencing political process. Many of the more radical and structuralist analysis saw the root of the environmental crises as the last resort for bringing about change and reform.

Reviewing the above, one cannot ignore the contribution of social sciences to environmental reform and draw several conclusions. First, in the 1970s and 1980s the majority of the environmental social science studies were not focused on explaining environmental reform, but rather on understanding the continuity of environmental degradation. During this period much lamentations can be seen as to how the activities of timber trade was causing deforestation and desertification but there was hardly any constructive focus on how to secure sustainability in the area. Second, conventional political and civil society institutions received most attention where as economic institutions and organizations were prominently absent from making any constructive contribution towards the process of achieving sustainability in timber trading. Third, although India was decidedly a socialistic country and Neo-Marxist perspective dominated its process of policy framing, India also became aware of the global demand of privatization and open foreign trade during this period, yet no clear dominant theoretical perspective emerged for achieving the desired reform. Fourth, although these traditions in studying the environmental protest, politics of environment and reformative attitudes originated in the 1970s, they still have strong positions in the contemporary social, political and economic scenario.

### **THEORY OF ECOLOGICAL MODERNIZATION:**

From the mid 1980s and during the early 1990s there was an explosion of concern for the environment and huge number of empirical studies were undertaken for environmental improvements, ecological restructuring and environmental reforms. These studies have focused on distinct levels of analysis and tried to assess whether a reduction in the use of natural resources and / or the discharge of emissions and effluents can be identified, either in absolute or in relative terms compare to economic indicators such as GNP. This development is manifest in the studies on sustainable trade, clean production, industrial metabolism,

industrial ecology and perspectives on the greening of consumption, life styles, and households. Although most of these studies occurred in developed countries they soon found their way into the developing or less developed parts of the world.

All these studies do not yield the same conclusion or point towards the same direction but a general picture can easily be seen. From the mid 1980s onwards there was a break in the tendency of parallel economic growth and increasing ecological disruption caused by legal and illegal felling of trees and excessive pollutions. This slow down is often referred to as the decoupling or delinking of material flows from economic flows. In a number of cases environmental reform also resulted in an absolute decline in the use of natural resources and / or in discharge of emissions, regardless of economic growth in financial or material terms. These conclusions are sometimes also valid for rapidly industrializing and modernizing countries for instance: Asia in general and India in particular.

Social dynamics behind these changes, that is, the emergence of actual environment induced transformations of institutions of social practices became one of the key objects of ecological modernization in 1990s.

The basic idea of ecological modernization is that, at the end of second millennium, modern societies witness a centripetal movement of ecological interest, ideas and considerations in their institutional design. This development crystallizes in a constant ecological structuring of modernity. Ecological structuring refers to the ecology inspired and environment induced process of transformation and reform in the central institutions of modern society. In this theory ecological restructuring is conceptualized at an analytical level as the growing autonomy, independence or differentiation of an ecological rationality vis-a-vis other rationalities such as timber trade. In the domain of states policies and politics the emergence of economic rationality has emerged in 1970s and the early 1980s. The constructions of governmental organizations and departments dealing with environmental issues date from that era. Equally, environmental laws, environmental impact assessments systems and green political parties date back to that period a distinct “green” ideology manifested by environmental NGOs, environmental value systems, and environmental periodicals started to emerge in the 1970s. Only in the 1980s however, this ‘green’ ideology assumed an independent status and could no longer be interpreted in terms of the old political ideologies of socialism, liberalism and conservatism.

However, the crucial transformation that makes the notion of the growing autonomy of an ecological rationality especially relevant is of more recent origin. After an ecological rationality has become relatively independent from the political and socio ideological rationalities of the 70s and the 80s, this process of growing independence began to extend to the economic domain in the 1990s. Because this growing independence of ecological rationality from its economic counterpart is crucial to the ecological question, economic processes of production and consumption are increasingly analyzed and judged from both economic and an ecological point of view. In the 1990s some institutional changes in the economic domain of production and consumption became discernable. Among these changes are the wide spread emergence of environmental management systems in the corporate sector, economic evaluation of environmental goods through introduction of eco taxes, the emergence of environment inspired liability and insurance arrangements, the increasing importance attached to the environmental goals such as natural resource saving and recycling among public and private utility enterprises and the articulation of environmental considerations in the economic supply and demand through eco-labels and product information systems. Within ecological modernization ideas, these transformations are considered as institutional changes indicating their semi permanent character. Although these changes would be difficult to reverse

### **THEORY OF NETWORKS<sup>27</sup> AND FLOW<sup>28</sup>:**

The second half of the 1990s witnessed the emergence of what is labeled as the sociology of networks and flows. The relevant innovations of the sociology of network and flows for environmental reform are four fold. First, with the introduction of the pace of flow and contrasting it with the space of place a new kind of time-space organization of practice is introduced that takes globalization fully into account. Globalization is no longer understood as elevating a process to a higher level. Second, the sociology of networks and flows lifts the sharp distinction between the social and material world, between flows of information and money and flows of material substance between the institutional infrastructure and the technological – material infrastructures. Within the sociology of networks and flows there is an effort to overcome the dichotomy of social and the material. Thus it goes beyond the conventional schemes of environmental social sciences which assert that social systems should be seen as systems having a material base and with the recognition that material

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<sup>27</sup> A group of people or organisations that are closely connected and that work with each other

<sup>28</sup> Smooth uninterrupted movement or progress

conditions matter for social practices and institutional developments. Hybrids and socio-technical systems are the key concepts that point to the fading dichotomy between the social and the material. Third, the strong separation between conventional categories of state, market, and civil society is lifted in favor of all kinds of new emerging arrangements. Socio-material infrastructures are no longer understood in terms of state and market. Fourth, ideas of governance, management, and control drastically change following the sociology of flows especially in general ideas of nation's states losing their sovereignty and power; possibilities of governance and control are seriously questioned.

In applying the sociology of networks and flows for understanding 21<sup>st</sup> century environmental reform to build an environmental sociology of networks and flows alone is not sufficient. This new social theory runs counter to the same frictions that the environmental sociologists had with earlier theories. Whereas most of the flow literature in social sciences emphasizes flows of capital, money, information, travel, migration and analyse them from perspectives as diverse as economic development governance and control, cultural diversity, or democracy, and environmental sociology of flows focuses on an explicitly environmental interpretations of the flow concept. This environmental interpretation differs in two ways from the sociology of flows: (a) By analyzing flow of information, capital, goods and persons from an ecological rationality point of view and (b) by analyzing environmental flows such as energy, water, waste, biodiversity, natural resources, contaminants and the like and also by taking an in-depth account of environmental change. Environmental flows are mentioned in between all other kinds of flows that could become or are object of sociological analysis. These flows are not assessed for their role in and contribution to environmental governance, deterioration, or reform. Nowhere, however, it is argued that the set of material flows as commonly addressed within the environmental sciences and social sciences deserve a special scientific approach. The question is whether it is helpful for a full understanding of environmental reform. What is needed is a more focused approach on environment which not only builds on such general conceptualization but also specifies them for environment networks and flows that might contribute more significantly towards environmental reforms.

## **POLITICS OF ENVIRONMENT**

For more than two decades, there has been a lively environmental debate along with a high degree of legislative activity in India. This intensified as a consequence of the Bhopal gas leak in 1984 which led to the Environment Protection Act of 1986. However, there is vast

agreement that the results of various reforms and regulations have been disappointing. Implementation has been poor. India's course of development is most likely unsustainable. Its current development strategy is therefore increasingly disputed along lines of ecological considerations. There are massive schemes for afforestation, there are laws to control air and water pollution and for conservation of forests. India has received world wide praise for its attempts to preserve tigers. But there is a major problem with this entire range of activities; it does not appear to reflect a holistic understanding of the relationship between environment and development. Programmes are ad hoc without clear priorities and there are too much of a police like attitude. In fact the members of Indian forest departments are now referred to as Indian forest force. There seems to be a belief that environment is to be protected from the developmental pursuits and from invasion of the people. There are little efforts at harmonizing the developmental process with the needs of the people and maintenance of ecological balance and at the same time increasing the productivity of land, water, and forest resources.

The political debate in India centers on two issues: equity and growth. The third dimension of sustainability evolving from environmental concern poses a major challenge to the issues of equity and growth. Today the challenge is to identify developmental process that will lead to equity, growth and sustainability.

The environment is not just pretty trees and tigers, threatened plants and ecosystems. It is literally the entity on which everybody subsist, and on which entire agricultural and industrial development depends. Development can take place at the cost of the environment only up to a point. Beyond that point, it will be like the foolish person who was trying to cut the very branch on which he was sitting. Development without concern for the environment can only be short-term development. In the long term, it can only be anti-development and can go on only at the cost of enormous human suffering, increased poverty and oppression. India may be rapidly approaching that point.

Hundreds of field-level groups today take a keen interest in environmental issues and their experiences and interests are extremely diverse. Some are interested in preventing deforestation others are interested only in afforestation. Many want to prevent the construction of one dam or another. There are others who want to prevent water pollution. There is the famous Chipko movement<sup>29</sup> in the UP Himalaya, probably the oldest and most famous of all the groups, which has played a major role in bringing the issue of deforestation

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<sup>29</sup> *The State of the Environment — 1972-1982*, United Nations Environment Programme, Nairobi, 1982, p 5-7

to the forefront of public opinion. There is its counterpart in the south, the Appiko movement<sup>30</sup> in the Western Ghats of Karnataka. Dams like the Silent Valley<sup>31</sup> and Bedthi<sup>32</sup> have already been stopped because of strong people's protests, and the well-known social worker Baba Amte led a major campaign against the proposed Bhopalpatnam and Inchampalli dams<sup>33</sup> on the borders of MP, Andhra Pradesh and Maharashtra. The Kerala Sastra Sahitya Parishad<sup>34</sup> has had a long acrimonious battle over the pollution of the Chiliar River in Kerala by a rayon mill. The India Development Service finds itself embroiled in another case of river pollution by a rayon mill in Karnataka.<sup>35</sup> Meanwhile; the Shahdol Group has worked against the pollution of a river in Shahdol district by a paper mill.<sup>36</sup> There is, also, the Mitti Bachao Abhiyan<sup>37</sup> to organize farmers against water-logging caused by faulty irrigation systems. While all these are relatively well known groups and have attracted varying degrees of media attention, there are many others who are doing excellent work in mobilizing people, both to prevent further ecological destruction, often in the face of determined government policies, and to bring about ecological regeneration. One thing, however, that binds most of these groups is their concern to put the environment at the service and the control of the people, the people usually being defined as the local communities who live within that environment.

Environmental protection *per se* is of least concern to most of these groups, including the well known Chipko movement, for example. Their main concern is about the use of the environment: how should the environment be used and who should use it and benefit from it. It is this growing understanding of the relationship between the people and their environment,

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<sup>30</sup> For an example of how the argument is turned on its head, see what Barbara Ward has to say: "We must be clear where the immediate responsibility for inaction lies. The peoples of North America, Japan, UK and the east of Western Europe make up, together with a few oil states, the great majority of the world's rich citizens. Ours is the responsibility for the present appallingly skewed distribution of resources. The richest 20 per cent, largely living in the West, have three-quarters of the wealth, the remaining three and a half billion of our fellow citizens must make do with the quarter that remains. And it is for the world's poor, the nations of the Third World and the poor majority within those countries, that a decent environment is even more important than it is for the rich West. The poor are always near the margin and the margins of our global environment are today smaller than they were 10 years ago in Stockholm." Quoted in Vohra, B B, *Environment within the United Nations — Developing Country Viewpoint*, ed. Shiela Bajaj, Environmental Services Group — World Wildlife Fund, New Delhi, 1982

<sup>31</sup> H. S.Mann, and Ishwar Prakash, *Halting the March, Ecodevelopment in the Thar*, Department of Environment, Environmental Services Group — World Wildlife Fund, New Delhi, 1983,

<sup>32</sup> Madhav Gadgil, and K C Malhotra, Report of the field study conducted on behalf of the Committee on legislative Measures and Administrative Machinery for Environmental Protection, Department of Science and Technology, New Delhi, 1980,

<sup>33</sup> *The State of the Environment — 1972-1982*, United Nations Environment Programme, Nairobi, 1982

<sup>34</sup> *World Conservation Strategy*, UNCN UNEP WWF, 1980, section 19

<sup>35</sup> Madhav Gadgil, *Towards an Indian Conservation Strategy*, Policy Paper, Indian Social Institute, New Delhi, 1982

<sup>36</sup> Kapil Bhattacharya, *Bangladesher Nod, Nodi O Porikolpona*, Bidyesoy Library Pvt Ltd, Calcutta

<sup>37</sup> Vijay Paranjpaye, *The Woes of Gangawali: An Economic Analysis of the Bedthi, Stage I, Hydroelectric Project in Uttar Kannara*, Gokhale Institute of Politics and Economics, Pune, 1981

born out of a concern for a more equitable and sustainable use of the environment, that is probably the most fascinating development in India today.

To understand the nature of the environmental problems in India, it may be useful to compare and contrast certain environmental trends and concerns in India with those in the West, especially since the environment crusade began in the west and since many groups in India, including political parties, have for long dismissed it as a petty western concept. The argument has always been that too much concern for the environment can only retard economic and industrial development. The UN Conference on the Human Environment held in Stockholm in 1972 was the landmark conference that created worldwide consciousness about environment. No UN conference has ever been able to collect so many luminaries at one place. Many delegations from developing countries had argued that the solution to environmental problems lay in economic development. "Smoke is a sign of progress," the Brazilian delegation had thundered, then representing a country witnessing an economic boom. India's Prime Minister Indira Gandhi, who made a major impression on the conference, is still remembered for her oft-quoted statement: "Poverty is the biggest polluter." In all those who came from the Third World, both leftists and rightists, there was a sneaking suspicion that the Western countries were up to some trick. The West may simply be pushing the environmental concern onto an unsuspecting Third World to retard its technological modernization and industrial development. It was even argued that having got their riches and their affluent lifestyles, westerners were now simply asking for more affluence: clean air, clean water and large tracts of nature for enjoyment and recreation, many of which were going to be preserved in the tropical forests and savannas of Asia, Africa and South America. But exactly 10 years later when the UN organized a meeting to commemorate the Stockholm conference, few non-governmental groups from the Third World was prepared to argue in favor of the development process as it is. The Third World today faces both an environment crisis and a development crisis, and both these crises seem to be intensifying and interacting to reinforce each other. On one hand, there does not seem to be any end to the problems of inequality, poverty and unemployment, the crucial problems that the development process is meant to solve. On the other hand, environmental destruction has grown further apace. But what is interesting is that while many environmental problems, especially those related to air and water pollution have tended to become less severe in many parts of the industrialized world, because of the introduction of highly capital-intensive pollution control technologies, these problems have continued to grow and become critical in many parts of the developing world. In other words, while the economic development process

in the world is only worsening our environmental problems, it is tending to solve them in the West<sup>38</sup>. Very simply speaking, the only major environmental problems in the West are those arising out of waste disposal — problems of air and water pollution and of disposal of highly toxic industrial and nuclear wastes. Though problems of acid rain have definitely increased and there does not yet seem to be any solution to the problem of toxic wastes, it is true that some cities and rivers do look cleaner. In the Third World, however, as its own industrialization proceeds, these waste disposal problems are getting worse day by day but they are still not the major or the only environmental problem. In the Third World, the major environmental problems are those which arise out of the misuse of the natural resource base: the soils, forests and water resources. These problems are created to a great extent because of the pressure to produce raw materials for modern industry. The Third World's environment not only provides raw materials for its own industries but also for the industries of the West. The UN Environment Programme (UNEP) in a recent report points to the impact of the heavy debt burden of the Third World and high interest rates in the West on the environment of the Third World<sup>39</sup> The debt burden and regressive terms of trade have forced many developing countries to put enormous pressure on their natural resources, sometimes even to the point of overexploitation. In 1981, for instance, it took one Latin American country 9.8 times as much beef to buy a barrel of oil as it did in 1981. At the end of the 1970s, profits from the export of one ton of bananas were enough to purchase only half the steel they would have bought at the end of the 1960s. When interest rates are high, there is a tendency to discount long-term issues like environment for short-term gains. A one per cent increase in interest rates adds approximately US \$5 billion to the current debt burden of developing countries. To have increased its export earnings (not profits) by \$1 billion in 1981, South America as a whole would have had to increase its banana exports three-fold, Ecuador three-fold and Colombia nine fold, while leading cotton exporters like Egypt and Turkey would have had to double and triple their cotton exports respectively. This would have meant bringing millions of additional hectares into production to grow these export crops. And, it can be added, this would have pushed millions of marginal peasants into marginal lands like desert fringes and steep hill slopes for their survival, leading to accelerated desertification and soil erosion.<sup>40</sup>

In our own country, the first major attack on the forests of the northeast came with the establishment of tea plantations. Destruction of forests goes on for coffee and other export

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<sup>38</sup> Ibid

<sup>39</sup> *Evolution of Legislation of Forestry in India: A Note in the Light of the Forest Bill*, Seminar Paper by Anil Agarwal, Indian Social Institute, New Delhi, 1982

<sup>40</sup> Ibid

crop plantations even today. The current overfishing on India's coasts, as on the coasts of almost all Southeast Asian countries, is taking place because of the heavy demand for prawns in Western and Japanese markets. This overfishing is leading to considerable tensions between traditional fisher folk and trawler owners, and violent encounters between the two are regularly reported<sup>41</sup> Recently, Indonesia completely banned the operation of trawlers in its coastal waters and several countries, including India, have decreed regulations to prevent trawler operators from fishing in the first few kilometers from the coast. This zone is reserved for traditional fisher folk. But policing trawlers over such an extensive coastline is an expensive proposition and regulations are, therefore, seldom observed or enforced. The export of frog's legs to cater to the palates of Western consumers and its impact on the agricultural pest populations in affected areas is now an old story<sup>42</sup>

But the pattern of environmental exploitation by industry that we see on the global scale simply reproduces itself on the national scale in India. That Western industry does to the Third World environment, Indian industry does to the Indian environment. Just to get an idea of how heavily dependent modern industry is on the natural environment, it may be useful to point out that nearly half the industrial output in India is accounted for by industries which can be called biomass-based: that is, industries like cotton textiles, rayon, paper, plywood, rubber, soap, sugar, tobacco, jute, chocolate, food processing and packaging, and so on.

Each of these industries exerts an enormous pressure on the country's cultivated and forest lands. They need crop lands, they need forests, and they need energy and irrigation. The Indian paper industry has ruthlessly destroyed the forests of India. Paper companies in Karnataka, having destroyed all the bamboo forests, are now getting their raw materials from the last major forested frontier of India: the northeast.<sup>43</sup> The government's own public sector paper companies are coming up in the northeast itself. The Andhra Pradesh government has meanwhile set its sights on the forests of Andaman and Nicobar Islands for the paper mill that it wants to build in Kakinada. A leading soap manufacturer has proposed that the Great Nicobar Islands be denuded to plant palm oil. The shortage of raw materials for wood pulp has already forced the government to liberalize import of pulp for the country's paper industry, thus adding to the pressure on the forests of other Third World countries<sup>44</sup>.

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<sup>41</sup> *Water Pollution: A Threat to the Desert*, Environment Cell, Gandhi Peace Foundation, Jodhpur

<sup>42</sup> Dinesh Mohan, , 'Accidental' Death and Disability in India: A Case of Criminal Neglect, First Annual State Bank Lecture, Centre of Biomedical Engineering, Indian Institute of Technology, New Delhi, 1982

<sup>43</sup> Tapan K Bose, *Ecopolitics and the Adivasis*, Cinemart Foundation, New Delhi, 1983

<sup>44</sup> *Report of the Workshop on a New Forestry Policy*, Indian Social Institute, New Delhi, 1982

One lesson is, therefore, clear: the main cause of environmental destruction in the world is the demand for natural resources generated by the consumption of the rich (whether they are rich nations or rich individuals and groups within nations) and because of their gargantuan appetite, it is their wastes mainly that contribute to the global pollution load.

If we want to see this process of 'resource colonization' in a historical light, we can trace it back to the beginnings of the industrial revolution. The cultural diversity that existed in the world at that time was no historical accident. It was born out of the world's biological diversity and people's ability to shape a society with the use of that biological diversity.

People came to adopt a lifestyle that was in harmony with the dictates of the immediate environment. Those who lived in the deserts practiced nomadism and those who lived in the hills practiced shifting cultivation. Houses and cities built with local materials and skills were built differently to satisfy the conditions set by the local climate. But as modern science and technology grew, it gave people enormous power. Unfortunately the new knowledge created by scientific and technological development fell on an highly unequal world, where access to this knowledge was and still is, unequal, and the infrastructure to use it very uneven. The major result of scientific and technological development, embedded as it is within an unequal global society, is that it has given few people more and more power to exploit resources from further and further away. First, distant lands (distant ecosystems) were turned into colonies for resource exploitation; when decolonization took place, multinational corporations took over the role of global resource exploitation and management within a framework of liberal international trade; and now it is the turn of such hitherto unfathomable global commons as the deep sea bed, Antarctica and space to be exploited. The UN even has a committee to discuss resource exploitation on the moon.

But at least on the terrestrial level, with hardly any uninhabited frontiers left, this relentless search for resources from others' ecosystems can only mean extraordinary conflict. In a more and more densely populated world, that which is a resource in a distant ecosystem for one human being is simply a resource within someone else's immediate ecosystem. If that someone's very survival is dependent on the resources of the immediate ecosystem, then there will be conflict, and resource colonization by the powerful will end in the dispossession and impoverishment of the less powerful, in their own homeland, so to say.

These trends raise serious doubts about the sustainability of the Western industrialization model based on global management of resources for the consumption of a few. The growth of science and technology has indeed been humankind's most magnificent achievement but definitely not the ends to which this knowledge has been used. The most unfortunate part of

this process is that we have now got a large number of consumers in the world whose consumption is highly destructive of the environment but who cannot perceive this destruction psychologically. These are consumers of distant resources: those who have access to all the fruits of modern science and technology. Just imagine a resident of Delhi who uses shirts made of cotton which has been produced in a field in Maharashtra heavily sprayed with pesticides leading to multiple resistance in mosquitoes; electricity from a dam in the Himalaya that has destroyed forests and blocked migration of fish; paper produced in Madhya Pradesh by a factory that has polluted the local river and logged forests in an ever-widening circle, disrupting the life of tribal's; cereals from Punjab where food is produced using a technology that drains soil fertility, and so on. It is humanly impossible for such distant consumers to appreciate what their purchasing power is doing to distant areas.

Just imagine, then, the situation of the Western consumer whose beef and fruits come from Latin America and Africa, peanuts from west Africa, coffee from east Africa, tea from India, prawns from Asia and timber from all over the world. But what is probably worse is that such consumers no longer dependent in any crucial sense on the immediate environment for their consumption needs, slowly become oblivious of the destruction even of the immediate environment. Thus, we get a world economic system in which individuals with power have almost no interest in the fate of their environment, distant or immediate — and only a global environmental crisis, situated amidst a sea of economic poverty, has been able to evoke some concern, and we still talk of the need for environmental education in a big way. Modern science and technology is not always used as a brutish tool by the rich and powerful to dispossess the poor. It has also been used subtly to undermine the confidence of the poor in their own resources and resource-use patterns. Particularly, if a natural resource used traditionally by people is so widely available that it just cannot be monopolized, every effort is made in the name of scientific progress to discredit that natural resource as archaic and useless. This drive to discredit a resource is undertaken to the extent that even the poor, who often have no alternative except to use that resource, look forward to the day when they can do without it.

The classic example is mud. Over half the world's population lives in mud structures. Prices of cement and bricks required for modern buildings continue to rise, being extremely energy intensive, faster than the purchasing power of the world's poor. The chances of all mud dwellers ever moving from their buildings are pretty low, at least not in the next 50 years.<sup>45</sup>

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<sup>45</sup> *Evolution of Legislation of Forestry in India: A Note in the Light of the Forest Bill*, Seminar Paper by Anil Agarwal, Indian Social Institute, New Delhi, 1982

The majority of the urban population in the Third World cannot afford even the cheapest modern housing. In most cities of the developing world, including India, the portion of the population living in slums and squatter settlements has been rising rapidly. Unable to meet the housing needs of the relatively small urban populations, the governments of the Third World have not even dared to launch housing programmes for rural areas, where the majority of the population lives<sup>46</sup>

The field experience of voluntary groups confirms that eradication of poverty in a country like India is simply not possible without the rational management of our environment and that conversely, environmental destruction will only intensify poverty. Environmental destruction goes hand-in-hand with social injustice. A major reason for this is seldom recognized. The vast majority of the rural households meet their daily household needs through biomass or biomass-related products, which are mostly collected free from the immediate environment. In short, they live within nothing other than a biomass-based, subsistence economy. Food, fuel (firewood, cow dung, and crop wastes), fodder, fertilizers (organic manure, forest litter, and leaf mulch), building materials (poles, thatch), herbs and clothing are all biomass products. Water is another crucial product for survival. Water is not biomass itself, but its availability is closely related to the level of biomass available in the surrounding environment. Once the forest disappears, the local pond silts up, the village well dries up, and the perennial stream gets reduced to a seasonal one. The water balance gets totally upset with the destruction of vegetation; in a monsoon climate like ours with highly uneven rainfall over the year, this means greatly increased runoff and floods during the peak water season and greatly increased drought and water scarcity in the lean dry season. There is reason to believe that the number of 'problem villages' from the point of view of availability of drinking water may be increasing.<sup>47</sup>

Nature is not just being destroyed. Nature is also being steadily transformed. There are two major pressures operating on the country's natural resources today. The first, generated by population growth and thus increased household demand for biomass resources, has been widely talked about. The poor often get blamed for the destruction of the environment. But the second set of pressures, generated by modernization, industrialization and the general penetration of the cash economy, are seldom talked about, at least in policy-making circles. Modernization affects nature in two ways. Firstly, it is extremely destructive of the

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<sup>46</sup> Ibid

<sup>47</sup> For several examples of people's initiatives, see *State of India's Environment: A Citizens' Report*, Centre for Science and Environment, New Delhi, 1982.

environment in its search for cheap biomass-based raw materials and in its search for cheap opportunities for waste disposal. Unless there are strong laws which are equally strongly implemented, there is no attempt made to internalize environmental costs and both public and private industrialists prefer to pass them on to society. State governments are also happy to give away large tracts of forests for a pittance and throw water pollution control laws to the winds to get a few more factories<sup>48</sup>

Secondly, modernization is steadily transforming the very character of nature. In physical terms, the tendency is to reduce the diversity in nature and transform it into a nature that is full of high-yielding monocultures. The driving force for this transformation arises out of the co-modification of nature. Whether it is a herd of cattle, a pond, a forest or an agricultural field, the attempt is to reduce diversity and promote the most high-yielding gene for maximum profit and production, the first more so in capitalist systems and the latter probably more in socialist systems. The long-term sustainability of the new system is seldom considered. The ecological role of the original nature is usually disregarded while transforming it<sup>49</sup>.

Let us look at a few cases of how the destruction of nature has affected the lives of people in India. One very dramatic area where government policies have consistently increased conflict is forests. The entire tribal populations, and millions of other forest dwelling people, depend on the forests for their very existence. Destruction of forests has meant the social, cultural and economic destruction of the tribal populations in particular. Beginning with the British and continuing with free India, the government has decided to control the forest resource itself, leaving little or no control in the hands of the forest dwellers.<sup>50</sup> Government control over forests has definitely meant a reallocation of forest resources away from the needs of local communities and into the hands of urban and industrial India. The end result is both increased social conflict and increased destruction or transformation of the ecological resource itself.

Yet another major component of the country's physical environment is grazing lands. The destruction of the grazing lands has meant enormous hardships for poor people, especially for the nomadic groups in the country. Few people know that India has nearly 200 castes engaged in pastoral nomadism, which adds up to nearly six per cent of India's population.

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<sup>48</sup> *Evolution of Legislation of Forestry in India: A Note in the Light of the Forest Bill*, Seminar Paper by Anil Agarwal, Indian Social Institute, New Delhi, 1982

<sup>49</sup> *Ibid*

<sup>50</sup> *Ibid*

India is unique in the world in terms of the diversity of animals associated with pastoral nomadism. There are shepherds of camels in Rajasthan and in Gujarat, of donkeys in Maharashtra, of yaks in Ladakh, of pigs in Andhra Pradesh, and even of ducks in south India. Sheep, goats and cattle are of course the main nomadic animals.

A number of factors, including land reforms and development programmes which have promoted expansion of agriculture to marginal lands, have steadily led to an erosion of grazing lands. The Rajasthan canal is a fine example of a government programme that has transformed extensive grazing lands into agricultural lands.<sup>40</sup> No effort was made by the government to ensure that the nomads who used these grazing lands earlier would benefit from the canal on a priority basis. In almost every village, the *panchayat* lands, traditionally used as *gauchar* lands, have been encroached upon by powerful interest groups and privatized. Nomadic groups have been increasingly impoverished over the last 30 years and an ever-increasing number is being forced to give up their traditional occupation to become landless laborers or urban migrants.

Riverine fisher-folk constitute another group that has suffered immensely with environmental destruction. Riverine fisheries are being seriously affected by the construction of dams which affect migratory fish and by increasing water pollution. <sup>41</sup> Large scale fish kills are regularly reported. Rivers have now become a resource for urban and industrial India to be used as cheap dump yards for their wastes and all this is sanctioned in the name of economic development.

In the 158-km stretch of the Hooghly, the average yield of fish is just about a sixth in the polluted zones as compared to the unpolluted zones. Growing water pollution is thus affecting thousands of riverine fisher-folk in the country, but little data is available on their plight. The increase is coming mainly from aquaculture, a technology that only those with sufficient capital and land can benefit from. Meanwhile, those poor fisher folk who depended on access to a common property resource like a river for their livelihood suffer from its degradation. The new commercial nature that is being created is of little help to village communities and their daily needs. There are people's protests in many parts of the country against the conversion of oak forests into pine forests and of sal forests into teak forests. Neither pine nor teak is of any interest to local communities. In the Singhbhum area of Bihar, there is even a movement to destroy the new teak forests. Equally, there is a strong protest in Karnataka against the planting of eucalyptus on farmers' fields. The planting of eucalyptus on farmers' fields and even on so-called barren fields is an excellent example of the adverse biomass conversion, harmful for the people, promoted by modernization. What happens to

the poor people when eucalyptus is planted on a farmer's field? We have a concrete example from a village in Punjab, where a rich farmer, a former governor, with over 100 ha of land has stopped growing cotton and has switched to eucalyptus. As long as he grew cotton, enormous quantities of cotton sticks would be available for the landless laborers in the village to use as fuel. Because of the shortage of firewood, crop wastes from the landlords' fields are the major and often the only source of fuel for these poor landless villagers. Now with eucalyptus growing, their main source of fuel has dried up, putting them in a precarious position. This is a case where afforestation has actually created a fuel famine for the neediest community<sup>51</sup>.

A weed is defined as a plant which has no economic value but in the socio-economic reality of India, *Lantana*, *Parthenium* and *Eupatorium* are weeds only for the revenue-earning forest departments of the government. For poor households who have no lands of their own, weeds growing on public lands are extremely useful because of the very fact that they are not wanted by the modern sector of the economy. Once they acquire an economic value, they will go out of their hands — like bamboo, which was for long described as a weed by foresters<sup>52</sup>.

Thus, when a patch of barren land is planted with eucalyptus, even the weeds are no longer available to poor, landless households and their fuel crisis intensifies. Not surprisingly, foresters report from all over the country, in the form of a complaint, that women even take away dry eucalyptus leaves from eucalyptus plantations for use as fuel, thus destroying, the foresters say, and any chance of the leaves breaking down into humus and enriching the soil.

What we see in India today is growing conflict over the use of natural resources and, in particular, over biomass between the two sectors of the country's economy; the cash economy (or the modern sector) on one hand and the non-monetized, biomass-based subsistence economy (the traditional sector) on the other.

As the growing stock of biomass goes down and the demand for biomass from the cash economy goes up and finally demand begins to exceed supply, pressure to exploit the remaining biomass increases enormously; biomass prices rise, and destructive processes accelerate because of market forces. Illegal timber felling is today a major activity in the country, undertaken with the full support of political interests. Stealing a few dozen trucks of timber is the surest and easiest way to become rich. No less a person than a chief minister — the well-known Ram Lal of Himachal Pradesh — recently had to resign because of his family's involvement in timber smuggling.

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<sup>51</sup> Ibid

<sup>52</sup> Ibid

Nothing could be more important for planners and politicians today than to rebuild nature. But this can only be done if we re-establish a healthy relationship between the people and their environment. Then only a nature that is useful to the millions, but not for making millions, can be re-established. Regardless of what happens in the West in the next two decades, for all its electronics revolution, its efforts to mine the oceans and its efforts to build solar cells and windmills, and how dramatically this changes the face of the world techno structure, and regardless of how much one may want to catch up with the West in the name of modernization or out of the sheer compulsions of geopolitics, rebuilding nature and rebuilding its relationship with the people will remain the only way to solve the problem of poverty and possibly even unemployment. With some 100 million to 150 million hectares of waste and near-wastelands and with a crying need to produce biomass, this country can never get a better opportunity to harness the power of its people to the productivity of its land, to strike at the roots of landlessness, poverty and unemployment, all at the same time.

If enough biomass was available, poverty, that is, lack of cash, as defined by economists and by the modern civilization, will not disappear. But the rigours of poverty, the increasing susceptibility to natural emergencies like floods and droughts will be arrested by creating more biomass. In fact, conventional measurements of poverty based on income data or on food calories are clearly inadequate in a situation where the rest of the biomass needs are becoming increasingly difficult to meet and collecting them on a daily basis constitutes the worst — and growing — drudgery of humankind, especially womankind, has ever known.

These calculations are not only just inadequate but they also reflect a strong gender bias because they deal mainly with those aspects of poverty — lack of cash — that the male is generally concerned with, but not with those aspects of poverty that the woman deals with — lack of fuel, fodder, water etc. If one were to construct a concept like gross nature product, one would find that for the poor it is this indicator, which is many times more important than the conventional gross national product (GNP). In fact, it can be said that those who do not get much from the conventional GNP — the poor — are the ones who are most critically dependent on the gross nature product. The GNP cannot be allowed to destroy or transform the gross nature product.

The economists get very worried about the structure of the GNP; it would be worthwhile if they had the poor in mind get worried about the structure of the gross nature product. It is not just the quantity of biomass that is important for meeting basic household needs but also its diversity; sources of biomass within any village ecosystem must be diverse enough to meet

the various household needs of fuel, fodder, building materials and herbs, and of raw materials for artisans.

The diversity in nature has also acted as insurance during periods of emergency by reducing societal vulnerability. During the period of drought and flood which are recurring phenomena in many parts of India, fruits, roots, leaves and wild animals in the forests often become an important alternative source of nutrition. In 1983, the tribals of Chotanagpur survived a drought not because of government assistance but despite government callousness. It is the forests which gave them their nutrition. Surviving on the forest during a drought is common in Bastar<sup>53</sup>. Wild animals caught in the jungles become a significant source of food during periods of crop failure. A study from Africa found that in times of drought, traditional societies had nearly 150 responses. They even fed the thatch of their huts to the goats. But in a modern village there were only two responses: pray to God (which evens the Tamil Nadu government recommended during the Madras water crisis) or migrate to the towns. The combination of trees, grasses, crops, animals and ponds, which can be found in almost every village, was an extraordinarily interactive and resilient system for emergencies. Instead of destroying this complex and interrelated system, science must be used to build on it.

In other words, it is not enough to preserve biological diversity in just those areas of where the flora and fauna are genetically rich and diverse by setting up biosphere reserves and national parks, but that biological diversity must be preserved and/or recreated in every village ecosystem. Concentrating on the production of a few commodities (cereals, for instance) is totally inadequate in a society which is only partly monetised and where the vast majority still has to depend on access to free biomass resources from the immediate environment. Every village has to become a biosphere reserve. If sufficient biomass could be generated, there would also be none of those tensions we see around nature protection areas today.<sup>65</sup> At a time when biomass is in acute shortage, it is obviously foolhardy to attempt such protection without massive schemes for large scale biomass generation.

Understanding of the gross nature product and how it is changing within the national ecological space (or shall we say, national economy) is extremely limited, despite its crucial importance for the poor. We know nothing, for instance, about the importance of so-called weeds for the poor. The reason we know so little about the gross nature product is because the 'growing stock' of biomass does not get reflected in GNP calculations anywhere. Therefore, whether the 'growing stock' lives or dies, exists or disappears, does not make any

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<sup>53</sup> Ibid

difference to economists. Most economists, not surprisingly, have no clue of what happens to a subsistence economy when its biomass resources are affected. The increasing hardships and tensions only get reflected in studies of 'political economy which record growing conflicts over land, forests, fodder, grazing lands, water sources, etc, or in totally unexpected indicators like the sex ratio of the country. Just why 22 million women failed to show up in India's 1981 census is anybody's guess. Surely their extraordinary work burden, in a situation of malnutrition, must be an important factor.

It is for this reason that an indicator like gross nature product, and changes in that indicator, would probably reflect far better the changing reality in the subsistence sector of a country like India. Unfortunately, we do not know as yet how to construct such an indicator. But if we did, we will definitely find that while the conventional GNP has gone up, the gross nature product has steadily gone down, the former acting as a parasite on the latter.

The answer to India's immediate problem of poverty lies in increasing the biomass available in nature in a manner that access to it is ensured on an equitable basis. But giving a relevant 'green cover' to the country — the real Green Revolution — would probably require the most holistic thinking that planners' economists and scientists have ever known. The conflicts and complementarities in the existing land use patterns have to be extremely well understood. Otherwise, land use patterns will remain as chaotic as today. Landless and poorer peasants will continue to oppose planting trees on community lands under so-called social forestry programmes because they are afraid this will take away their grazing lands, while forest departments and richer peasants will only plant those trees which animals cannot touch (like eucalyptus) even though there is a stark fodder crisis all around. Nothing could take us closer to Gandhiji's concept of *Gram Swarajya* than striving to create village ecosystems which are biologically diverse and self-reliant in their local biomass needs to the maximum extent possible. This will clearly demand an extremely intensive use of our natural resources like land and water to create huge and diverse growing stock of biomass. Any science which teaches how to do this will truly have the right to be called a people's science — and indeed it will have to begin with the traditional knowledge of the people. Even more so, planning for the enhancement of village ecosystems will call for village-level planning with the involvement of the people — a level of decentralization that has never been attempted either in resource planning or in resource management.

The biggest challenge, therefore, is before social workers and politicians who have to play a crucial role in ensuring that people can participate in this biomass-based development process. No biomass-based strategy can succeed without the involvement of the people,

especially women. If useful nature is to grow, it will have to be protected and nurtured. The walls built to protect nature will be respected by the people only if they are people's walls and if the people know that what grows beyond belongs to them.

Easy availability of biomass leading to a reduction in women's work burden could create the appropriate conditions for many desirable social changes. Kerala, for instance, is often cited as an interesting case of an economically poor state moving ahead with its demographic transition. But is Kerala poor in environmental terms also? The availability of biomass, in fact, appears to be the maximum in India and women's work burden low. This may sound an exaggerated proposition but would it be right to surmise that, among many other things, it was also the easy availability of biomass and relatively lower work burden that created the appropriate conditions for literacy programmes for women to succeed? If women in Kerala had to spend as much time working as women do in large parts of Rajasthan, Uttar Pradesh and Bihar, wouldn't there have been immense male pressure to keep women working in crucial household activities and away from schools? Immediately, at least, the country must realize that a clear biomass policy is desperately needed, which recognizes the competing uses for biomass in society, especially between biomass-based industry and poor households and sets clear priorities on the use of biomass in a situation of scarcity. The needs of the poor must be specified as a priority use of biomass in the existing situation of environmental degradation. A beginning definitely needs to be made with the proposed Forest Policy and with rural energy planning in general.

If India fails to recreate nature on a massive scale in a manner that generates employment and equity, not only its villages but also its cities will become un-livable. Many people prefer to call the urban migrants economic refugees from the countryside. But to my mind many of them are really ecological refugees, displaced by dams, by mines, by deforestation, by destruction of grazing lands, by floods, by droughts, by urban expansion, and what not. India has today the world's fourth largest urban population but before the end of the century it will be the largest. Managing this huge urban population will call for extraordinary political and managerial sagacity and altogether new approaches, something we cannot learn from the rest of the world. But one thing is definite — if the process of urbanization continues to create the same demands on our rural environment, it will only accelerate the destruction of that environment and in turn make the urban environment impossible to manage. India cannot survive without a low-energy, low-resource input urbanization. In its absence, no law or laws, like the so-called Delhi Bills, which try to turn the incoming ecological and economic

refugees into our cities into criminals, will work. Only a holistic approach to our problems and dedicated political will to solve them will.

## CHAPTER: 2

### CONCEPT OF SUSTAINABILITY AND TIMBER TRADE: AN OVERVIEW OF LAGISLATIVE FRAMEWORK

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs ”

Our Common Future 1987

#### THE FRAME

With the concept of development and the increasing global population, the demand for timber has increased many folds. All trade have an impact on natural resources directly or indirectly but timber trade impacts the natural resources in a big way. Consequently, global climate change, decrease in forest cover and biodiversity loss have become subjects of international concern. As a result of centuries of dreadful exploitation many natural forest and bionetworks are now gravely in danger. Natural forests have already been reduced to a few wreckages and damages. According to the latest global survey by the UN Food and Agriculture Organization (FAO), deforestation is presently taking place in at least 76 countries, and in the mainstream of these the rate of loss is accelerating<sup>54</sup>. The planet currently contains large areas of recently cleared forest, young restoring forest and middle age forest. The tropical and temperate regions generally have a specialized flora and fauna, a proportion of which can only survive in forests that have remained undisturbed for long periods of time. Preserving areas of natural or semi-natural forest habitat are consequently of primary importance in maintaining biodiversity. The term *biodiversity* is generally used to depict the quantity and multiplicity of living organisms on earth. Biodiversity means the wholesome stock and interdependence among living organisms from all sources including, inter-alia, earthly, nautical, aerobic and other aquatic ecosystems and the ecological complexes of which they are part; this includes assortment within species, between species and of ecosystems.<sup>55</sup>

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<sup>54</sup> Nigel Dudley, Jean-Paul and Jeanrenaud, The Timber Trade and Global Forest Loss, *Ambio*, Vol. 27, No. 3 (May, 1998), pp. 248-250. See <http://www.jstor.org/stable/4314725>. Accessed: 30/01/2012 .01:43 pm

<sup>55</sup> Dr. S.R.Myneni, *Environmental Law*, Edn. 2008, Asia Law House, p.401

## THE FOCUS

The focus of this chapter is to deal with one of the most important and major cause of deforestation, namely, timber trade. Areas of high biodiversity tend to contain the oldest, and thus in many cases the most commercially valued trees. Natural forests are often virtually under the stewardship of politico-economically weak indigenous groups, or nominally under state control and are laid bare to exploitation, abuse, corruption and criminal activities. Forests with high biodiversity are, by their very nature, likely to draw the attention of the timber traders globally. Therefore the sustainability of the national and international timber trade are crucial to the survival of biologically rich forests' ecosystems and therefore to the majority of species on one hand and prevention of climate change on the other.

Logging and regeneration can have important impact not only on the biodiversity of a nation but also on its economy. Timber trade is at present one of the primary cause of forest dilapidation especially in those forests that include the uppermost levels of biodiversity. Natural forests in many moderate and boreal<sup>56</sup> countries have already been reduced to a few shards, and losses continue in the tropics. Time has also amplified the relative impact of the timber trade. Major forest has now been reduced to fragments in many countries.<sup>57</sup>

As the area of high quality natural forest declines, and is increasingly restricted to areas which are uncongenial to human settlement, deforestation due to timber trade continues to grow. In developing countries, the impact of the timber business upon forest has been underestimated its exacerbated role in the cause of deforestation has been undervalued or mistreated. Loggers are often the first outsiders to break through forests leading to further dreadful conditions when they create logging routs or use logging roads to enter previously closed forests.<sup>58</sup>

Forest products constitute an important source of revenue for the government exchequer. Import and export of forest goods form a significant portion of international trade<sup>59</sup>.

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<sup>56</sup> Boreal means, relating to or characteristics of the climatic zone south of the Arctic, especially the cold temperate region (Eurasia and North America) dominated by taiga and forest of birch, poplar and conifers.

<sup>57</sup> Nigel Dudley, Jean-Paul and Jeanrenaud, The Timber Trade and Global Forest Loss, *Ambio*, Vol. 27, No. 3 (May, 1998), pp. 248-250. See <http://www.jstor.org/stable/4314725>. Accessed: 30/01/2012 01:43

<sup>58</sup> *Ibid.*

<sup>59</sup> Forest Product is any material derived from a forest for commercial use, such as lumber, paper or forage for livestock. Wood, by far the dominant commercial forest product, is used for many industrial purposes, such as the finished structural materials used for the construction of buildings, or as a raw material, in the form of wood pulp, that is used in the production of paper. According to section 2(4) of the Indian Forest Act, 1927 forest product means and includes timber, charcoal, wood oil, natural varnish, myrobalans etc.

Therefore it implies that business and trade of wood products and forest raw materials has attracted the traders all over the world and India is no exception. Our fascination towards wood based products, ranging from ceilings, doors, windows, and furniture to valuable show pieces has gradually enlarged the size of trade based on timber items. Timber is also essential in infrastructural work and construction. Demand for luxurious wood products has consequentially fuelled the greed of unscrupulous elements who abused the forest and indulged in illegal trading unfortunately leading to destruction of forest and loss of forest cover globally<sup>60</sup>.

Of late the structure of the global timber trade and timber industry is changing, marked by a perceptible shift in favor of intensive plantation of trees over natural forests as part of the corporate social responsibility of transnational companies. Dominance of transnational companies in industrial round wood processing and international forest trade and declining as well as stabilizing of prices of most forest produce and products have helped to bring about a change. At the same time, a growing domestic and export demand for finished wooden products have given rise to the growth of small and illegal timber traders and forest mafias. Illegal loggers often target particularly valuable species, have little concerns for principles of sustainable logging and operate in inaccessible areas of reserved, protected and ecologically fragile forests<sup>61</sup>. Illegal logging is not a new phenomenon. It has been widespread for decades only recently the civil society has become especially concerned with the issue of illegal logging. Illegal timber trade is now recognized as one of the key factors that contribute to deforestation, biodiversity loss and climate change while undermining the rule of law. In many producer countries, illegal logging involves high-level corruption, tax evasion, leading to the loss of national revenue and limits the resources available for investing in sustainable development. From this perspective uncontrolled and unregulated timber trade results in loss of sustainability. Moreover, illegal trade in timber is also associated with issues of international security, money laundering, organized crime, and human rights abuses and, in some cases, violent conflict.

Another important reason for writing this chapter is the concern that there are conflicting and mutually excluding fundamental right involved in the area of timber trade. Right to trade is a fundamental right under Article 19 (1) (g) of the Constitution, whereas right to clean and

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<sup>60</sup> A drive from the Darjeeling more regions to Bagdogra on National Highway 31 in Siliguri subdivision of district Darjeeling in West Bengal will prove the point.

<sup>61</sup> Nigel Dudley, Jean-Paul and Jeanrenaud, *The Timber Trade and Global Forest Loss*, *Ambio*, Vol. 27, No. 3 (May, 1998), pp. 248-250. See <http://www.jstor.org/stable/4314725>. Accessed: 30/01/2012 01:43

healthy environment<sup>62</sup> and right to development<sup>63</sup> form the right to life under Article 21 of the Constitution. Reasonable restriction, regulation and control on these rights alone will make them sustainable. Hence this chapter is on sustainable development.

## **THE OBJECTIVE**

The objective of this chapter is to explore the Indian legal frame work & International instruments for regulatory and control mechanism that ensure sustainable timber trade and to assess their effectiveness.

## **CONCEPT OF SUSTAINABILITY**

In India the Supreme Court of India has laid emphasis on sustainable development and has made right to healthy and clean environment a fundamental right under right to life in article 21 of the Constitution<sup>64</sup>. In *Vellore Citizen Welfare Forum v. Union of India*<sup>65</sup> the Court observed – Sustainable Development means the development that meets the needs of the present without compromising the ability of the future generation to meet their own needs. It is a balancing concept between ecology and development

Deforestation and forest degradation have, inter alia, two major critical issues. On one hand it threatens biodiversity, stability of the ecosystem and on the other hand the long-term availability of forest products and more specifically timber for development and economic growth of the nation. Population pressure, heavy dependence on fuel wood, timber and other products, as well as conversion of forests to agricultural, urban and industrial land are the underlying factors for deforestation in India. Forest degradation and deforestation has also resulted from overgrazing and shifting cultivation. In addition, as forests have become degraded, so fire, pests, diseases and natural disasters have caused greater damage. Construction of irrigation schemes, dams and reservoirs as well as mining are further causes of deforestation while armed conflict has also taken a toll in some countries<sup>66</sup>.

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<sup>62</sup> M. C. Mehta v. Kamal Nath, AIR 2000 SC 1997

<sup>63</sup> Samatha v. State of Andhra Pradesh, AIR 1997 SC 3297

<sup>64</sup> Subhash v. State of Bihar, AIR 1991 SC 420, M.C. Mehta v. Kamal Nath AIR 2000 SC 1997

<sup>65</sup> AIR 1996 SC 2715

<sup>66</sup> State of The Environment And Policy Retrospective: 1972–2002, p.101, see [www.grida.no/geo/geo3/english/pdfs/chapter2-1\\_socioeconomic.pdf](http://www.grida.no/geo/geo3/english/pdfs/chapter2-1_socioeconomic.pdf), visited on 19.3.2012 at 4 p.m.

## INDIAN JUDICIARY ON CONCEPT OF SUSTAINABILITY

The Supreme Court has recognized, accepted and developed the concept of 'sustainable development' in India as an important principle for maintaining the right balance between the environment and development. Mr. Justice V. R. Krishna Iyer was the first to sow the seed of sustainability in India when he directed that the duty of a municipal corporation is to keep the city clean in *Ratlam Municipality v. Vardhichand*<sup>67</sup>. In this case the residence of a locality within the limits of Ratlam Municipality were suffering because of stench and stink caused by the effluents from a alcohol plant flowing into the street, open drains and public excretion by nearby slum-dwellers. The Supreme Court held that the budgetary constraints did not absolve a municipality from performing its statutory obligation to provide sanitation facilities.

In *Vanwasi Sewa Ashram v. State of Uttar Pradesh*<sup>68</sup>, the Supreme Court directed that disputed land areas should be declared as reserve forest. In the same year in *M.C. Mehta v. Union of India*<sup>69</sup>, the Supreme Court issued directions regarding hazardous chemicals relying partly upon Article 21. In the Obiter Dicta of the case the court stated that public health and ecology have priority over unemployment and loss of revenue. The Supreme Court has further held that right to pollution free air falls within Art.21 of the Constitution of India<sup>70</sup>. In *L.K. Koolwal v. State of Rajasthan*<sup>71</sup>, the Rajasthan High Court held that maintenance of health, sanitation and environment falls within Art.21 thus rendering the citizens the fundamental right to ask for affirmative action.

The Karnataka High Court in *V. Laxmipati v. State of Karnataka*<sup>72</sup> pointed out that "entitlement to clean environment is one the recognized basic human rights jurisprudence and cannot be permitted to be thwarted by status quoism on the basis of unfounded apprehensions". The Court further observed that "the right to life inherent in Article 21 of the Indian Constitution does not fall short of the required quality of life which is possible only in an environment of quality, where, on account of human agencies, the quality of air and quality of environment are threatened or affected, the Court would not hesitate to use its innovative power to enforce and safeguard the right to life to promote public interest."

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<sup>67</sup> AIR 1980 SC 1622.

<sup>68</sup> AIR1987 SC374

<sup>69</sup> AIR 1987 SC1086.

<sup>70</sup> Subhash v. State of Bihar, AIR 1991 SC 420.

<sup>71</sup> AIR 1998 RAJ 2.

<sup>72</sup> AIR 1992 Kant 57.

The Supreme Court of India made a historical pronouncement in *Dr. B. L. Wadhwa v. Union of India*<sup>73</sup> (*Delhi Garbage case*) where Court dealt with the right to clean environment of the residents and obligatory duty of the government and its instrumentalities to keep the city and town clean. Supreme Court asserted that residents have a constitutional and statutory right to live in a clean city and authorities have a mandatory duty to collect and dispose of garbage / waste generated from various sources in city. In *Chameli Singh v. State of Uttar Pradesh*<sup>74</sup>, The Supreme Court held that the right to live in any civilized society implies the right to food, water, decent environment, education, medical care and shelter. These are basic human rights known to any civilized society. All civil, political, social, and cultural rights enshrined in the Universal Declaration of Human Rights 1948 or the once guaranteed under the constitution of India. In *M.C. Mehta v. Union of India*<sup>75</sup> [Taj Trapezium case] Supreme Court was dealing with the problem of protecting the ‘Taj Mahal’ from the pollution of nearby industries. The court applied the ‘Precautionary Principle’ and observed – the environmental measure must anticipate, prevent and attack the causes of environmental degradation. The ‘onus of proof’ is on an industry to show that its operation with the aid of coke/coal is environmentally benign. It is rather, proved beyond doubt that the emissions generated by the use of coke/coal by the industries in TTZ are the main polluters of the ambient air. The Court ordered the industries to change-over to the natural gas as an industrial fuel or stop functioning with the aid of coke/coal in the Taj trapezium and relocate themselves as per the directions of the Court. In *Animal and Environment Legal Defense Fund v. Union of India*<sup>76</sup> the Supreme Court held that every attempt should be made to preserve the fragile ecology of the forest area and to protect The Tiger Reserve and the right of the tribal’s in the state of Madhya Pradesh. The Supreme Court directed the setting up of a green bench in *Vellore Citizens Welfare Forum v. U.O.I*<sup>77</sup>, the court further held that chemical or other hazardous industries which are essential for economic development have to be setup but steps are to be taken to reduce the risk of the hazard affecting the community and necessary step should be taken for locating the industries in a manner to pose least risk or danger to the community. It has been held by the supreme court of India that fundamental rights address the individual’s interest whereas the Directive principles of State Policy address societal concern<sup>78</sup>. In *M.C. Mehta v. Kamal Nath*<sup>79</sup> the Supreme Court enunciated the doctrine of ‘Public Trust’ based on

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<sup>73</sup> AIR 1996 SC 2969

<sup>74</sup> (1996) 2 SCC 549

<sup>75</sup> AIR 1997 SC 734

<sup>76</sup> AIR 1997 SC 1071,

<sup>77</sup> AIR 1996 SC 2715

<sup>78</sup> *Samatha v. State of Andhra Pradesh* AIR 1997 SC 3297, see also *M.C. Mehta v. U.O.I*, (1996) 4 SCC 351; *M.C. Mehta v. U.O.I*, (2002) 10 SCC 191; *M.C. Mehta v. U.O.I*, (2001) 3 SCC 756.

<sup>79</sup> (1997) 1 SC 388, see also *Virender Gaur v. State of Haryana*, (1995) 2 SCC 577, *A.P. Pollution Control Board v. M.V. Naydu*, (1999) 2 SCC 718.

legal theory of the ancient Roman Empire. The Idea of this theory was that certain common properties such as rivers, seashores, forests and the air were held by the government in trusteeship for the free and unimpeded use of the general public. The resources like air, sea, waters, and the concept forests have such a great importance to the people as a whole, that it would be totally unjustified to make them a subject of private ownership. The concept 'environment' bears a very close relationship to this doctrine. The doctrine enjoins upon the resources for the enjoyment of the general public, rather to permit their use for private ownership or commercial purposes. It was thus held in this case that the state government had committed breach of public trust by leasing ecologically fragile land to the motel management. In *M.K. Balakrishnan v. Union of India*<sup>80</sup>, the Supreme Court stated that right to water is a part of right to life guaranteed by Art.21. The Supreme Court formulated 'Precautionary Principle' in *M.C. Mehta v. Union of India*<sup>81</sup> and stated that the State is required to anticipate, prevent and attack the causes of environmental degradation.

Any disturbance to the basic environment element, namely air, water, and soil which are necessary for 'life' would be hazardous to 'life' within the meaning of Art.21 of the Constitution of India<sup>82</sup>. In *Narmada Bachao Andolan v. Union of India*<sup>83</sup>, the Supreme Court decided the issues relating to construction of dam on Narmada River which was a part of Sardar Sarovar Project. The Court observed – What has to be seen is that if the environment is likely to suffer, then what mitigative steps can be taken to set off the same. Merely because there will be a change is no reason to presume that there will be ecological disaster. It is when the effect of the project is known then the principle of sustainable development would come into play which will ensure that mitigative steps are and can be taken to preserve the ecological balance.

In today's emerging jurisprudence environmental rights are described as 'third generation' rights'. In India, the apex judiciary has interpreted the existing constitutional guarantee of right to life under Article 21 to mean and include the right to live in a healthy environment.

In *N.D. Jayal v. Union of India*<sup>84</sup>, the Supreme Court linked the concept of 'sustainable development' with the 'right to life' and observed. Adherence to sustainable development principle is a sine qua non for the maintenance of the symbiotic balance between the rights to environment and development. Right to environment is a fundamental right. On the other hand, right to development

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<sup>80</sup> (2009) 5 SCC 511, see also, *State of Orissa v. Govt. of India*, (2009) 5 SCC 492, *Delhi Water Supply and Sewage Disposal Undertaking v. State of Haryana* (1996) 2 SCC 572.

<sup>81</sup> (1997) 3 SCC 715.

<sup>82</sup> *M.C. Mehta v. Kamal Nath*, AIR 2000 SC 1997.

<sup>83</sup> AIR 2000SC 3751

<sup>84</sup> (2004) 9 SCC 362

is also one. Here the right to “sustainable development” cannot be singled out. Therefore, the concept of “sustainable development” is to be treated as an integral part of “life” under Article 21. In *M.C. Mehta v. Union of India*<sup>85</sup>, the court explained the significance of sustainable development in following words –The development and the protection of environments are not enemies. Without degradation of the environment or minimizing adverse effects thereupon by applying stringent safeguards, it is possible to carry on development activity applying the principle of sustainable development. The development has to go on because one cannot lose sight of the need for development of industry. A balance has to be struck.

The Supreme Court while recognizing its role in the development of the doctrine of Sustainability, in *T.N. Godavarman Thirumulpad v. Union of India*<sup>86</sup>, has said that natural resources are the assets of entire nation. It is the obligation of all concern including the Union Government and the State Governments to conserve and not to waste resources. Any threat to ecology can lead to violation of the right of enjoyment of healthy life guaranteed under Art.21 which is requires to be protected. The Constitution enjoins upon the Supreme Court a duty to protect the environment. The Supreme Court has further stated where on account of human agencies the quality of air and quality of environment are threatened or affected, the Court would not hesitate to use its innovative power to enforce and safeguard the right to life to promote public interest<sup>87</sup>. While giving credence to the role of the State, the Supreme Court in *Vincent Panikulangara v. Union of India*<sup>88</sup>, has said that “a healthy body is the very foundation for all human activities. In a welfare state it is the obligation of the state to ensure the creation and sustenance of conditions, Congenial to good health.” This was also reiterated in *Delhi Transport Dept. Re*<sup>89</sup>. Recognizing the importance of both, the state action and indulgence by the Supreme Court, in *Research Foundation v. Union of India*<sup>90</sup>, the court said that the right to information and community participation necessary for the protection of environment and human health is an inalienable part of Art.21 and is governed by the accepted environmental principle. The government and the authorities have to motivate public participation by formulating the necessary programmes. This approach was reiterated in *Goa Foundation v. Union of India*<sup>91</sup>, wherein the court said that government of India is not powerless to ensure compliance with environmental laws in

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<sup>85</sup> AIR 2004 SC 4045

<sup>86</sup> (2006) 1 SCC 1

<sup>87</sup> V. Lakshmi pathy v. State of Karnataka, AIR 1992 Kant. 57

<sup>88</sup> (1987) 2 SCC 165

<sup>89</sup> (1998) 9 SCC 250 (“the state government is under a constitutional obligation to control pollution and if necessary by anticipating the causes of pollution and curbing the same”).

<sup>90</sup> (2005) 10 SCC 5 10.

<sup>91</sup> (2005) 11 SCC 560.

particular the Environment Protection Act 1986. Government is directed to issue order for defaulting units who continue to operate in violation of environmental laws.

The Supreme Court did not ignore or overlook the right to development and has read the same in Art.21 and has placed it within the premise of both fundamental rights and directive principles. The case *Samatha v. State of A.P.*<sup>92</sup>, is a declaration for the same. In this case the Supreme Court stated that India being an active participant in the successful Declaration on Right to Development 1986 and the signatory thereto its duty to formulate policies, legislative and executive, and to protect the social, economic, civil and cultural rights of the people in particular, the poor, the dalits and tribes as enjoined in Art.46<sup>93</sup> read with Art.38<sup>94</sup> and 39<sup>95</sup> of the Constitution of India. By that endeavor right to life would become meaningful. Social and economic democracy is the foundation of political democracy. Law as a means of social engineering has to create a just social order. In *N. D. Jyal v. Union of India*<sup>96</sup>, popularly known as second *Tehri Dam Case*, it has been held that right to development cannot be treated as a mere right to economic betterment. It encompasses more than economic betterment and includes guarantee of fundamental human rights. It includes within its spectrum civil, cultural, economic, political and social processes for people's wellbeing and realization of their full potential.

It must be noted that the era of pro-environmental adjudications start from 1987<sup>97</sup>. When the Supreme Court took a pro-environment stand for protection of environment and has lasted for almost two decades. A paradigm shift can be noted after two decades<sup>98</sup> where the Supreme Court has begun to stress upon sustainable development as a viable concept to eradicate poverty and improve the quality of human life within the carrying capacity of the eco system. Sustainable Development means the type or extent of development that take place and which can be sustained by nature/ecology with or without mitigation. The required slandered now is that the risk of harm to the environment or to human health is to be decided in public interest according to the reasonable person test.

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<sup>92</sup> *Samatha v. State of Andhra Pradesh* AIR 1997 SC 3297.

<sup>93</sup> Constitution of India, Art.46: Promotion of educational and economic interests of scheduled casts and scheduled tribes and other wicker sections.

<sup>94</sup> Constitution of India, Art. 38: State to secure a social order for the promotion of welfare of the people.

<sup>95</sup> Constitution of India, Art.39: Certain policies to be followed by the state- such as: (a) Promote adequate means of livelihood (b) Equitable distribution of resources, wealth and means of production. (c) Equitable wage for men and women. (d) Promotion of health for all.

<sup>96</sup> (2004) 9 SCC 362.

<sup>97</sup> *Ambika quarry Works v. State of Gujarat* 1987 SCR (1) 562.

<sup>98</sup> *Narmada Bachao Andolan v. U.O.I.* AIR 2000 SC 3751, *Dahanu Taluka Environment Protection Group and another v. Bombay Suburban Electricity Supply Company Ltd.* (1991) 2 SCC 539, *Tehri Bandh Virodhi Sangharsh Samity and Others v. State of U.P.* (1992) SCC. SUPP(1) 44 and *N.D. Jyal v. U.O.I.*, (2004) 9 SCC 362.

## **LAWS RELATING TO SUSTAINABLE FOREST MANAGEMENT AND TIMBER TRADE**

The concept of sustainability when apply to the management of forest means sustaining the forest cover, conserving the existing forests and restoring the degraded forest. For this purpose broadly forest is classified into reserve forest, limited production forest and production forest.

- i. Conservation of Reserve forest: The areas of forest in Himalayas, Eastern and Western Ghats, the Vindya and Satpura Ranges, Araballi Range, Sacred Grooves, Biosphere Reserves, National Parks and Sanctuaries, Ecologically Fragile Zone should be sealed from human interference. No commercial exploitation or support to fuel starved villagers or hungry cattle should be permitted in these areas. Elaborate, extensive and immediate steps should be taken to sensitize the people about this.
- ii. Limited Production Forests: at more than 1000 meters altitude the forests in hilly topography are less fertile. A part of the annual increment may be harvested in a very careful and controlled manner so as to avoid soil and tree damage.
- iii. Production Forests: These are forests on flat land managed for high degree of production. Working on scientific lines and with proper logging techniques environmental problems can be avoided to a large extent. However care should be taken to ensure generation of forests and not plantations.

The following strategy should be able to help in the conservation of forests in India:

1. Forest dwellers must have access to subsidized source of fuel, fodder, building material, etc. so that do not cut trees.
2. Moratorium (at least 15-20 years) on commercial tree felling in fragile areas of Himalayas and other hilly areas.
3. Massive Afforestation during programmes with people's participation during moratorium.
4. Modify working plans into environmentally sound action plans based on scientific research.
5. Community forests around villages should be managed by people's cooperatives. Most women participation is to be ensured whenever possible.
6. Involvement of masses and voluntary agencies in the task of tree planting
7. Forest should be protected from fire. Modern fire-fighting equipment should be used to extinguish accidental forest fire.

8. Grazing of cattle in the forests should be discouraged.
9. Pests and diseases of forest trees should be controlled by fumigation and aerial spray of fungicides and through biological method of pest control.
10. The use of fire wood should be discouraged and alternative source of energy for cooking such as biogas, natural gas, etc. should be made available.
11. Afforestation should be done in areas unfit for agriculture, along highways and rivers, around playgrounds, parks, carnival grounds and railway land etc. *Vanamahotsava* programme in August and February should be arranged with involvement of people.
12. A tree removed from the forest for any purpose under pressure must be replaced by a new tree. Thus tree felling should be matched by tree planting programmes as clearly as possible.
13. Silviculture practice of conservation becomes necessary as it causes faster rate of development of the desired forest and it also causes uniform stocking and ever aged stands.
14. Modern method of sustainable forest management should be adopted.
15. Permission for carnival/community festival should require planting of trees.

In order to save the diminishing forest cover, there is a dire need for extensive planting of trees through Afforestation programme. To achieve these goals the effective implementation of the following forestry practices for the survival and welfare of mankind would be helpful:

(1). *Protection or conservation forestry*: It involves protection of degraded forests to allow recoupment of their flora and fauna.

The criteria for sustainable forestry are:

- (i) Maintenance of forest for their contribution to global carbon cycles;
- (ii) Maintenance of the health and vitality of the ecosystem.
- (iii) Take measures to maintain and encourage the enhancement of productive function of forests;
- (iv) Nurturing the biodiversity in forest ecosystem and
- (v) Maintenance of socio economic functions and conditions.

(2). *Production or commercial (or exploitative) forestry*:

The basic reason behind exploitation of forest is the growing demand for the supply of goods and services and to meet the need of the people for firewood, fodder, food, fertilizers, fiber, timber, medicine, etc., or for industrial purposes such as timber of all type, plywood, matchwood, fiber board, paper and pulp, rayon, silvichemicals, etc. For this about 100 million hectares of additional land is required. This can be done by the following:

(I) Intensive plantation and

(II) Productive and captive plantation. The state must make an extra effort to make the additional 100 million hectare land available for the above purposes.

(I). Intensive plantation: This is planting all the available land from villages' fields to community land to road or rail sides and every available space. Indigenous and exotic species can be used for plantation that removes pressure from natural forests. The National Afforestation and Eco-development Board (NEAB) of the Government of India has taken up massive plantation in fifty districts every year since 1992-93.

(II). Productive and captive plantation: It involves intensive plantation of trees on available land or on land not under agriculture with the aim of fulfilling the commercial demand. Generally fast growing trees are raised using modern techniques. The production forestry programmes include social forestry, agro-forestry and urban forestry programmes under community forestry.

- (a) Social forestry: Social forestry started in 1976 involves rising of trees for fire-wood, fodder, agricultural implements and fruits on public and common lands, road sides etc., for the benefit of rural community by involving villagers and school children.
- (b) Agro-forestry: It is a new name for an ancient land practice where land is used for agriculture, forestry and animal husbandry. It is, however a recent scientific activity. According to International Council for Research in Agro-forestry (ICRAF), "Agro-forestry is a system of land use where woody perennials are deliberately used on the same land management units as annual agricultural crops and animals, either sequentially or simultaneously, with the aim of obtaining greater outputs on sustained basis".
- (c) Urban Forestry: It is aimed at growing ornamental and fruit trees in urban areas along roads, in private compounds, vacant lands and common parks to protect environment.

Most forests, however different in climate and location, are threatened by unsustainable forestry practices, exploitation which is an impediment to development and leads to climate change. Because forests cover a vast area of land, across political boundaries and affect a

variety of issues including wildlife, water resources and trans-boundary developmental issues in India there is a number of laws that impact forests.

Prevention is always said to be better than cure. Henceforth a problem which is at minimal level in the present time but has the potentiality to pose a greater threat is required to be handled with due care and attention. Likewise timber trade, illegal sawmills and the consequential problem of wide spread cutting down of forest requires to be dealt with more strictness within the existing legal framework. In India at national level there are good many laws relating to protection and conservation of forest. However, looking at the problem of timber trade, the need of the hour is a careful examination of the present laws relating to conservation and protection of forest.

#### **LAWS AND INSTRUMENT RELATING TO BIODIVERSITY:**

Biodiversity is a collective term for all species of living being in air, water, earth, forest, space so on and so forth. Biodiversity flourishes well in forest concern for biodiversity was first addressed in Convention on Biological Diversity (CBD).

#### **CONVENTION ON BIOLOGICAL DIVERSITY (1992):**

The convention was opened for signature on 5<sup>th</sup> June, 1992 at the United Nation Conference on Environment and Development (the Rio “Earth Summit”) The objectives of the convention are “the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, inclusive by appropriate access to genetic resources, and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate finding” The convention is the first global comprehensive agreement to address all aspect of biological diversity and genetic resources, species, and ecosystems. It recognizes for the first time that the conservation of biological diversity is “a common concern of human kind” and an integral part of the development process. Therefore while addressing issues relating to Sustainable Forest Management (SFM), issues relating to Biodiversity forms an integral part.

The convention on biological diversity is one of the most significant recent development in international law, international relations and the fields of environment and development. However this convention is more concerned with conservation of what is available but does not deal with prevention of conservation of biodiversity.

## **THE BIOLOGICAL DIVERSITY ACT, 2002:**

The Biological Diversity Act 2002 is a Central Act of Parliament aiming to provide for conservation of biological diversity, sustainable use of its components and a fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and matter connected therewith and thereto.

It is to be noted that in the statement of objects and reasons of the Biological Diversity Act, 2002 also does not mention illegal logging and timber trade. This issue can be introduced indirectly through the statement “To regulate access to biological resources of the country with the purpose of securing equitable share in benefits arising out of the use of biological resources and associated knowledge relating to biological resources”. Thus the Act, while addressing the issue of biodiversity conservation, does not address the issues relating to prevention of depletion and disturbance of biodiversity through loss and abuse of forest due to the illegal logging and timber trade. This is perhaps due to the fact that it is a faithful representation of the Convention and does not go beyond it.

The core purpose of this Act is to control and regulate access to bio-diversity in India. The Act states that “No person who is non-Indian citizen, who is a citizen of India but a non-resident, a body corporate, an association, or organization not incorporated or registered in India or a corporation registered in India which has non Indian participation in share capital or in management shall, without previous approval of the National Biodiversity Authority, obtain any biological resource occurring in India or knowledge associated thereto for purpose of research or for commercial utilization or for bio-survey and bio-utilization”<sup>99</sup>. This section, however, neither prevents nor protects the forest from entering and indulging of illegal timber felling from” person who is non-Indian citizen, who is a citizen of India but a non-resident, a body corporate, an association, or organization not incorporated or registered in India or a corporation registered in India which has non Indian participation in share capital or in management” and also from an Indian citizen. Thus the section is like a porous sieve. On the face of it addresses the issue of biodiversity conservation but fails to address the fundamental cause for the same.

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<sup>99</sup> Biological Diversity Act, 2002, Section 3.

## **LAWS AND CONVENTION ON CLIMATE CHANGE: NATIONAL AND INTERNATIONAL PERSPECTIVE**

India is a mega biodiversity country where forest account for 21.05% of the geographical area<sup>100</sup>. There are about 2423 tribal forest villages in India<sup>101</sup>. Therefore assessment of impact of climate change and sustainability of the forest is a major cause of concern. In 1997 two regional assessments were made, one for the state of Himachal Pradesh and other for the Western Ghats<sup>102</sup>. These studies indicated moderate to large scale shifts in the vegetation types with implication for the forest dieback and biodiversity. The two most dominant forest types in India covered in these studies were:

- i. Shorea Robusta (Sal) 12% in the eastern part of central India.
- ii. Tectona Grandis (Teak) 95% spread across central India and Western Ghats.

The study was in relation with temperature and rainfall in the past, at present and against the projected future change in the climate for each vegetation type<sup>103</sup>. The study indicates that the present vegetation type after adapting to the climate is likely to shift/evolve into a different vegetation type and undergo large scale changes up to 75%<sup>104</sup>. The economically important forest types, such as Tectona Grandis (Teak), Shorea Robusta (Sal) are projected to undergo a change. Even where no change is projected in the forest type, climate change will be an additional pressure and will exacerbate the decline in the biodiversity resulting in socio-economic pressure<sup>105</sup>. Climate change could cause irreversible damage to unique forest ecosystem and biodiversity rendering several species extinct locally and globally. Forest ecosystems require the largest response time to adapt through migration and re-growth.

A study of four eco-sensitive regions in India vis-à-vis climate change conducted by a team of scientist of Indian Institute of Science<sup>106</sup>, highlight the need for greater research into the subject. All the four regions are fragile eco-sensitive regions which are vulnerable to climate change and also there is large dependence of communities on forest

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<sup>100</sup> Forest Survey of India, State of Forest Report, 2013, Ministry of Environment and Forest, Dehradun

<sup>101</sup> Development of forest villages, Report of the Ministry of Tribal Affairs, 2013, Government of India.

<sup>102</sup> N.H. Rabindranath, R. Sukumar, P. Dashingkar, Climate Change and Forest: Impacts of Adaptation, Regional Assessments for the Western Ghats India, Atmospheric Environmental Issues in Developing Countries, 1997, Stockholm Environmental Institute, Stockholm and P. Dashingkar, Adapting to climate change in a Forest Based Land Use System- A case study of Himachal Pradesh, India, Atmospheric Environmental Issues in developing countries, 1997, Stockholm Environmental Institute, Stockholm.

<sup>103</sup> Ibid.

<sup>104</sup> N.H. Rabindranath, R. Sukumar, and A. Saxena, Impact of Climate Change on Forest in India, Report, Center for Ecological Sciences, Indian Institute of Science, Bangalore. P.7-9.

<sup>105</sup> Ibid.

<sup>106</sup> Prof. Rabindranath, Prof. G. Bala, R. Gopala Krishan, Impact of Climate Change on Forest / A study of four eco-sensitive regions in India, Indian Institute of Science, 2009 (unpublished).

biodiversity. The terrain is characterized by mountains and altitudinal gradients. It is found that the forests in these areas are gradually adapting to climate change and invasive species are spreading in these areas and the afforestation is dominated by largely monocultures. All these are indications for potential degradation of forest. The Himalayan sector is defined by Alpine and sub Alpine moist temperature forest that spread over Jammu & Kashmir, Himachal Pradesh and Uttarakhand and are stated to undergo a massive change of about 57% by 2030 and the snow cover is projected to be replaced by vegetation cover<sup>107</sup>.

The Western Ghats are older than Himalayas and are also known as the Sahyadri Mountain. It is not a true mountain range but only the eroded precipitous edge of the Deccan Plateau. This range hosts the tropical wet evergreen forest, tropical dry deciduous forest and tropical thorn forest. The range covers Gujarat, Maharashtra, Goa, Karnataka, Tamilnadu, Kerala and ends at Kanyakumari. The entire ghat is vulnerable to climate change and the tropical moist deciduous forest is the most vulnerable component of this range<sup>108</sup>.

The coastal region forest is defined by all the districts that lie on the Indian coast. These areas consist of tropical thorn forest, tropical moist deciduous forest and the considered most vulnerable. 31% change is projected for by the year 2035<sup>109</sup>.

The North-Eastern region which comprises of Assam, Sikkim, Arunachal Pradesh, Tripura, Mizoram, Manipur and Nagaland (popularly called the seven sisters) are relatively less vulnerable due to increased rainfall coupled with increased warming<sup>110</sup>.

In conclusion it can be stated that the Himalayan range is most vulnerable with 38.4% projected change. The coastal region and the Western Ghats are moderately vulnerable with 30.5% and 18.5% projected change respectively. In North-Eastern range which also covers the Eastern Himalaya is less vulnerable with 7% projected change. These projections are quite alarming and are expected to impact the Indian topography in a devastating manner<sup>111</sup>.

Not even in India, climate change is predicted to have far reaching effects on forests throughout the world also. Ecological models predict climate change will shift the geographic distribution of tree species and alter productivity. Despite the global nature of

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<sup>107</sup> Ibid

<sup>108</sup> Ibid.

<sup>109</sup> Ibid.

<sup>110</sup> Ibid.

<sup>111</sup> Ibid.

climate change, most analyses of timber markets have restricted themselves to single countries or regions. While regional analysis can provide insights into how landowners and markets adjust and adapt to large scale global climate change, regional studies cannot measure how the rest of the world responds to climate change<sup>112</sup>.

A global market approach is particularly important for forestry given that climate change is predicted to affect regions very differently. For example, the ecological literature suggests high latitude forests are likely to expand deeply into the tundra; mid-high latitude forests could undergo dieback and large changes in species distribution, and low latitude forests are likely to increase productivity<sup>113</sup>.

Despite ecological predictions that species will experience stock effects and move across the landscape, most timber market studies focus solely on future changes in forest productivity. To capture the range of ecological responses, to reflect regional differences, and to capture general equilibrium price effects, it is critical that impacts be measured on a global scale. The ecological global model currently available predicts shifts in species and changes in productivity due to climate change. The economic model is an optimal control model adopted by the U.S in the context of the entire globe. This model is the first of its kind for examining the welfare impact of climate change. It explores how global markets may adapt to a range of ecological changes resulting from climate change<sup>114</sup>. The study predicts that global log prices will rise by approximately 4% per year because the increase in demand will outpace the productivity increase. Regional stumpage price will vary from these prices depending on timber quality, harvest, access, and transportation cost. Most of the growth in production is predicted to occur in non-indigenous plantations established in sub tropical regions. The projected increase of non-indigenous timber plantation in sub tropical region is 6 million hectares per year which will have an astounding effect on agriculture<sup>115</sup>.

There are four major trends in future world timber production:

1. Continuing decrease in hard wood, round wood, export from the tropics as the old growth forests are reduced in size and quality and as the tropical countries impose export restrictions.

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<sup>112</sup> Brent Sohngen, Robert Mendelsohn, and Roger Sedjo, A Global Model of Climate Change Impacts on Timber Markets, *Journal of Agriculture and Resource Economics*, 26(2): 326-343, Western Agriculture Economic Association.

<sup>113</sup> *Ibid.*

<sup>114</sup> *Ibid.*

<sup>115</sup> *Ibid.*

2. Increase importance of tropical and temperate plantations.
3. Increasing exploitation of massive timber resources.
4. Increasing consumption of timber in developing and industrializing countries.

Several projection of future production agreed at intensive plantations in both temperate and tropical countries will yield a little more than 50% of the total demand by the middle of this century. The reason being on one hand the old growth forests are increasingly managed for conservation. The vegetation is expected to change due to climate change. The falling tariff barriers are the silver lining in the cloud because it may stimulate trade in plantation and semi natural forest product but many countries have resisted this trend of free trade and are imposing log export ban or v very high taxes. Climate change therefore is going to be particularly difficult in the forest sector and raise environmental constraints<sup>116</sup>.

The impact of climate change on business development has been summed up as:

1. Private – public wood land owners need to work together with owners of wood processing units to ensure continuity of supply. Continued investment in hardwood sawmills and processing plants will be necessary to support this depressed sector.
2. Socio-economic studies of whole wood chain are required to identify the pinch points.
3. There should be government incentive to encourage private plantation
4. The sector is poorly organized and is need of revitalization on scientific and economic terms.
5. Domestic timber production, procurement and marketing needs to be developed.

Climate change will impact the timber sector in the following manner:

- i. Climate change offers opportunities and threat (that is mitigation and adaptation roles) and threat to the forest sector. Some species will be less suitable as timber and others will open up newer trade opportunities.
- ii. Increasing winter storms, violent north-westerns, summer fires, rising incidents of flood are all indications how climate change is affecting the earth and posing a threat to the forest. The impact does not stay limited to timber it has an impact on overall climate creating a vicious circle.
- iii. Land use policy must also be linked to afforestation, privately owned forest and sustainability in natural resource management.
- iv. Government policy to control of illegally logged hardwood imports will go a long way to help the current situation

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<sup>116</sup> Gerry Lawson and Gabriel E. Hemery, World Timber Trade and Implementing Sustainable Forest Management in the United Kingdom, Land uses Policy Group Report, 2008, [www.lupg.org.uk](http://www.lupg.org.uk).

- v. Whole tree harvesting and complete removal of harvesting residue speeds up climate change on one hand and causes erosion or soil compaction on the other.

The environment as a whole is affected due to climate change apart from decreases in wood supply, biodiversity conservation, recreation and other bio-economic activities will be affected.

Sustainable development implies use of natural resources such that the future generations can attain the same level of well being as enjoyed by the present generation. It is in context of the need for conservation of the stock of natural resources that *sustainable management of forests (SFM)* has gained importance. Sustainable Forest Management ensures that values derived from forests meet present day requirements and at the same time the quantity and quality of long term development goals are maintained. The "Forest Principles" adopted at The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 captured the general international understanding of sustainable forest management at that time<sup>117</sup>. Sustainable forest management actually described as the attainment of balance – balance between society's increasing demands for forest products and benefits, and the preservation of forest health and diversity. This balance is critical to the survival of forests, and to the prosperity of forest-dependent communities.

Trade has an important role in the forestry sector on environment, while environmental policies affect on the competitiveness of individual producers. While trade in forest products is perceived as the major driving force for sustainable management of natural resources. The trade and environment debate is not new. The relationship between Trade and Environmental Protection consisting of both the impact of environmental policies on trade as well as the impact of trade on the environment United Nation Environmental programme (UNEP) describe that timber trade and environment are related to each other, because all economic activity is based on the environment. Much environmental damage is due to the increased scale of global economic activity. Two distinct bodies of international law govern trade and the environment. Trade law is governed by the World Trade Organization (WTO).<sup>118</sup> Environment and trade linkages are not isolated, they are fundamentally related. Environmental changes have been made by international trade constitutes a growing portion of that growing scale. Trade can be good for the environment, because it creates wealth that

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<sup>117</sup> Sustainable forest management, See, [http://en.wikipedia.org/wiki/Sustainable\\_forest\\_management](http://en.wikipedia.org/wiki/Sustainable_forest_management), visited on 17.3.2012 at 6 p.m.

<sup>118</sup> Trade and Environment in the Forestry Sector: Towards Sustainable Forest Management, see <http://scialert.net/fulltext/?doi=ajsr.2010.1.17>, visited on 18.3.2012 at 6 p.m

can be used for environmental improvement. But, there are four types of negative and positive impacts on environment and development are affected by trade. They are *product effects, scale effects, structural effects and direct effects*<sup>119</sup>;

#### Product Effects

- Positive Effects:

Wide dissemination of environmentally friendly technologies and technology for protecting the environment

- Negative Effects:

Facilitation of international trade in environmentally harmful products

#### Scale-Effects

Expansion of the level of economic activity due to allocate efficiency.

#### Positive Effects

- Efficient use of natural resources
- Increased wealth-higher demand for environmental protection
- Increased wealth-less pressure to exploit natural resources

#### Negative Effects

- Increased environmental pressure and/or environmental damage
- Increased wealth-increase in environmentally harmful activities

#### Structural-Effects

Specialization in sectors for which country has a comparative advantage.

#### Positive Effects

- Increased share of environmentally friendly sectors

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<sup>119</sup> Ibid

- Creation of new environmentally friendly products/sectors
- Removal of subsidies, quotas, other restrictive measures

#### Negative Effects

- Increased share of environmentally harmful sectors

#### Direct-Effects

Direct environmental impacts of economic activity and trade.

- Increased levels of transportation-increased air pollution
- Invasive species of plants and animals

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 keeping aside the negative part.

## **EXPLORING THE CONCEPT OF SUSTAINABILITY IN THE NATIONAL FOREST POLICY STATEMENT IN INDIA**

### **A. The Forest Policy of 1894**

The Government of India issued a Resolution on 19th October, 1894, declaring its forest policy. The principles laid down in that policy were:

- 1) The sole object with which state forests are to be administered is public benefit. In general, the constitution and preservation of a forest involve the regulation of rights

and restriction of privileges of the user of the forest by the neighboring population (now called fringe population)

- 2) Forests situated on all hill slopes should be maintained as protection forests to preserve the climatic and physical conditions of the country and to protect the cultivated plains that lie below them from the devastating action of hill torrents.
- 3) Forests which are the store house of valuable timbers should be managed on commercial lines as a source of revenue to the State.

The 1894 policy statement, thus, lays the forest open to exploitation by making it a source of state revenue. In the process it encourages greed corruption and abuse of forest.

- 4) Forests that yield only inferior timber, fuel wood or fodder or are used for grazing should be managed mainly in the interest of the local population, care being taken to see that the user does not annihilate its subject and the people are protected against their own improvidence.

Here in lies the seed for declaring village forest and developing Joint Forest Management (JFM).

### **B. National Forest Policy, 1952**

During the First Five-Year Plan, the forest policy of Independent India was declared on May 12, 1952 by the Government of India almost 56 years after the 1<sup>st</sup> policy. During the 56 years timber trading on commercial lines continued causing havoc to the forest. According to this policy, it was decided to raise steadily the area under forests to 100 million hectares, which would come to 33 percent of the country's land as a whole. The Government planned to promote and expand forests and manage them scientifically.

The Government has proposed the following programmes:

- 1) Afforestation: - Afforestation schemes such as (i) plantation of quick growing species; and (ii) plantation to be raised under the scheme of rehabilitation of degraded forests were brought under State plans.
- 2) Social Forestry: - To increase green coverage, the Government has set up social forestry projects on non-forest lands, public lands or on village common lands. Government framed this policy on the purpose of involving people in developing forest to meet the needs of the fuel, paper, etc.

Under social forestry 3 steps were proposed:

- a) Farm Forestry: - Farmers were encouraged to plant trees on their own farms. For this purpose the State Forest Departments would supply the seedlings to the farmers and other people without any cost.
- b) Public Wood Lots: - The Government plant fast growing trees along road-sides, canal banks and other such public lands for the needs of community.
- c) Community Wood Lots: - Trees are planted by the communities themselves as community lands to be shared equally by the villages. Seedlings were supplied by Forest Department free of cost.

It is to be noted that this Policy State reflects a state awareness that exploitation of the forest for timber to earn revenue for the state had wrecked havoc on the forest. That is why the policy speaks of Social Forestry etc. But unfortunately the policy does not put a ban on exploitation of forest for timber or managing forest on commercial lines for earning revenue. So under 1952 policy also the forest continues to be exploited on 1894 policy lines. Moreover, both policies are silent on sustainability of forest.

### **C. Forest Policy, 1988**

Basic Objectives: The basic objectives that governed the National Forest Policy, 1988 are the following:

- (i) Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that has been adversely disturbed by serious depletion of the forests of the country.
- (ii) Conserving the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna which represent the remarkable biological diversity and genetic resources of the country.
- (iii) Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs;
- (iv) Meeting the requirements of fuel wood, fodder, minor forest produce and small timber of the rural and tribal populations;
- (v) Increasing the productivity of forests to meet essential national needs;
- (vi) Encouraging efficient utilization of forest-produce and maximizing substitution of wood.

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.

## **LOCATING TIMBER TRADE IN THE FIVE YEAR PLANS IN INDIA**

Five year plans are the backbone of any nation's development strategy and economic stability. India has had about 12 five year plans so far. An attempt is made in this segment to assess the stand taken by the planning commission regarding forest and timber and also for the purpose of achieving sustainability.

First Five Year Plan (1951-1955)<sup>120</sup>: In the 1<sup>st</sup> five year plan chapter 21 of the plan document is completely devoted to forest. In this chapter the vital role played by the forest in India's economy is unequivocally recognized. There is a commitment to raise India's forest cover to one third of its total land mass and the plan proposes that immediate scope of increasing the forest area can be achieved in the following manner:

- a. Aforestation as a measure to prevent soil erosion.
- b. Extension of tree lands, and
- c. Establishment of village plantation.

According to this plan document the production of timber recorded a large scale increase during the forties. This occurred mainly to meet war requirements and resulted in considerable over felling of trees and destruction of forest. The production declined during the planned period to 1.8 million ton per annum. 2.1 million tons of timber was imported. Moreover, as a result of the partition of the countryman species of valuable timber has been lost. OF the total amount of timber produced during the plan period seventy three percent of it was utilized in the private sector and 27 % in the government sector. The plan documents notes that though the war demand for timber has decreased the demand for domestic and infrastructure building purposes has increase considerably. This is also because the availability of steel was far short of the total requirement. The plan projected that there is going to be further increase in demand for timber and greater production of timber would

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<sup>120</sup> [Planningcommission.nic.in/plans/planrel/fiveyr/default.html](http://Planningcommission.nic.in/plans/planrel/fiveyr/default.html).

generally have to be obtained either from increased yield per acre or through development of potentially exploitable forest on about 20 million acres of land. The plan went on to devise schemes for the above purpose at a high priority and for the purpose of protection of immature species strongly recommended, as a matter of priority that every government sawmill should have seasoning kilns installed. The railways too must have a large number of seasoning kilns and treatment plants.

Thereby it can be seen that the first five year plan on one hand recommended increase of forest cover and on the other hand recommended that supply of timber be increased for the purpose of development.

Second Five Year Plan (1956-1961)<sup>121</sup>: The second five year plan in its four ward on forest under chapter 15 states that the forest of India are the source of many kinds of timber with very technical properties which sub-serves the requirements of building industry, of defense and communication as well as an expanding range of industries in which wood forms the principal raw material. Forests are also the source of urban firewood for urban India and small timber requirement by the rural communities. They also provide grazing hay and fodder. Forest has an important ameliorating influence on the factors of climate. They also perform vital function of protecting soil erosion and water conservation. This plan document emphasizes that the forest policy should be devised in such a manner to secure the long range development of forest resources and meeting the increasing demand of timber in the immediate future. In case of teak the difficulty was ineffective regeneration because they form a sprinkling in tropical forest in between other species of trees. The plan proposes that there should be clear felling and artificial generation of teak wood in compact areas in order to supply the required amount of wood for industrial, infrastructural and building purposes. A pronounced trend towards artificial and regeneration of industrial / commercial species will therefore be inevitable in the management of forest.

From the above it can be seen the second plan also more emphasis was laid on the problem of increasing the timber supply from the forest. More importantly, since then, the jungle is replaced by the forest.

Third Five Year Plan (1961-1966)<sup>122</sup>: In chapter 2 of the third five year plan it is stated that development of forest resources is an integral part of the programme for optimum land utilization. Forest have an important protective as well as productive function they not only supply timber, fuel, fodder and variety of other products but also have a moderating influence against flood and erosion

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<sup>121</sup> Ibid

<sup>122</sup> Ibid.

and maintenance of soil fertility. A number of industries such as construction, furniture, paper, rayon, plywood, matches, resins and tanning depend on forest supply. Development of forestry and forest industries is held essential for the tribal's and forest dwellers. The plan document focuses on increasing the forest area because of the requirement of industrial wood of 4.5 million tons during the plan period which is projected to increase to 9.5 million tons by 1975. New plantations take 25 to 30 years to develop in the ordinary course production and may be able to supply only 5.5 million tons by 1975, thus leaving a gap of 4 million tons. Therefore this plan document gives a drive to increase the timber producing area and also accessing inaccessible hilly areas to meet the gap in the supply of demand of timber. The plan recognizes the difficulty in generating timber producing forest within the plan period. The plan advocates immediate objectives to increase the timber output through better techniques of timber extraction, achieve better utilization through the increase use of preservation and seasoning processes. It advocates a large scale programme of new plantations for meeting the increasing requirement of industry. These plantations should comprise not only the traditional species of timber with long periods of maturity but also fast growing species with a comparatively short rotation. The proposed new plantation programme is on 210 acres for teak. Thus the third plan concentrates more on production on timber then controlling and regulating timber trade.

Fourth Five Year Plan (1969-1974)<sup>123</sup>: In the fourth five year plan the issue of forest is clubbed with animal husbandry, dairy, and fishery under chapter 8. Forest is dealt with to highlight the need for supply to wood and wood based industries and the consequent requirement to raise the productivity of forest and achieve better techniques of timber extraction. The report states the programme in the third plan period to raise plantation of teak and other broad leaved species was raised to 394000 hectares with UNDP assistance. This increase in output and better techniques of timber extractions has yielded better logging. The statement says Indian Forest is that of low productivity and stresses on raising the productivity during the plan period to 13.5 million m<sup>3</sup> and to increase timber production with the help of plantation of quick growing species of timber. Special efforts are planned to bridge the gap between demand and supply of timber by full utilization of the forest produce.

It must be specifically noted that until the 4<sup>th</sup> plan the focus on increasing forest area is not for conservation but for commercial purposes for the supply of timber.

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<sup>123</sup> Ibid.

Fifth Five Year Plan (1974-1979)<sup>124</sup>: There is a significant change in the styling of the report. Forest in this plan figures in chapter 5 titled Planned Outlays and Programme for Development. Regarding forest the plan says taking note from the fact that forestry development has assumed a significant dimension as a source of timber and fuel and for the maintenance of the natural ecological system; special programmes for social forestry and economic plantations have been given high priority. Accordingly provision is made to double the outlays of the first three years of the plan.

No other mention of forest has been made in the fifth plan.

Sixth Five Year Plan (1980-1985)<sup>125</sup>: In the sixth five year plan forest is not treated separately. A new chapter (chapter 20) has been added entitled “Environment” interalia forest forms a part of this chapter. In a brief statement the plan documents states that the extent of forest cover is a good indicator to the health of the land. Large scale deforestation in the previous decade has rendered the sensitive catchment areas in the Himalaya and other hilly area vulnerable to soil erosion. There is paucity in India’s forest cover and about 20 million hectare of land is estimated to have been effected by deforestation and erosion. The plan document also noted that extensive damage to the forest has also damaged agricultural lands by water logging, salinasation, siltation etc. The plan hopes to achieve improvement in agricultural productivity by vigorously tackling the issue of deforestation and land degradation.

It is for the first time a plan document is looking at forest from the conservation point of view rather than commercial point of view.

Seventh Five Year Plan (1985-1990)<sup>126</sup>: According to the seventh five year plan the area of forest was reduced from 550 lac hectares to 460 lac hectares. There has not been significant success in social forestry. Though the earlier aforestation programmes have helped to increase the longevity of plants and results in increase yield, there is a lot that remains to be done. The plan stresses on research and development to improve the quality and quantity of timber.

Eight Five Year Plan (1992-1997)<sup>127</sup>: In eight five year plan forest is clubbed with environment under chapter 4. The plan document recognizes that extensive deforestation has adversely affected land and water resources. Approximately 6000 million ton of soil which contain the soil nutrients are being washed off every year causing harm to the upper surface of the earth, forest canopy and is

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<sup>124</sup> Ibid.

<sup>125</sup> Ibid.

<sup>126</sup> Ibid.

<sup>127</sup> Ibid.

raising the river and ocean bed. The cause for such huge loss and damage is said to be poverty and population. The main challenge has to be met by undertaking the following programme:

1. Undertaking holistic environmental protection.
2. Increasing per-capita income.
3. Decentralizing the environmental issues and department.
4. Raising awareness and sensitivity about environment.
5. Drafting a new forest policy.
6. To create a ministry to deal with environment exclusively.
7. To spread accountability and responsibility for polluting the environment.
8. To monitor the environment.

For the first time 8<sup>th</sup> plan takes a holistic conservationist approach to environment and concentrates on setting up the pollution control board and drafting of laws for the conservation of environment including air, water, river, forest and waste land development. The plan also involves the people in partnership for conservation purposes and brings about the issue of joint forest management. It stresses on the National Forest Policy and the need for research and development in the area. Under the plan five new institutes of wood sciences and technology, Bangalore; Institute of deciduous forest Jabalpur; Institute of Forest Genetics and Tree Breeding Coimbatore; Institute of Arid Zone Research Jodhpur and Institute of Rain and Moist Deciduous Forest Research Jorhat have been set up. Each institute is expected to take up one or more challenges of forest conservation and commercial yield of timber. Indira Gandhi National Forest Academy has been set up in Dehradun. A ten point action plan is put in motion under the plan which will look into sustainable coexistence between the forest and forest dwellers. In addition to this a separate drive for plantation of timber producing trees for the purpose of commercial use has been taken up. The National Waste Land Development Board has been directed under the plan to cultivate those varieties of plants which can meet the fuel wood demand. To encourage people to cultivate trees the department of forest is directed to take special steps.

The 8<sup>th</sup> 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.

Nine Five Year Plan (1997-2002)<sup>128</sup>: The 9<sup>th</sup> five year plan deals with environment and forest under chapter 8 and states that there has been an increasing awareness in the recent years that the

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<sup>128</sup> Ibid.

protection of environment is necessary for sustaining the economic and social progress of the country. This awareness was reflected at the earth summit in the Rio de Janeiro in June 1992 where more than a hundred heads of government adopted a global action plan called Agenda 21 aimed at integrating environmental imperatives with developmental aspirations and reiterated through the U.N. General Assembly Special Session on Environment held in June 1997. It is now accepted that in terms of natural resources, a countries demand for its sustenance should not exceed its caring capacity. Over the last few decades, India has evolved legislations policies and programmes for environmental protection and conservation of natural resources. The Indian government policy has been expressed in the form of statements on forestry, on the abatement of pollution and national conservation strategy. India became a signatory to the Convention on Biological Diversity, Montreal Protocol and Basel Convention. The spirit of Agenda 21 has already been incorporated in the policy guidelines, for instance, with regard to the social and economic dimensions of Agenda 21, India has become a signatory to the Montreal Protocol for phasing out ozone depleting substances, the Basel Convention on trans-boundary hazardous substances the convention on Biological Diversity and other international treaties. Environmental Concerns are being integrated with development through environment impact assessment reports which have been made mandatory. Compliance with a condition stipulated is being ensured by monitoring the implementation of environmental management plans. Conservation and management of resources for development are sought to be achieved through a combination of regulatory and market based economic instruments. The role of major groups including the NGOs, farmers and other communities is being strengthened by directly involving them in the process of identification, formulation and implementation of environmental programmes. The important role of capacity building, legal instruments and mass media for promoting public awareness is fully recognized. The plan stresses on the importance of forest conservation as an important aspect of human survival and sustainable development. It admits that forest in India has been shrinking in the past several decades and now account for only 19.27% of total land mass.

The plan has started a mandatory environmental audit under the Environment (Protection) Act, 1986, Adoption of Clean Technology Policy, Concept of Minimization of Waste Circles, Environmental statistic Mapping etc.

However, the plan is silent on production of timber for commercial purposes directly. The plan however encourages creation of timber producing forests on privately owned land for commercial purposes and leasing out land for production of fuel and fodder.

Ten Five Year Plan (2002-2007)<sup>129</sup>: The tenth forest plan under chapter nine states that sustainability is not an option but an imperative. Regarding forest the plans states that the forest play an important role in environmental and economic sustainability. They provide numerous goods and services and maintain life support systems for life on earth. Some of these support systems of major economic and environmental importance are:

1. Supply of timber, fuel wood, fodder, and a wide range of non-wood products
2. Natural habitat for biodiversity and repository of genetic wealth.
3. Provision of recreation and opportunity for eco-tourism.
4. Playing an integral part of the water shed to regulate the water regime, conserve soil and control floods; and
5. Carbon sequestration and carbon sink.

However, forests are consistently and seriously undervalued in economic and social terms.

The countries forest resource is under tremendous pressure. Intensified shifting cultivation, indiscriminate removal of timber, fuel wood, foddors and other forest produce, forest fire and encroachment has led to forest degradation and deforestation. It is estimated that over 12 million metre<sup>3</sup> of timber are removed from the forest annually.

The action for the tenth plan envisages the following:

1. Natural Forest: The plan requires that for the development of forest area good forest areas must be brought under scientific management to enhance productivity, density and health. For this purpose micro planning would be the core element of the strategy, afforestation programmes will be universalized and decision making would take place at the community level.
2. Development of Medicinal Plants.
3. Forest Protection.
4. Initiatives for forest based industries: Wood based industries are not efficient due to technological obsolescence and inappropriate machinery and its maintenance, unskilled man power and poor quality of products. Such industries have to be modernized in order to be economically viable. Initiatives for the modernization of technology, reduction and recycling of waste, regulation regarding the use of seasoned and treated materials, promotion of standards and codes for wood products will be encouraged. With the relaxation of trade

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<sup>129</sup> Ibid.

barriers and liberalized imports, customs duty on logs and wood chips is substantially reduced from 100% to 5% and in some case even less. Though in one hand the liberalized import reduced the demand on our natural forest, it also deterred the growth of Indigenous production and forest based industries on the other hand.

5. Forest Plantations: The forest plantations should reduce the pressure on natural forest and reverse the negative impact of deforestation while meeting the increased demand for timber. At present the performance of forest plantations has not been very high and its timber yield varies from year to year. Timely thinning, tending, irrigation, application of pesticides may improve the situation.

Eleven Five Year Plan (2007-2012)<sup>130</sup>: In chapter 9 the plan document states that protection of environment has to be a central part of any sustainable inclusive growth strategy and the 11<sup>th</sup> plan is conscious of the dangers of environmental degradation. It recognizes the environmental policy 2006 and takes initiatives for integrated environmental concern planning. The plan speaks of the critical role of forest in sustaining life and indicates that as of the satellite data in 2002 the forest canopy is 23.68% of the land mass. It recognizes the tremendous pressure the forest is under. A demand and supply gap of almost 64 million m<sup>3</sup> has been projected for timber in 2006. The shortage is being met to import amounting to nearly 9000 corers in 2003-2004. Social forestry is heavily encouraged under the plan.

Twelve Five Year Plan (2012-2017)<sup>131</sup>: The 12<sup>th</sup> plan focuses on the following:

1. Greening 5 million hectares under the Green India Mission including 1.5 million hectares of degraded land, afforestation and eco-restoration of 0.9 million hectares of ecologically sensitive areas.
2. Technology based monitoring of forest covered, biodiversity, and growing stock including change monitoring on periodical basis through dedicated satellite by 2017 and establishment of open web based National Forestry and information system for research and public accessibility by 2015.
3. Engagement of village green guards or community foresters for every Joint Forest Management Village by 2016.
4. Establish forestry seed bank in forest circles and model nursery in every district with information on public portals by 2014 and

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<sup>130</sup> Ibid.

<sup>131</sup> Ibid.

5. Improve forest productivity, restore and intensified forest range land, capacity building for forest committee are some of the target plans under the plan.

## **EXPLORING THE CONCEPT OF SUSTAINABILITY IN THE STATUTORY FRAMEWORK RELATING TO FOREST IN INDIA**

### **A. Indian Forest Act, 1865 And Forest Act 1878:**

Till the beginning days of British Rule, no attention was paid towards forests protection. People used to clear forests for agricultural purposes. However, during the British rule, the first Indian Forest Act, 1865 (VII of 1865) was passed by the Supreme Legislative Council declaring the possession of State over forests.

### **B. Indian Forest Act, 1927:**

The Indian Forest Act, 1927 is a comprehensive legislation relating to forests management that consolidates pre-existing laws such as the Indian Forest Act, 1865 and the Forest Act, 1878.

Although the Forest Act, 1927 deals specifically with (i) reserve forests, (ii) village forests and (iii) protected forests, the preamble and other provisions of the Act are wide enough to cover all categories of forests. The Forest Act applies to the forest vesting in the state. However it may be pointed out here that by virtue of the state being the greater land lord and ultimate owner of all natural resources, and also because forest is under the List- III, Concurrent List in the VII<sup>th</sup> schedule<sup>132</sup>, this Act can be made to extend over forest cultivated over privately owned land by individuals.

Under this Act the State Government may constitute any forest-land or waste-land which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest produce of which the Government is entitled, a reserved forest<sup>133</sup>. Reserved Forest under Sec.4 of the Act, no right shall be acquired in or over the land comprised in such notification, except by succession or under a grant or contract in writing made or entered into by or on behalf of the Government or some person in whom such right was vested when the notification was issued; and no fresh clearings for cultivation

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<sup>132</sup> The Constitution of India under Art, 246 read with schedule VII controls the National Resource. List II- state list Entries 17, 18, 23, 27; List I- Union list Entries 87, 88; List III- Concurrent list Entries 17A Forest. This includes all forest produce including timber.

<sup>133</sup> Indian Forest Act, 1927, Chapter II, Section 3-5.

or for any other purpose shall be made in such land except in accordance with such rules as may be made by the State Government in this behalf under Sec. 5 of the Act<sup>134</sup>.

The difficulty here is that some “grant” or “contract” that was vested in some person or family during the British Period prior to independence still continues and this colonial legacy enables exploitation of “Reserved Forest” legally, this is a major lacuna. It is humbly submitted that once a forest area is declared as reserved, such grant or contract should stand cancelled automatically.

There are certain acts prohibited in areas declared as “Reserved Forest” which are:

- a) Making of any fresh clearing.
- b) Setting fire to a reserved forest or, in contravention of any rules made by the State Government in this behalf, kindling any fire, or leaves in such manner as to endanger such a forest; However if a notification by the Forest Authorities require the kindling of fire in a particular reason or for a particular purpose, fire can be kindled.
- c) Trespassing by person or cattle for any reason is prohibited.
- d) Causing damage by felling tree or dragging timber is prohibited.
- e) Damaging a tree by felling, girdling, burning, stripping of barks, leaves etc. is prohibited.
- f) Quarrying stone, burning lime or/charcoal or collecting, subjecting to any manufacturing process, or removing, any forest-produce is prohibited.
- g) Clearing or breaking up any land for cultivation or any other purpose is prohibited.
- h) In contravention of any rules made in this behalf by the State Government hunting, shooting, fishing, poisoning water or setting trapping or snaring; or in any area in which the Elephants' Preservation Act, 1879, is not in force, killing or catching elephants in contravention of any rules so made is punishable with imprisonment for a term which may extend to six months, or with fine which may extend to five hundred rupees, or with both, in addition to such compensation for damage done to the forest as the convicting court may direct to be paid<sup>135</sup>.

However, any act done by permission in writing of the Forest Officer, or under any rule made by the State Government; or by the exercise of any right continued<sup>136</sup>, or created by grant or contract in writing made by or on behalf of the Government<sup>137</sup>.

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<sup>134</sup> Ibid.

<sup>135</sup> Ibid.

<sup>136</sup> Indian Forest Act 1927, Section 15 (2) (c)

It is to be noted that this provision operates as a gate way of abuse. Those under existing grant or contract get a free access to abuse and exploit the forest. Although damaging, felling, girdling, stripping of trees and dragging of timber is prohibited, those under the grant or contract can indulge in above acts and also clear forest. This is a major weakness of the ACT. Whenever fire is caused willfully or by gross negligence in a reserved forest, the State Government may (notwithstanding that any penalty has been inflicted under this section) direct that in such forest or any portion thereof the exercise of all rights of pasture or to forest-produce shall be suspended for such period as it thinks fit<sup>138</sup>.

Under this Act, the State Government may assign to any village-community the rights of Government to or over any land which has been constituted reserved forests, and may also cancel such assignment. All forests so assigned shall be called village forests. Although this provision exists, many states have not formed any village forest<sup>139</sup>.

Section 35 of the Indian Forest Act, 1927 allows the state government to abrogate any right in case of willful neglect or disobedience to any rules or regulation or for requirement for the purpose of construction etc. If such abrogation occurs the Forest is placed under the control of a Forest Officer as a Reserved Forest.

### **C. Forest (Conservation) Act, 1980:**

The Forest (Conservation) Act, 1980 is a very small piece of legislation, consisting only 5 sections without having any section defining terms used therein.

Object of the Act:

The Act has been passed with a view to check deforestation which had been taking place in the country on a large scale and which had caused ecological imbalance and thus led to environmental deterioration. The Act is to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

### **D. Restriction on The De-Reservation Of Forests or Use of Forest Land For Non-Forest Purpose:**

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<sup>137</sup> Indian Forest Act, 1927, Section 23.

<sup>138</sup> Section 26, Indian Forest Act 1927.

<sup>139</sup> During the field survey in Kerala, Tripura, Assam, Mizoram and West Bengal the researcher could not find any village forest, although each of the above states had Joint Forest Management (JFM) working successfully. There were instances of forest grown on privately owned land. The forest officials also confirmed that there was no village forest in the above mentioned states.

Notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing-

- (1) that any reserved forest (within the meaning of the expression 'reserved forest' in any law for the time being in force in that State) or any portion thereof, shall cease to be reserved;
- (2) that any forest land or any portion thereof may be used [or any non-forest purpose;
- (3) that any forest land any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organization not owned, managed or controlled by Government; and
- (4) that any forest land or any portion thereof may be cleared of trees which have grown naturally in that land or portion, for the purpose of using it for reforestation.

The word 'forest' must be understood according to its dictionary meaning, the description covers all statutory recognized forests, whether designated as reserved, protected or otherwise for the purpose of Section 2 (i) of the Act [*T.N. Godavarman Thriumulkpad v. Union of India*, AIR 1997 SC 1228].

The Forest (conservation) Act, 1980 was enacted with a view to check further deforestation which ultimately results in ecological imbalance; and therefore provisions made therein for the conservation of forests and for matters connected therewith, must apply to all forests irrespective of the nature of ownership or classification thereof [*T.N. Godavarman Thriumulkpad v. Union of India*, AIR 1997 SC 1228].

#### **Penalty for Contravention of the Provision of the Act:**

Whoever contravenes or abets the contravention of any of the provisions of Section 2, shall be punishable with simple imprisonment for a period which may extend to fifteen days. (Sec. 3A)

#### **E. Scheduled Tribes And Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006:**

Objects of the Act:

The preamble of the Act states that "An Act to recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes and other traditional forest dwellers who have been residing in such forest for generations but whose rights could not be

recorded; to provide for a framework for recording the forest rights so vested and the nature of evidence required for such recognition and vesting in respect of forest land.

The recognized rights of the forest dwelling Scheduled Tribes and other traditional forest dwellers include the responsibilities and authority for sustainable use, conservation of biodiversity and maintenance of ecological balance and thereby strengthening the conservation regime of the forests while ensuring livelihood and food security of the forest dwelling scheduled Tribes and other traditional forest dwellers.

#### **MINOR FOREST PRODUCE:**

‘Minor forest produce’ includes all non-timber forest produce of plant origin including bamboo, brush wood, stumps, cane tussar, cocoon, honey, wax, lac, tendu or kendu leaves, medicinal plants and herbs, roots, tubers and the like (Sec. 2(i)).

#### **SUSTAINABLE USE:**

‘Sustainable use’ shall have the same meaning as assigned to it in clause (o) of Section 2 of the Biological Diversity Act, 2002. [Sec.2 (n)]. It reads thus, “Sustainable use means the use of components of biological diversity in such manner and at such rate that does not lead to the long term decline of the biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations”.

#### **FOREST RIGHTS OF FOREST DWELLING SCHEDULED TRIBES AND OTHER TRADITIONAL FOREST DWELLERS**

(1) For the purposes of this Act, the following rights, which secure individual or community tenure or both, shall be the forest rights of forest dwelling Scheduled Tribes and other traditional forest dwellers on the forest lands, namely :-

(a) Right to hold and live in the forest land under the individual or common occupation for habitation or for self-cultivation for livelihood by a member or members of a forest dwelling Scheduled Tribe or other traditional forest dwellers;

(b) community rights such as *nistar*, by whatever name called, including those used in erstwhile Princely States, Zamindari or such intermediary regimes;

(c) Right of ownership access to collect, use, and dispose of minor, forest produce which has been traditionally collected within or outside village boundaries;

(d) Other community rights of uses or entitlements such as fish and other products of water bodies, grazing (both settled or transhumant) and traditional seasonal resource access or nomadic or pastoralist communities;

(e) Rights for conversion of pattas or leases or grants issued by any local authority or any State Government on forest lands to titles;

(f) Rights of settlement and conversion of all forest village, old habitation, un-surveyed villages and other villages in forest, whether recorded, notified, or not, into revenue villages;

(g) Right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use:

#### **DUTIES OF HOLDERS OF FOREST RIGHTS:**

The holders of any forest right, Gram Sabha and village level institutions in areas where there are holders of any forest right under this Act are empowered to –

(a) Protect the wildlife, forest and biodiversity;

(b) Ensure that adjoining catchments area, water sources and other ecological sensitive areas adequately protected;

(c) Ensure that habitat of forest dwelling Scheduled Tribes and other traditional forest dwellers as preserved from any form of destructive practices affecting their cultural and natural heritage; and

(d) Ensure that the decision taken in the Gram Sabha to regulate access to community forest resources and stop any activity which adversely, affects the wild animals, forest and the biodiversity are complied with (Sec.5.)

#### **AUTHORITIES AND PROCEDURE FOR VESTING OF FOREST RIGHTS:**

The Gram Sabha shall be the authority to initiate the process for determining the nature and extent of individual or community forest rights or both that may be given to the forest dwelling Scheduled Tribes and other traditional forest dwellers within the local limits, of its jurisdiction under this Act by receiving claims, consolidating and verifying them and preparing a map delineating the area of each recommended claim in such manner as may be

prescribed for exercise of such rights and the Gram Sabha shall, then, pass a resolution to that effect and thereafter forward a copy of the same to the Sub-Divisional Level Committee.

## **CONCEPT OF SUSTAINABILITY IN PENAL LAW, CIVIL LAW & COMMON LAW**

In addition to forgoing discussion there are provisions for protection of environment under Penal Law, Civil Law and Common Law.

### **A. PENAL LAWS**

The penal laws applicable in cases of environmental violations are:

- i. Indian Penal Code 1860.
- ii. Code of Criminal Procedure 1973.
- iii. The Police Act, 1861.

- i. Indian Penal Code 1860:

The polluters of the environment can be punished under the code for certain types of pollutions.

- ❖ *Water Pollution*: River springs and reservoirs belong to the public and therefore if a person pollutes it he commits the offence of public nuisance and is punishable under the code<sup>140</sup>.
- ❖ *Air Pollution*: The code specifically deals with air pollution. Anyone who vitiates the atmosphere or makes it noxious to the health of the people dwelling or carrying on business there or in the neighborhood or while passing through the area commits public nuisance<sup>141</sup>.
- ❖ *General Pollution*: Any act or omission by a person that causes any common injury, damage or annoyance to public or common people commits public nuisance<sup>142</sup>.

Public nuisance<sup>143</sup> is an offence against the people (public) which annoys the common man or which is a neglectful omission to do something for common good. However the provisions are largely ineffective as the punishment is token, fine<sup>144</sup>.

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<sup>140</sup> Section 277, Indian Penal Code 1860

<sup>141</sup> Section 278, Indian Penal Code 1860

<sup>142</sup> Section 290, 291, Indian Penal Code 1860

<sup>143</sup> Section 268, Indian Penal Code 1860

<sup>144</sup> Section 290, Indian Penal Code 1860

- ❖ Negligent act likely to spread infection disease dangerous to life is dealt with under Section 269<sup>145</sup>. It covers negligently aggravating dangerous diseases like cholera, plague, small pox.
- ❖ Disobedience quarantine rule is punishable under section 271<sup>146</sup>.
- ❖ Adulteration of food and sale of noxious food and drink is punished under section 272<sup>147</sup>.

The above brief presentation demonstrate that the Indian Penal Code does not deal with criminal activities relating to timber except under the offence of mischief<sup>148</sup> that causes loss to property caused by pollution. This includes the ecosystem. Felling of trees, deforestation, disturbing the flow of a river by diverting its path, causing soil erosion, siltation, disturbing the flora and fauna of a region, causing water, air, and other pollution are all covered under this. But again it entails token punishment of three months imprisonment of either description or fine which is not deterrent enough.

ii. Code of Criminal Procedure, 1973:

The code prescribes procedures for abatement of public nuisance. All types of nuisance causing pollution may be controlled and removed by District Magistrate or Sub-Divisional Magistrate by exercising power under sections 133, 143, and 144. Under section 133<sup>149</sup> a conditional injunction may be issued a particular person or under section 143<sup>150</sup> or in case of urgency section 144<sup>151</sup> may be invoked. However the provisions of the Criminal Procedure Code directly or indirectly do not deal with the issue of illegal felling of timber.

iii. The Police Act, 1861:

The Act deals with the prevention and control of noise under section 32 and 33 and suffers from non deterrent nature of the punishment. This Act, interalia deals with:

- ❖ Slaughtering of cattle, furious riding
- ❖ Cruelty to animal

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<sup>145</sup> Indian Penal Code 1860

<sup>146</sup> Indian Penal Code 1860

<sup>147</sup> Indian Penal Code 1860

<sup>148</sup> Section 425, Indian Penal Code 1860

<sup>149</sup> Criminal procedure code, 1973

<sup>150</sup> Criminal procedure code, 1973

<sup>151</sup> Criminal procedure code, 1973

- ❖ Obstructing passengers
- ❖ Exposing goods for sale
- ❖ Throwing dirt on the street.

## **B. CIVIL LAW**

The remedies under civil, provisions are available under the Code of Civil Procedure 1908 and the Specific Relief Act, 1963.

- ❖ Cases under which temporary injunction may be granted<sup>152</sup>
  - Any property dispute where the suit property is likely to perish, endanger, or wrongfully sold or used.
  - Defendants threaten to dispose off the property.
  - Defendant threatens to dispossess the petitioner
- ❖ Injunction to restrain repetition or continuance of breach is granted under Order 39 Rule 2 (2)<sup>153</sup>.

Specific Relief Act, 1963 is enacted to provide specific relief under certain defined action or omission of civil nature<sup>154</sup>. The word obligation includes every duty enforceable by law. The court may determine and declare status<sup>155</sup>.

It may be pointed out, yet again, that the provisions of Code of Civil Procedure and the Specific Relief Act does not address the issue of timber smuggling, tree felling and forest depletion effectively.

## **C. COMMON LAW REGIME ADDRESSING ENVIRONMENTAL ISSUE:**

- ❖ Nuisance:

The common law regime for the purpose of this research is limited to Tort Law. The most common, in common law is the wrongful act of committing a nuisance by which life, health,

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<sup>152</sup> Order 39 Rule 1, Code of Civil Procedure

<sup>153</sup> Code of Civil Procedure

<sup>154</sup> Section 4, Specific Relief Act, 1963

<sup>155</sup> Section 34, Specific Relief Act, 1963

property or comforts are jeopardized. Environmental pollution is brought within the purview of nuisance. It covers water and air pollution and can be extended to noise. But there is much difficulty preferring a suit for the tortious action of nuisance because of the exhaustive and diverse definitions of the term nuisance.

❖ Negligence:

It is a specific tort that may be specifically used for the purpose of preserving and protecting the environment. It is rooted in the concept of duty to care and breach of legal duty that results in injury and damage.

❖ No fault or strict liability:

This liability is somewhat peculiar. In that a person becomes liable without there being any fault on his part. Although it is a separate tort, it may be treated as an extension of both nuisance and negligence. The basis is foreseeable risk and yet it differs from both nuisance and negligence.

This doctrine is specifically valuable in context of environmental pollution. The most important and the foundational case to the point is *Ryland v. Fletcher*<sup>156</sup> where in it was held although the defendant was not guilty of negligence, he was still liable. This was termed as “Doctrine of Strict Liability”. Eventually this rule has been used in many numbers of cases.

The Bhopal Union Carbide Unit established in 1975 had stored methyl isocyanides liquid gas in huge quantity. There was a leakage of this gas and it spread over the sleeping township of Bhopal leading to endless dead and innumerable injured. The company was held absolutely liable. The more stringent doctrine of Absolute Liability was laid down by the Supreme Court in *M.C. Mehta and Another v. Union of India and Others*<sup>157</sup> and *Shriram Food and Fertilizer Industries and Another v. Union of India and Others*<sup>158</sup> which has far reaching implications for trade and industry.

## **THE EASEMENT ACT, 1882**

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<sup>156</sup> (1866) LRI EX 265

<sup>157</sup> WP (Civil) no: 12379 of 1985

<sup>158</sup> WP (Civil) no: 26 of 1986

Section 7 (f) of the Easement Act, 1882, every riparian owner has a right to the use of water of a natural stream. A riparian owner is entitled to the uninterrupted flow of water of a river or canal but he has no right to pollute the same.

Common law may cope up with the pollution resulting from non-industrial sources. But it does not address the issue of forest protection, conservation and timber trade.

## **INTERNATIONAL REGIME AND MULTILATERAL ENVIRONMENTAL AGREEMENTS**

### **A. CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES**

**(CITES):** The growing global economy is placing an increasing strain upon global ecosystems. Sometimes this strains involves the over exploitation of species, putting them at risk of extinction. Due to the integration of the global economy, such over exploitation appears to be often driven by international trade. As regards timber from natural forests, however, it needs to be recognized that the volume of the trade has not shown a growing trend.

The CITES was adopted in 1973. The purpose of CITES, is to protect wild flora and fauna for current and future generations. Wild flora and fauna are described as an irreplaceable part of the natural systems of the earth and as being valuable from aesthetic, scientific, cultural, recreational and economic points of view<sup>159</sup>. CITES establishes international cooperation for the protection of certain species from over exploitation through international trade<sup>160</sup>. The purpose of adopting the convention was not only to avoid aggravation of an ecological problem, but also to prevent a penalization of countries, in particular the US, with stricter ecological legislation. The Cites proposal to control trade in certain timber species have been controversial. Many countries have not accepted the CITES listing criteria applicable to trees for being unscientific. This includes trade in Mahogany which appears thrice in CITES Appendix II. The problem is

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<sup>159</sup>. Convention on International Trade in Endangered Species of Fauna and Flora (CITES), 3 March 1973, Preamble (1), (2), Available at: <http://www.cites.org/eng/disc/text.shtml>.

<sup>160</sup> CITES, Preamble (4), as cited in-FAO CORPORATE DOCUMENT PEPOSITORY, Trade and Sustainable Forest Management and Interactions, Available at: <http://www.fao.org/docrep/007e/ae017/ae017e07.htm>.

inadequate scientific data and information. It is felt that such incomplete and imperfect information will have a negative impact on timber trade<sup>161</sup>.

## **B. UN CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED):**

The relationship between economic development and environmental degradation was first placed on international agenda in 1972 at the UN Conference on Human Environment held in Stockholm. Following the conference it was realised that environmental protection and natural resource management has to be integrated with socio-economic issues of poverty and under development. In 1987 the UN World Commission on Environment and Development (WCED; Brundtland Commission) develop the idea of “sustainable development” in its report “our common future: the World Commission on Environment and Development” widely called the “Brundtland Report”. After considering the report in 1989 the UNCED was convened and the process of planning and negotiations among all member states of the UN was initiated. After four session of the Preparatory Committee the conference, also known as the “Earth Summit” was held at Rio-de-Janeiro in June 1992. The primary goal of the conference was to arrive at a common understanding that social, environmental, and economic needs must be met in balance with each other for long term sustainable out comes. Its success is focusing the global attention on sustainable development as a workable objective for all actors and stake holders at various levels. The conference produced a new plan for international cooperation and policy on Environmental and Developmental issues<sup>162</sup>.

## **C. THE RIO PROCESS:**

In Rio de Janerio, governments adopted three major agreements aimed at changing the traditional approach of focusing only on the economic growth to sustainable development. The three agreements are<sup>163</sup>:

1. The Agenda 21 is a comprehensive programme for global action in all areas of sustainable development. It is divided into 4 sections and 40 chapters in which it addresses the challenges for sustainable development and contains detailed proposals

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<sup>161</sup> FAO CORPORATE DOCUMENT PEPOSITORY, Trade and Sustainable Forest Management and Interactions, Available at: <http://www.fao.org/docrep/007e/ae017/ae017e07.htm>

<sup>162</sup> Ibid.

<sup>163</sup> Ibid

for action. It takes into account socio-political dimensions in participatory decision making process. Chapter 11 of this document is entitled combating deforestation. Under this the document outlines the field of forestry and addresses the issues of multiple functions of all types of forests, sustainable management and conservation of all forests, afforestation, reforestation and the establishment of capacities for planning, assessment and systematic observations of forest and processes.

2. The Rio declaration is a series of 27 principles defining the rights and responsibilities of states among each other and their relationship with society. It addresses the industrialized countries as most powerful polluters and calls for integration of environment protection in all fields of policy, participation of public and effective environmental legislation<sup>164</sup>.
3. The Forest Principles are a “non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests”<sup>165</sup>. This statement is the first global consensus reached on forests.

#### **D. UN COMMISSION ON SUSTAINABLE DEVELOPMENT (CSD):**

The UN Commission on Sustainable Development (CSD) was established by the UNGA<sup>166</sup> in December 1992 as a functional commission of the ECOSOC<sup>167</sup> to ensure effective follow-up of UNCED. The original mandate of CSD is to review the implementation of UNCED at the international regional and national level particularly in relationship with Agenda 21. The main basis of the monitoring process is through annual reports submitted by the governments. Another of the CSD is to promote dialogue and build partnership for sustainable developments between the stake holders and actors.

A five year review of the Earth Summit progress known as Rio+5 was done in June 1997 by the UNGA Special Session (UNGSS) in New York. Rio+10 were held in 2002 by the World Summit on Sustainable Development (WSSD)<sup>168</sup>.

#### **E. INTERGOVERNMENTAL PANEL ON FORESTS (IPF) AND INTERGOVERNMENTAL FORUM ON FORESTS (IFF):**

An adhoc open ended Intergovernmental panel (IPF) for the tenure of two years was constituted in 1995 in the third session of CSD. IPF was to provide a forum for international

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<sup>164</sup> A/CONF.151/26(Vol. III), <http://www.fao.org/docrep/007e/ae017/ae017e07.htm>

<sup>165</sup> Ibid.

<sup>166</sup> United Nation Global Action.

<sup>167</sup> Economic and Social Council.

<sup>168</sup> FAO CORPORATE DOCUMENT REPOSITORY, Trade and Sustainable Forest Management and Interactions, Available at: <http://www.fao.org/docrep/007e/ae017/ae017e07.htm>

forest policy dialogue. In 1997 the process continued through another open ended adhoc body called the Intergovernmental Forum on Forest (IFF) for the tenure of three years. In 1995 eight international organizations namely, FAO, UNDP, UNEP, ITTO, World Bank, CSD and Secretariat of the CBD setup an Interagency Task Force on Forest (ITFF) to coordinate the inputs of these organizations to the framing of international forest policy. The overall objective of IPF and IFF is to develop coherent policies to promote the management, conservation and sustainable development of all types of forests. In pursuance of this mandate the IPF was expected to focus on 12 issues clustered in five interrelated categories and submit the final recommendations to the CSD in 1997<sup>169</sup>. They are:

- Implementation of forest related decisions taken during the UNCED at the national and international level including examination of sectoral and cross-sectoral linkages.
- International cooperation in financial assistance and technology transfer.
- Scientific research forest assessment and development of criteria and indicators for sustainable forest management.
- Trade and environment in relation to forest product and services.
- International organizations, multilateral institutions and instruments including appropriate legal mechanisms.

In 1997 when the report was presented no consensus could be reached on major issues of financial resources and technological transfer.

The IFF made certain recommendations and ECOSOC, base on those recommendations established the UN Forum on Forest (UNFF) in 2000, which was setup as a subsidiary body of ECOSOC and acquired a legal entity. The main object of UNFF is<sup>170</sup>:

1. Management, conservation and sustainable development of all types of forests and to strengthen long term political commitment to this end.
2. Facilitate implementation of forest related agreements and foster a common understanding on Sustainable Forest Management (SFM).
3. Provide for continued policy development and dialogue as well as to address forest issues and emerging areas of concern in holistic, comprehensive and integrated manner.
4. To enhance cooperation as well as policy and programme coordination on forest related issues.

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<sup>169</sup> Ibid.

<sup>170</sup> Ibid

5. To foster international cooperation.
6. To monitor, assess and report on progress of the above functions and objectives and;
7. Strengthen political commitment to SFM.

In 2005 the UNFF evaluated the efficiency of IAF and addressed the institutional framework for the UNFF<sup>171</sup>.

#### **F. COLLABORATIVE PARTNERSHIP ON FOREST (CPF)<sup>172</sup>:**

CPF was established by the ECOSOC in 2001. It is a partnership of 14 major forest related international organizations, institutions and convention secretariats. The objectives if CPF are as follows:

1. Implementation of IPF/IFF proposals for actions.
2. Provide expertise and advisory services to UNFF.

CPF reports annually to UNFF and presents a document entitled “CPF framework”. In order to work efficiently the CPF has designated focal agencies and supporting agencies.

#### **G. FOOD AND AGRICULTURAL ORGANIZATION (FAO)<sup>173</sup>:**

The FAO facilitates contacts and information flow among the ongoing, new and emerging processes and between these and other related programmes such as National Forest Programmes, Global Forest Resources Assessment and the works within the framework of CBD. FAO’s statistical and analytical work on these areas is highly relevant and significant. It monitors the development of tariff and non-tariff barrier in international trade through series of studies. It lays emphasis on compatibility, comparability and harmonization of forest related matters. It supports capacity building, cooperation and information dissemination.

#### **H. INTERNATIONAL TROPICAL TIMBER ORGANIZATION (ITTO)<sup>174</sup>:**

The ITTO was established by the United Nation in 1986 amidst increasing concern for the faith of the tropical forest. On one hand there was extensive deforestation during this period and on the other hand there was an agreement that timber trade was one of the keys to economic development. ITTO’s function is to reconcile these two seemingly disparate phenomena. ITTO’s origin can be traced back to the long series of negotiations that led to the first International Tropical Timber Trade Agreement (ITTA) began at fourth session of United Nations on Conference on Trade and Development (UNCTAD). ITTA’s chief concern is the fate of tropical forest and it was the first organization to promote conservation of forest

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<sup>171</sup> Ibid.

<sup>172</sup> Ibid

<sup>173</sup> Ibid

<sup>174</sup> Ibid.

and development of trade. In effect it is the predecessor of the Brundtland Commission and the Earth Summit. In 1994 ITTA built the foundation for sustainable management of resource base and simultaneously encouraging timber trade for the promotion of the economy of developing nations. It contains mechanism for information sharing, data collection on tropical timber. Its unique feature is that, unlike other intergovernmental organizations it concentrates on trade and industry but like an environmental organization it also pays considerable attention to the sustainable management of natural resources. Its focal points are:

1. Equal partnership in decision making and policy formulation.
2. Active participation of civil society and trade organizations in meeting the stated goals.
3. Formulation and implementation of projects in timber producing countries using local expertise.

## **CONCEPT OF SUSTAINABILITY IN INTERNATIONAL INSTRUMENTS**

Protection and conservation of forest has been a major concern of the International Law. The International Community has been greatly concerned not only with a particular form of pollution but also with the holistic approach to the problem. Pollution and degradation in one country is a cause of deterioration in environmental quality everywhere since 1972. Several attempts have been made to control environmental degradation.

### **A. UN CONFERENCE ON HUMAN ENVIRONMENT 1972 AT STOCKHOLM:**

It is universally known that international law regarding environmental protection really gained its significance in 1972 with the holding of the UN Conference on the Human Environment at Stockholm, as a consequence of the public awareness about the growing environmental pollution. The Stockholm conference trusted upon three major aspects, namely, recognition of environmental problems, the growing scientific understanding of inter-relatedness of natural systems and the concern of public over the humiliating impact of human activities on the global environment. Stockholm conference worked on a system of environmental coordination for the U.N. The establishment of United Nations Environment Programme (UNEP) is a major step in this direction.

### **B. RIO CONVENTION 1992:**

The international conference on Environment was held in Rio de Janeiro in 1992. It discussed the global and environmental problem widely. There are twenty seven principles adopted in Rio declaration. The conference deeply concerned with the green house effect, deforestation, desertification, global warming, ozone depletion, population, technology transfer, finance and degradation. It gave importance to environmental legislation, environmental impact assessment, and economic, scientific and technological policy development. The convention aspired that the developed countries should take measures returning their emission of carbon dioxide and other greenhouse gases to 1990 levels by the year 2000. It stressed the importance to plan to eradicate the poverty and achieve sustainable development.

**C. JOHANNESBURG CONVENTION 2002:**

States assembled at world summit on sustainable development in Johannesburg from 2-4 September 2002 and reaffirmed their commitment to the Rio principles. They decided to promote the integration of the three components of sustainable developments, economic development, social development and environmental protection- as interdependent and mutually reinforcing pillars.

**D. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, 1992:**

The mid 1980s was a period of increased concern with the human impact on global climate. The Inter-governmental Panel on Climate Change (IPCC) established by the World Meteorological Organization and the UN Environmental Programme, presented evidence of global climate change with its first report in 1990. As global environmental concern gained public awareness, international action to address the threat of global climate change became a viable response.

In 1992, the United Nation Framework Convention on Climate Change, New York, 1992 was adopted. It came into force in 1994. The convention set forth the ultimate objective of stabilizing atmospheric concentrations of green houses at safe levels.

Some legally binding international instruments are described with the help of a table<sup>175</sup>:

**FOREST RELATED LEGALLY BINDING INSTRUMENT**

<b>Instrument</b>	<b>Forest Related Focus</b>	<b>Dated Adopted</b>	<b>Secretariat</b>
<b>Global</b>			
<b>1.Stockholm</b>	Protects human	2001	UNEP

<sup>175</sup> R.N. Choudhry, Laws of Forests in India, 3<sup>rd</sup> Edition 2011 (reprint), Orient Publishing Company.

convention on persistent organic pollutants	health and the environment from persistent organic pollutants (POPs). : Heptachlor and Chlordane are used extensively to control termites. A third, Mirex, is also a termiticide and can be relevant for protection of trees and plantations against ants.		
2. Rotterdam convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade	Promotes shared responsibility and co-operative efforts among parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm and to contribute to their environmentally sound use, by facilitating information exchange about their characteristics, by providing for a national decision making process on their import and export.	1998	UNEP and FAO jointly
3. International tropical timber agreement	Promote international trade in tropical timber, the sustainable management of tropical forests and the development of forest industries through international consultation and co-operation, policy work and project activities.	1994	ITTO
4. World Trade	Rules of trade	1994	WTO

Organization (WTO) agreements consisting of approximately 60 agreements, annexes decisions and understandings.	covering goods, services and intellectual property, including timber and non-timber forest products.	post-1994	
5. Convention on biological diversity	Conservation and sustainable use of forest biological diversity and the fair and equitable sharing of the benefits from the use of forest genetic resources	1992	UINEP
6. Cartagena Protocol on Biosafety to the Convention on Biological Diversity	Biosafety related to genetically modified forest species	2001	UTNEP
7. United Nations Framework Convention on Climate Change (UNFCCC)	Aims to stabilizing the concentration of green house gases in the atmosphere so as to prevent dangerous human induced changes to the global climate system, and in so doing is considering the role that could be played by forests.	1992	UN
8. Kyoto Protocol to the United Nations Framework Convention on Climate Change1.	Considering flexible implementation mechanisms, including, Joint Implementation and the Clean Development Mechanism. Which will include forestry projects that address climate change	1997	UN
9. United Nations Convention to Combat Desertification	Forests are addressed as an important element for the prevention of drought and desertification, at the same time that deforestation is	1992	UN

	acknowledged as a contributor to desertification and land degradation		
<b>10.</b> Convention on International Trade in Endangered Species	Endangered forest species subject to international trade	1973	UNEP
<b>11.</b> Ramsar Convention on Wetlands	Protection of wetlands of international importance especially as waterfowl habitat, including mangrove forests; guidelines for river basin management taking into account the role of forests.	1971	IUCN
<b>Regional</b>			
<b>12.</b> ASEAN AGREEMENT on the conservation of nature and natural resources.	Addresses several subjects including soil, water, sea, air, flora, fauna, forests, lands, protected areas, natural resources & nature conservation.	1985	ASEAN Secretariat

Some forest related non-legally binding agreements & processes are described with the help of a table<sup>176</sup>:

### **FOREST RELATED NON-LEGALLY BINDING AGREEMENTS & PROCESSES**

<b>Agreement or Process</b>	<b>Forest-Related Focus</b>	<b>Dated Adopted/ Established</b>	<b>Secretariat/ Responsible Body</b>
<b>1.</b> Global Programme of Action for the Protection of the Marine Environment from Land-based Activities	Two of nine land-based sources of pollution are relevant to forests: sedimentation and physical alteration	1995	UNEP

<sup>176</sup> Ibid

	and destruction of coastal ecosystems, including mangrove and other coastal forests		
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### Global Intergovernmental processes

<b>2.</b> Johannesburg Plan of Implementation of the World Summit on Development	The achievement of sustainable forest management through partnership involving Government and Stakeholders, including all major groups, is an essential goal of sustainable development. To this end, several key actions were adopted.	2002	UN
<b>3.</b> The United Nations Forum on Forests	Intergovernmental policy forum to promote the management, conservation and sustainable development of all types of forests and to strengthen long term political commitment to this end	2000	UNFF Secretariat
<b>4.</b> G-8 Action Programme on Forests (Canada, France, Germany, Italy, Japan, The Russian Federation, The United Kingdom & United States	Focuses on 5 elements: monitoring and assessment of forests, national forest programmes, protected areas, the private sector and illegal logging. Actions are directed both nationally and	1998	

	internationally through bilateral assistance programmes and support to international processes.		
<b>5. Commission on Sustainable Development</b>	Monitoring and assessment of the implementation of Agenda 21, including Chapter 11 on Combating Deforestation, and the including paragraph 45 on sustainable forest management.	1992	Division for Sustainable Development
<b>6. FAO Committee on Forestry</b>	Comprised of Senior Government Representatives, the Committee advises FAO on its work related to forests, including reviewing international forestry problems and FAO's work programme on forestry. Region (vegetation zone/geographic area).	1973	FAO Supporting body

**SFM Criteria and Indicators Processes**

<b>1. Dry Forest Asia Initiative</b>	South Asia & Mongolia, China, Myanmar, Thailand.	1999	FAO/UNEP/ITTO
<b>2. Lepaterique Process</b>	Central America	1997	CCAD/FAO
<b>3. African Timber</b>	Tropical Forests of	1996	ATO

Organization	Africa		
4.Near East Process	Near East	1996	FAO/UNEP
5.Montreal Process	Mainly temperate and boreal forests in North & South America, Asia & Oceania	1995	Liaison Office hosted by Canada
6.Tarapoto Proposal	Amazon basin	1995	Act Pro Tempore Secretariat
7.Dry Zone Africa Process	Sub-Saharan Africa	1995	UNEP/FAO
8.Pan European Process	European boreal and temperate forests including the portion of Russia's forests in Asia	1994	MCPFE
9.Sustainable management of natural tropical forests	Tropics	1992	ITTO

### **SUSTAINABILITY IN TIMBER TRADE**

Every human being has a natural impulse to develop, nurture or steps forward. "Development" an expression belonging to the area of economics, has at the present time acquired a central and unique category. Development is an intricate observable fact and is used as a synonym of modernization, urbanization and industrialization. In twenty first century terms like "development", "modernization", "growth", and progress have become paranormal concepts whose usefulness is outside the sphere of challenge and, therefore, any question that attacks these concepts is shunned. With the passage of time the question of development and degradation to environment became more dominant when it was realised that our environment is being affected adversely and it is causing damage to life and property on the earth. For growth or advancement man depends predominantly upon on natural resources and it is a well known fact that natural resources are not unlimited. Unreasonable and reckless use of natural resources has very dangerous consequences upon the environment

but on the other side development has its own dynamism and momentum, it cannot be stopped. For this reason the concept of sustainable development was developed for the first time by the International Union for the conservation of nature (IUCN) in the year 1980 in its world conservation strategy, to strike a balance between management and consumption. The concept of sustainable development was later popularized by the Report “Our Common Future” in 1984 by Norwegian Minister President Brundtland<sup>177</sup>. Sustainable development actually includes, *development which "meets the needs of the present without compromising the ability of future generations to meet their own needs"*

Applying the wide-ranging Brundtland definition of sustainable development to tropical timber production, for it to be a sustainable process, it should be able to meet the needs of the present time and the same time be regenerated so that the future generation may also meet their own needs. In terms of timber extraction this formula is generally applied to the amount or financial value of the lumber extracted from the forest; this approach can be described as *'fisco-sustainability'*<sup>178</sup>. A scrutiny of any given timber operation based solely on 'fisco-sustainability' would therefore not essentially take into account the loss of the timber producing tree and its environmental cost. Moreover, it will also not take into account the social and environmental cost of non regeneration of that timber. That a tree genus has become extinct would only indicate the loss of money/revenue when looked at from the point of view fisco-sustainability but the other loss of the environmental and biological resource would not be reflected. Similarly when natural forest is replaced by manmade forest, according to fisco-sustainability it would be “sustainable” without taking into account the social, environmental and biological cost. That type of narrow approach to sustainability, which is frequently described by the expression 'sustained yield', does not consider conservation of the biological integrity of the original forest bionetwork, such as whether species of wildlife are able to adapt to the new conditions created by logging or replanting. It also neglects maintenance of environmental services, such as watershed protection and soil conservation, survival of the forest dependent, local populations. These, misinterpreted factors are termed biological, environmental and social sustainability. Many tropical forestry experts agree that it will be impossible to sustain tropical forests over the long term without the establishment and enforcement of appropriate government policies. For instance,

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<sup>177</sup> H.N. Tiwari, Environmental Law, 4<sup>th</sup> Edition, 2011, Allahabad Law Agency, pp.56-58

<sup>178</sup> Sustainability and The Trade In Tropical Rainforest Timber, see [http://www.foe.co.uk/resource/briefings/sust\\_trade\\_tropical\\_timber.html](http://www.foe.co.uk/resource/briefings/sust_trade_tropical_timber.html), visited on 1.3.2012 at 10 a.m.

authorities like Brundtland Commission and Food and Agricultural Organization (FAO) suggest that policies must be developed to ensure comprehensive land use planning, improve timber concession agreements, provides incentive for sustainable practices through taxation and other fiscal control, encourage the increased use of agro-forestry and forest plantations, ensure the participation of local peoples in the benefits of timber harvesting, and protect the permanent forest estate once it has been established. After such policies have been developed, government must also have the political will to enforce them, only then will be a chance for forest to be sustained<sup>179</sup>.

Because not all definitions of 'sustainable tropical forest management' recognize these distinctions there has been considerable confusion in trying to define what is actually meant by the term sustainability. This has led to various authors questioning its very utility. Colchester, for example, has stated that "the fact that everyone who addresses this thorny topic has their own notion of what sustainable actually means provides one of the main sources of confusion in this debate"<sup>180</sup>. The International Institute for Environment and Development (IIED) notes that "it is questionable whether one universal definition of 'sustainable management' is useful, because it will lend itself to different interpretations by different interests"<sup>181</sup>. The very ambiguity and lack of clear definition and understanding of the phrase has made it a convenient spring-board from which narrow commercial and political self-interests are often promoted. In a policy document for the World Bank, Lee Talbot<sup>182</sup>, concludes "sustainability is a smoke screen to cover destruction of irreplaceable forests for financial gain"<sup>183</sup>.

There is an increasing demand for timber from sustainably managed forests in the international market. Despite continued efforts, illegal timber trade is still common both in temperate and tropical regions. The underlying causes of illegal timber trade are complex, particularly in developing countries involving economic, social, cultural and political issues. The impact of illegal trade on markets is of concern to both timber producing and consuming

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<sup>179</sup>. D.P. Dykstra and R. Heinrich, Sustaining tropical forests through environmentally sound harvesting practices, FAO CORPORATE DOCUMENT REPOSITORY, Title: Sustainability, Produced by Forestry Department, <http://www.fao.org>.

<sup>180</sup>. State of World's Indigenous Peoples, Department of Economic and Social Affairs, Division for Social Policy and Development, Secretariat of the Permanent Forum on Indigenous Issues, ST/ESA/328, United Nations Publications, Sales No.09.VI.13, ISBN 92-1-130283-7, United Nations, New York, 2009.

<sup>181</sup>. Kostas Koukouzelis, Sustainable Development, Liberty, and Global Social Justice, Conference at Bucharest, Public Reason 4 (1-2)/165-81, 2012.

<sup>182</sup> ex-director of the International Union for Conservation and Nature (IUCN), and formerly an environmental consultant for the World Bank's Africa Environment Unit

<sup>183</sup> Refer to note 58

countries. The difficult task of addressing the issue of the sustainability of the international trade in timber within the context of the serious problem of illegal logging holds the main international focus with the aim of ensuring that all timber exports are at least compatible with the legislation of the country of origin. According to Food and Agricultural Organization (FAO) the underlying causes of illegal timber trade are flawed policy and legal framework; minimal enforcement capacity; insufficient data and information about the forest resource and illegal operations; and corruption in the private sector and in government. All these are areas that need to be addressed if forest protection worldwide is to become a reality<sup>184</sup>. Each year 45,000-50,000 sq.km of forest is brutalized due to illegal logging which include tropical and temperate zones. Although loggers often 'selectively fell' a few preferred species, the process is often immensely destructive. To remove only two or three trees per hectare, logging equipment often destroys over 50% of the residual timber stand. Under such circumstances natural regenerative capacity is disrupted the forest, if the forest recovers at all, is substantially altered. Such extraction techniques have no long-term future<sup>185</sup>.

*Forest/timber certification* schemes are also the major topics relating to timber trade issues these days. Forest/timber certification certifies that the forest from which the timber is harvested is managed in a sustainable manner. The idea of forest/timber certification seems to be sound, but there are problems in implementation and possible conflicts with free trade doctrines. Basic problems in implementation include “how” to conduct certification and “who” will do it. Another problem is how to trace timber from sustainably managed forests to final products. Certification schemes may attract more demand for certified timber, and some producing countries are advocating them, but they may levy enormous costs which will in turn encourage illegal timber trade and others are against the idea. Free trade doctrine emphasizes the merit of comparative advantage. In order to assure the functioning of comparative advantage, discrimination of products due to difference in process is prohibited. The certification schemes discriminate products, (i.e. timber) based on processing (i.e. mode of forest management).<sup>186</sup>

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<sup>184</sup> Sustainable Timber Second Report of Session 2004–05, Volume I, House of Commons Environmental Audit Committee, p.10. See <http://www.publications.parliament.uk/pa/cm200506/cmselect/.../607i.pdf>, visited on 20.3.2012 at 11 a.m.

<sup>185</sup> Sustainability and The Trade In Tropical Rainforest Timber, see [http://www.foe.co.uk/resource/briefings/sust\\_trade\\_tropical\\_timber.html](http://www.foe.co.uk/resource/briefings/sust_trade_tropical_timber.html), visited on 1.3.2012 at 10 a.m.

<sup>186</sup> Shin Nagata, The Scope of Timber Trade Policy to Support Sustainable Forest Management, p 342. See <http://www.enviroscope.iges.or.jp/modules/envirolib/upload/1504/.../ir98-4-2.pdf>, visited on 2.3.2012 at 11 a.m.

For many years, there was a misconception that the timber trade plays a negligible role in forest loss, and that most deforestation is caused by agricultural clearance or fuel wood collection. However, research conducted by World Wide Fund (WWF) leads to the opposite conclusion taking the survival of biodiversity as a major criterion. WWF concludes that the timber trade is currently the most important cause of loss and forest degradation around the world.<sup>187</sup>

Timber trade has direct and indirect influences on the environment. The indirect influences are commonly perceived to be more important. At the same time, environmental conditions, policies and regulations influence the market access and competitiveness of individual producers of forest products and thus affect trade flows. While trade in forest products is perceived as the major driving force for sustainable management of natural resources. International trade liberalization and corresponding national macroeconomic policy reforms have led to expanding exports by developing countries, particularly in commodities, thereby increasing pressure on the environment. Trade based on unsustainable practices in forest operations has been seen as a major factor contributing to deforestation and forest degradation, particularly in developing countries. In a number of tropical countries such as Africa, Southeast Asia and the Guyana Shield, export oriented production has apparently accounted for a significant share of forest loss and degradation<sup>188</sup>. In addition to direct impacts, indirect effects, such as opening up forest areas for encroachment, can become or trigger underlying causes of deforestation. Indirect impacts on deforestation are linked to such factors as changing production and consumption patterns (including expanding demand for food), expansion of subsistence agriculture and specially the demand for fuel wood. There is an ever-increasing demand for timber from sustainably managed forests in the international market place. In spite of nonstop efforts, unlawful timber trade is still regular both in temperate and tropical regions.

Tropical forest loss can be endorsed to social factors such as institutions, population strain, traditional practices, and the demands of economic growth, and to natural factors such as forest fires and atmosphere. Some institutional deficiencies are underdeveloped land systems and environmental protection systems, as well as inadequate administrative management capacity, while an especially significant population pressure factor is increasing rural

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<sup>187</sup> The World Wide Fund For Nature, The Timber Trade and Global Forest Loss, see <http://www.panda.org/home.htm>, visited on 20.3.2012 at 2 p.m.

<sup>188</sup> Analytic Process and Setting the Scene, <http://www.fao.org/docrep/007/ae017e/ae017e01.htm>, visited on 21.3.2012, at 2.30 pm.

population density. Economic development involves agricultural development, industrialization, and earning foreign currency, as well as non-traditional shifting cultivation (opening land by burning its vegetation), livestock grazing, and fuel wood gathering. However, considering these from a different standpoint as direct causes shows the problem in a new light. Excessive export-oriented commercial logging, the creation of agricultural land for business related plantations to grow oil palms and coffee, urbanization motivated land use changes, and non-traditional broken up cultivation by landless peasants, as well as large forest fire. Few would deviate that the timber trade is intimately linked to the turn down of forests, but it is wrong to simplistically presuppose that deforestation is the fault of importing or exporting countries. It was not just international market demand that brought the timber boom to Southeast Asian countries; other factors were that governments and political forces of the involved countries badly wanted this trade, and that laws controlling logging and distribution were not properly enforced.<sup>189</sup>

The very important cause of depletion of forest and the environmental degradation is illegal logging. It takes place when timber is harvested, transported, bought or sold in violation of 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, mis-declaration to customs and avoidance of taxes and other charges. In tropical countries, logging for wood products is responsible for deforestation. Possibly more than half of all the logging activities in the most vulnerable regions are conducted illegally. 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.<sup>190</sup> 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

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<sup>189</sup> Trade and environment: promoting environmentally friendly trade, p.50. See [www.ase.tufts.edu/gdae/education.../Trade\\_and\\_the\\_Environment.pdf](http://www.ase.tufts.edu/gdae/education.../Trade_and_the_Environment.pdf), visited on 17.3.2012 at 10 a.m.

<sup>190</sup> Duncan Brack, Controlling Illegal Logging and the Trade in Illegally Harvested Timber: The EU's Forest Law Enforcement, Governance and Trade Initiative, *RECIEL 14 (1) 2005*, p. 28.

for law and the corruption it promotes, which are damaging to governance and social cohesion alike.

Logging for timber is actually not the only cause of deforestation. An equally important reason for deforestation is land conversion i.e. turning forests into profitable agricultural land. It regularly occurs that laws are broken during the land conversion practices. For example, the promised social projects and investments are regularly not effectuated, or more is logged than agreed.<sup>191</sup>

## **TIMBER TRADE- ITS EFFECT ON THE SURVIVAL OF FOREST DWELLERS**

There is a symbiotic correlation among the forest dwellers and forest. Forest dwellers or tribal's are considered protectors of forest. Forests are home to an estimated millions of indigenous people, who are directly dependent on forest resources and the health of forest ecosystems for their livelihoods. The cultural and spiritual identity of indigenous peoples is often linked to intact primary forests with their rich biodiversity. There are approximately 400 million indigenous people across more than 70 countries, with a high percentage located in tropical areas. They depend on the forest to sustain their ways of life, including their cultures and spiritualities.<sup>192</sup> One of the most striking findings of the study is how timber and fuel wood have become a significant component of the livelihoods of so many different groups of forest dwellers. Whereas this used to be a central component of the livelihoods of just a few, for example poor rural households for whom collecting firewood was an important source of income, charcoal producers, and the main timber traders, there are now large numbers of people heavily dependent on timber and fuel wood for part, if not most, of their livelihood. What used to be a coping strategy for rural households in times of stress collecting and selling firewood, for example during drought years has now become a strategy of adaptation in the current conflict. Wherever possible some poor urban households are collecting fire wood to sell in urban markets as a source of income. The extent to which this is possible varies from one geographical location to another, according to security and access to forest resources as well as availability.<sup>193</sup> Many forest dwellers collect small quantities of

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<sup>191</sup> Tim Boekhout van Solinge, Eco-Crime- The Tropical Timber Trade , p.106. See <http://www.rodolfocordova.com/.../Boekhout%20timber%20crime.pdf>, visited on 21.3.2012 at 8 p.m.

<sup>192</sup> A Good Practice Guide Sustainable Forest Management, Biodiversity and Livelihoods, see <http://www.thereddsite.wordpress.com/.../cbdiucn-good-practice-guide-on-forest...>, visited on 20.3.2012 at 3 p.m.

<sup>193</sup> Destitution, distortion and deforestation, United Nations Environment Programme (November, 2008), Pp. 11-13, See [http://www.postconflict.unep.ch/publications/darfur\\_timber.pdf](http://www.postconflict.unep.ch/publications/darfur_timber.pdf), visited on 19.3.2012 at 10 a.m.

firewood which they sell directly to consumers, or they are hired by traders to go into the bush with trucks and armed escorts. Timber cutting has become one of the world's foremost threats to indigenous people and the environment. Around the world tropical timber cutting is becoming the driving force of deforestation, dispossessing forest people from their homes and destroying the most diverse environments on earth. Once a minor cause of forest loss, timber cutting is now dominated by the economics of exhaustion. Already, in several parts of the tropics, loggers have consumed all the wood available to them and reinvested in other industries. Now, on the new frontiers, the cutting is characterized by extraordinary haste and carelessness, the damage caused is out of all proportion to the amount of wood removed. The political influence of many timber companies renders them almost immune to attempts to restrain them.

However the recent position is that the locals, such as forest tribes, it is difficult to address their concerns, as they are dealing with commercially and politically powerful individuals or corporations. In practice, the illegal destruction of some forests not only signifies a threat to the survival of animals and plants living in the forests, but also to the many millions of forest and village people around the world who are directly dependent on forests. It is part of the human experience that people have lived in forests as hunters and gatherers, but this age-old life style is now seriously threatened.

To satisfy the demand for tropical timbers, the logging industry continues to exploit virgin rainforest in search of the mature, valuable and aesthetically pleasing species. Logging roads and extraction tracks open up previously inaccessible areas to shifted cultivators and landless migrants who follow such routes into new areas and may clear the forests permanently. This leads to an irreversible diminution in rainforest cover which has negative effects for the wildlife, the local communities and the environment on which both depend.<sup>194</sup>

Besides this, Illegal logging can affect local communities in the countries where it is occurring. Local communities may depend on forests for non-timber forest products (e.g., fruits and medicines) as well as for habitat and cover for wild game and fish. Illegal logging in these areas may convert forest ecosystems to less useful ecosystems such as grasslands. In some parts of the world, illegal logging has been termed "conflict logging," similar in meaning to conflict diamonds. For example, money earned from the illegal trade in wood has been traced to the purchase of weapons used in conflicts such as the one between Liberia and

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<sup>194</sup> Sustainability and the trade in tropical rainforest timber, see, [http://www.foe.co.uk/resource/briefings/sust\\_trade\\_tropical\\_timber.html](http://www.foe.co.uk/resource/briefings/sust_trade_tropical_timber.html), visited on 1.3.2012 at 11 a.m.

Sierra Leone.<sup>195</sup> The continuous increase in timber production using destructive harvesting practices, and without adequate management to facilitate natural forest regeneration, suggests a grim future for the forest dependent. Timber trade is nowadays increasing gradually to satisfy the pockets of the timber merchants but on the other side it is a very big obstacle for forest dwellers because they are fully dependent on forest for their food, cloth and shelter, in the forest there are some medicinal and aromatic plants on which they are depend upon for their health and commercialization's of timber gradually vandalizing such aromatic and medicinal substances. Despite the benefits to different stakeholders derived from forest resources, the activities of timber companies have been identified as the most significant immediate threat to the integrity of tropical rainforest ecosystems and the livelihoods of forest dwellers in central Africa. 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. For instance some of the companies responsible for the devastation of the natural forest of that country in the recent past are now operating in Cameroon and other countries of the Congo Basin.<sup>196</sup>

Drawing a balance between environmental conservation and development seems to be the toughest challenge of the century. Timber and timber related industry is market driven. Since there is not many popularly accepted substitute for timber, timber trade shows two trends:

(a). Rise in illegal logging

(b). Rise in the practices of timber and timber related products.

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<sup>195</sup> Pervaze A. Sheikh, Illegal Logging: Background and Issues, see <http://www.nationalaglawcenter.org/assets/crs/RL33932.pdf>, visited on 2.3.2012 at 11 a.m.

<sup>196</sup> Ousseynou Ndoye & Julius Chupezi Tieguhong, Forest Resources and Rural Livelihoods: The Conflict Between Timber and Non-timber Forest Products in the Congo Basin, p.37, see, <http://www.tandfonline.com/loi/sfor20>, visited on 14.3.2012 at: 01:21 p.m.

The above factors have a negative impact upon forest and diversity.

The Supreme Court in India has played a pivotal role in protecting India's environment giving rise to what may be termed as "green jurisprudence". Today right to wholesome environment is a fundamental right to life under Art.21 of the constitution. The pro-environment stand of the apex court has been traced to 1980. However late 1990s there has been a paradigm shift with the Supreme Court extending a weight-age to developmental project with a precondition that environment should not be affected adversely. Thus there is strong 'sustainability' jurisprudence in India. India is now guided by the doctrine of "Sustainable Development"

A necessary extension of sustainable development is sustainable forest management. This involves classifying and grading of the forest and the ecosystems and evolving policies of least confrontation and most benefit. Within this is the need to protect the biodiversity. India has a strong legislation on protection on biodiversity in the form of the Biological Diversity Act 2002. However one major weakness of the Act is that it does not recognize the fact that entering the forest itself and even also for the purpose of the timber felling, disturbs the ecosystem. The Act does not bar timber trading.

Climate to has an impact on vegetation and biodiversity. Climate has a direct link with forest. There is a two layer infect. The first one is a vicious cycle of the forest impacting upon the climate and the climate impacting upon the forest. The second layer of impact is that with the change of climate the forest adapts itself to new situation and changes itself, so does the biodiversity. The result is the extinction of many original and precious species of flora and fauna. The change vegetation verity may not yield the same quality of timber leading to price hike for under quality product. Thus timber trade and climate have far reaching affect on each other yet the laws relating to climate change does not address this issue directly.

Unfortunately the National Forest Policy also fails to address the issue of timber trading. Infect the 1894 policy and the 1952 policy encourage timber trading as a means of revenue source for the state. Only the 1988 policy addresses the concern for deforestation due to timber felling. However, a huge loss has already been incurred between 1894 and 1988.

The early five year plans till the 8<sup>th</sup> one concentrated on ways and means to produce timber to meet the market demand. A paradigm shift is noted in the post 8<sup>th</sup> plan period where a

conservationist approach towards environment in general and forest in particular has been taken. Under the current plan production of timber is altogether a different agenda and strong initiative is taken in conserving the forest.

The Indian Forest Act along with its rules addresses the issue of timber trade in India but the difficulties are that the “grant” or the “contract” that vested the forest (land) to some person or family by the British prior to independence continues to this day. This colonial legacy is resulting in exploitation of even the “reserve forest” legally, this is a major lacunae. Even after declaring such “vested” forest (land) as part of the reserve forest the “vesting” is not cancelled. This operates as a gate way of abuse. Those under the existing grant or contract get a free access to abuse and exploit the forest. Although damaging, felling, girdling, stripping, and dragging of timber is prohibited, those under the grants or contracts can indulge in the above mentioned activities and clear the forest. This is a major weakness of the Indian Forest Act, 1927. Though the forest department may abrogate the rights of the grantee or the contractee for indulging in the above activities, it results in prolonged litigations like the Godavarman case<sup>197</sup> and is of very little use.

Conserving the forest is a matter of international concern as there are transboundary issues involved. Despite the 1972 Stockholm Conference, 1992 Rio Convention and Johannesburg Convention 2002 and the 1992 Convention on Climate Change not much pave way has been made. These instruments talk about conservation of forest but not about prohibition, restriction, regulation and control of timber trade directly.

Sustainable timber trade points towards the sustainability of the trade itself. Such sustainable trade is not possible if the timber in the forest does not last due to dieback, desertification or change in the quality of vegetation. Thus, sustenance of forest is a sinequanone for sustainable timber trade. The scope of regenerating the forest is very limited because of the time taken for a timber producing tree to reach a marketable maturity is longer than the rate in which the trees are felled. Moreover due to change in climate vegetation adaptability takes place and the forest is in a perpetual state of transition. As a result there is no forest growth in real terms which challenges the sustainable timber trade itself.

Global timber trade structures have been changing drastically from trade in raw logs to trade in wood products. This change seems to reflect the trends in environmental movements

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around the world and the depletion of useful forest resources. Considering changes in the timber trade, it is believed that orderly timber trade is needed in order to realize sustainable management of forests. It can be suggested that for the better future environmental degradation can be stopped by implementing sustainable development in a better way but to attain sustainability is not easy in the context of timber trade.

While recalling the great words of Mahatma Gandhi, it can be asserted that mother Earth has provided human being with abundant resources so that the human race can survive in this beautiful planet. However, it is the human greed, lust for power which has made these resources scarce. Man has to live in this world as it is now. In changing this world, men are altering the very environment that has allowed the human race to thrive. Men could be creating conditions that threaten the long term survival of human civilization itself.

## **CHAPTER 3**

### **SUPREME COURT ON REGULATION OF TIMBER TRADE WITH SPECIAL REFERENCE TO GODAVARMAN CASE**

#### **The Frame**

The frame of this chapter is the effort made by the judiciary specifically to control and regulate timber trade. Never before in the history of judicial activism has the Supreme Court has taken such a path breaking step wherein it virtually took over the forest administration. The frame also pans on those cases which have had an impact upon timber trade and issues of protecting the same from various illegal activities.

#### **The Focus**

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 the impact of the orders and judgments of the case upon the Northeastern States in India which had largely earned revenue through timber trade. Other cases which have had an impact upon forest and issue relating to timber trade is looked into very briefly.

## **The Objective**

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.

## **THE GODAVARMAN CASE**

The decade of the 80s and 90s witnessed acute concern of the country regarding environment. The first significant legislation was the water (Prevention and Control of Pollution) 1974 was focused on the issue of pollution in context of water. The early 1980s saw the air (Prevention and Control of Pollution), 1981 which focused on the issue of pollution in respect of air. This was followed by the Environment (Protection) Act 1986. It is significant to note that the attention was clearly focused on the issue of prevention and control and pollution. However the laws were not very effective in controlling pollution. During this period a series of Public Interest Litigation were filed in view of the weak implementation of the anti-pollution laws for example, the Ganga Pollution case<sup>198</sup> or the Taj Trapezium case<sup>199</sup> or the Bicchri case<sup>200</sup>. Eventually a gradual paradigm shift can be observed where the Supreme Court began to focus on sustainability of the environment and recommended the constitution of “Green Bench”<sup>201</sup>.

Concern with the forest took shape with the Forest (Conservation) Act 1980. Until 1927 forest was a national asset and properly of the state. The Britishers in 1894 realized the tremendous commercial potentiality of the forest. They formulated a Forest Policy in 1894 where in trade in timber and forest produce was encouraged as a means of earning revenue for the state. This approach was rejected in 1955 Forest Policy. The shift from commercialization to conservation occurred in 1988 Forest Policy. The period from 1894 to 1988, almost a century, is the story of abuse and ventalization of forest. As a result by 1988

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<sup>198</sup> M.C. Mehta v. Union of India, AIR 1988 SC 1037

<sup>199</sup> M.C. Mehta v. Union of India, AIR 1997 SC 734

<sup>200</sup> Indian Council for Enviro Legal Action v Union of India, AIR 1997 SC 2298

<sup>201</sup> Vellore Citizens Welfare Forum v Union of India, AIR 1996 SC 2715

the nation was acutely conscious of forest depletion and the resultant climate change, biodiversity change, desertification fall in ground water level so on and so forth. Urgent and immediate intervention on war footing was required to protect forest. It was only 1995-1996 the Supreme Court systematically dealt with the issue of deforestation and from 1995 - 2004 has laid down guidelines, looked at a large number of Interlocutory Application and addressed the concerns of each constituent states of the Union of India.

The *Godavarman Thirumulpad v. Union of India*<sup>202</sup> and the *Environment Awareness Forum v. State of Jammu and Kashmir*<sup>203</sup> ushered in the second phase of judicial activism in the field of Environment in India. This time the focus of the judges was forest, saw mills, encroachment, mines, dams, infrastructure project and other innumerable demands for development at one hand and preservation of the jungle on the other<sup>204</sup>. In this process varying social, economic, political, and constitutional issues came up for consideration. The challenge was that, problem related to population cases were loud, visible, calling for immediate intervention so people could be made to realize the eminent crises, but in case of forest the consequence of exploitation and abuse lay in future and hence remote invisible and gradual, almost impossible to make people understand. Besides the 1927 Act<sup>205</sup> and the large number of rules that are framed under it and the 1980 Act<sup>206</sup> and the rules framed under it was required to be harmonized. Moreover, almost all States in India had framed their own laws. All these huge legal material was required to be balanced and streamlined. Moreover the North Eastern States in India called for special attention in view of the special constitutional Scheduled VI position available to them.

### **Genesis of Godavarman Case:**

The Nelliampathy area in the central circle of the forest in Kerala is a dense forest hosting a store house of biodiverse flora and fauna and comprises of two hills and surrounding valley<sup>207</sup>. Nelliampathy has a total of 150 acres of cardamom plantation in the land area that is under reclamation by the forest department. Under Kerala Private Forest (Vesting and Assignment) Act, 1971, the government nationalised all private forest in Kerala within its purview. On 10 May, 1971, all private forests in Kerala vested in the Kerala State

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<sup>202</sup> (1996) 9 S.C.R 982

<sup>203</sup> AIR 1999 SC 1495.

<sup>204</sup> A "Jungle" is unplanned, uncontrolled and unregulated growth of trees, shrubs, creepers, undergrowth etc hosting a vast biodiversity. A "Forest" is a planned, organized, controlled growth of trees, plants etc.

<sup>205</sup> Indian Forest Act, 1927

<sup>206</sup> The Forest (Conservation) Act, 1980

<sup>207</sup> The researcher had personally visited this place during his empirical fieldwork in Kerala.

Government except those forests that were within the ceiling area allowable/applicable to the owners.

There is a temple of Goddess Bhagawati called the Nilamboor Kovilagam in the area. During the British Period this entire land was leased to the temple as devutter property<sup>208</sup>. The lessee, during the subsistence of the lease, could use the property in any manner; they could cut trees, drag them, sell them as owners and appropriate the forest and forest produce as they pleased. When the lease expired sometime in the 1990s, the Government of Kerala moved to rake over the forest land and decided to declare it an eco-sensitive zone.

The Nilamboor Kovilagam people resisted the move of the forest department of Kerala and eventually the department filed the suit for encroachment of forest land against the Nilamboor Kovilagam represented by T.N. Godavarman Thirumulpad<sup>209</sup>.

Almost simultaneously another case Environment Awareness Forum v. State of Jammu & Kashmir<sup>210</sup> was filed on the issue of encroachment of forest land for illegal mining.

The two cases together raised the issue of forest conservation, encroachment of forest land before the Supreme Court. The Supreme Court extended the matter to cover all States within the Union of India on 2<sup>nd</sup> September 1996 and accordingly notice was issued to all chief secretaries of States. Unfortunately most of the States did not respond and failed to appear before the Supreme Court even after sending repeated notice. The court made special efforts to secure representation from North Eastern States. Finally the court directed that the secretaries dealing with forest and environment in each of the seven North Eastern States and the States of Sikkim, Kerala, Maharashtra should personally appear before it.

**Interpretation of “Forest”:** The Supreme Court held that the Forest “Conservation” Act was enacted that to contain deforestation and the consequent ecological imbalance. The definition of “Forest” must at first be understood according to its dictionary meaning. The court further went on to state that Section 2 was the core of Forest “Conservation” Act 1980 as amended in 1988<sup>211</sup>. Under section 2 no State Government or any authority can de-reserve any forest or

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<sup>208</sup> Property exclusively dedicated to the service of God and for maintenance of His abode.

<sup>209</sup> The PCCF of the Central Circle Forest in Kerala First narrated the facts to the researcher. Thereafter the researcher visited Nalliampathy. The researcher also met the Advocate A.P. Chandrasekharan an expert on forest laws and counsel in Godavarman Tirumulpad Case in Kerala who narrated and corroborated the above facts to the researcher.

<sup>210</sup> WP 171 of 1995, AIR 1999 SC 1495

<sup>211</sup> Section 2, Forest (Conservation) Act, 1980 reads as follows:

No State Government or other authority shall make, except with the prior approval of the Central Government, any order directing-

use forest land for non-forest purposes or lease or assign forest land to any private person or authority or corporation or organization owned and managed or controlled by the government or clear any forest land or any portion thereof for re-forestation. In the explanation attached to section 2 “non-forest purpose” means breaking up or clearing of any forest land or nay portion thereof for plantation, horticulture or herbiculture but does not include any action for conservation, development and management of the forest.

In its order<sup>212</sup> the Supreme Court observed that there is misconception in certain quarters about the word “forest” used in the 1980 Act. While extending the scope of the word “forest” the court held that the word covers all statutorily recognized forest in whichever manner designated. The forest land shall include not only forest as understood in its dictionary meaning but also any area recorded as forest in the government records irrespective of its ownership and the provision of conservation in the 1980 Act applies to all forest as understood irrespective of ownership. In this order each State was required to constitute an expert committee within one month of passing of the order to:

1. Identify areas which are “forests” whether or not those areas are recognized or notified or classified as forests under any law irrespective of ownership of the land.
2. Identify areas where there were forest earlier but now stand degraded, and
3. To identify areas covered by plantation trees belonging to the government and those belonging to private persons.

The court further decided that all ongoing activity within any forest in any State throughout the country without prior approval of Central Government must stop immediately. Consequently the felling of trees in all forests was to remain suspended except those that were being felled in accordance with the working plan of the State Governments as approved

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That any reserved forest (within the meaning of the expression “Reserved Forest” in any law for the time being in force in that State) or any portion thereof, shall cease to be reserved;

That any forest land or any portion thereof may be used for any non-forest purposes;

That any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organization not owned, managed or controlled by the government;

That any forest land or any portion thereof may be cleared of trees which have grown naturally in that land or portion, for the purpose of using it for re-forestation.

Explanation.- For the purpose of this section, “non-forest purpose” means the breaking up or clearing of any forest land or portion thereof for –

The cultivation of tea, coffee, spices, rubber, palms, oil bearing plants, horticultural crops or medicinal plants;

Any purpose other than re-forestation

But does not include any work relating or ancillary to conservation, development and management of forest and wild life, namely, the establishment of check posts, fire lines, wireless communications and construction of fencing, bridges and culverts, dams, waterholes, trench marks, boundary marks, pipelines or other like purposes.

<sup>212</sup> Order dated 12.12.1996

by the Central Government. The court passed specific orders for the North Eastern States especially for Tirap and Changlang in Arunachal Pradesh, Jammu & Kashmir, Himachal Pradesh, hilly regions of Uttar Pradesh and Tamilnadu. This order of the Supreme Court<sup>213</sup> superseded all other existing orders passed by any State Government, any authority or any High Court.

Another significant development occurred almost simultaneously with these cases. The case Centre for Environmental Law WWF-India v. Union of India<sup>214</sup>, was also filed at this time. In an order passed in this case<sup>215</sup> the Supreme Court prohibited de-reservation of forests, National Parks and sanctuaries. By adding “forest” in the order of this case which is essentially related to Wildlife Protection Act, 1972, the Supreme Court adopted a completely new and holistic approach towards protection, preservation and conservation of forest in India.

**Saw Mills and Wood Based Industries:** In the order under Godavarman case the Supreme Court while stalling the activities that did not have prior approval of the Central Government had also concerned itself with saw mill’s and wood based industries and banned the running of saw mills of any kind including veneer and plywood mills without prior permission / approval of the Central Government. The Supreme Court was acutely concerned about the danger to the Tropical Wet Evergreen Forest of Tirap and Changlang in Arunachal Pradesh and ordered immediate closure of saw mills within 100 Kms from Assam border. In order to stop trade in timber the court completely banned the movement of cut trees and timber from any of the seven North Eastern States to any other state within the Union of India.

**Regulation of number of saw mills:**

Each Government was directed to file a report regarding;

1. Number of saw mills, veneer and plywood mills operating within each State.
2. The real owners of those saw mills,
3. The license and actual capacity of those saw mills,
4. Their proximity to the forest and

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<sup>213</sup> Order dated 12.12.1996

<sup>214</sup> WP 337 of 1995- This case concerns the settlement of rights in National Parks and Sanctuaries.

<sup>215</sup> Order dated 13.11.2000.

5. Their source of timber.

Within one month of the passing of the order the States were required to constitute an expert committee to:

- a. Assess sustainable capacity of the forest of the State vis-à-vis saw mills and timber based industries.
- b. Number of saw mills that can be safely sustained by the State, and
- c. The optimum distance from the forest at which the saw mill should be located.

A High Power Committee (HPC) was constituted by the Supreme Court in order to oversee strict and faithful implementation of the court orders. Significantly the Supreme Court dealt at length with the running of wood based industries in North Eastern States and observed that even though proliferation of wood based industries has been the main reason for degradation of forest in the North Eastern States and the dependence of local people on the forest in those region, the court felt that it would be neither feasible nor desirable to completely ban timber trade and running of wood based industries in that region. However, the court strongly felt that their number and capacity are to be regulated and they must be required to relocate in specified industrial zones. Industrial requirements have to be subordinated to maintenance of ecology and environment as well as bonafide local needs. The court further directed the State Governments to notify industrial estates for locating wood based industries in consultation with Ministry of Environment and Forest. Some of the important directions issued by the Supreme Court in this regard are as follows:

- a) License given to all wood based industries shall stand suspended.
- b) Wood based industries cleared by the HPC will have the option to shift to the identified industrial area.
- c) Units that do not want to shift shall have to windup as per law.
- d) License issued shall be renewed annually subject to condition that no illegality is attributed to the same.
- e) Number of wood based industries shall be determined strictly within the quantity of timber that can be felled annually on a sustainable basis as determined and approved by the plan from time to time.

- f) There shall be a complete moratorium on the issue of new license for the next five years.

**Location of Wood Based Industries:** Number of States setup new industrial areas for locating wood based industries and saw mills. In case of Jammu & Kashmir the court had stipulated that the saw mills be located at least 8Kms beyond the demarcated forest and a committee was constituted to identify industrial zones for shifting saw mills.

The court took a serious view of the action taken by the Government of Nagaland with respect to identification of industrial area. In an Interlocutory Application<sup>216</sup> the Government of Nagaland the whole foot hill areas of Nagaland and all areas within 1Km of the National and State Highway and State Roads were declared industrial estate for locating wood based industries. The Ministry of Environment and Forest stated that the State Government had not consulted it before notifying the industrial estate for locating the wood based industries. In essence it was made out that the notification was not in strict compliance of the court's order. The idea behind the court's order was to keep the wood based industries in compact blocks for easy and effective monitoring. The action taken by the Nagaland Government was stayed and the Chief Secretary was show caused by the court. Subsequently the Nagaland Government reported compliance with the order of the court.

**Movement of Timber:** Another significant step was that the court restricted the movement of timber including sawn timber, veneer and plywood outside the North East and permitted the same only if sourced from or processed in HPC cleared wood based units situated within the approved industrial estates except in the State of Mizoram where no industrial estate exist. Round and hand sawn timber shall not be allow to be transported outside North East except with the prior approval of the HPC or the Ministry of Environment and Forest (MoEF). In order to control illicit timber trade and timber product the court directed that transit passes (TPs) printed only in water marked paper shall be used for the transportation of timber and timber products with effect t from a date to be fixed by the MoEF but not later than 1<sup>st</sup> December 2001. In order to regulate consumption of raw material by timber and veneer units and in order to keep record of the finished products and the disposal and movement of the same it was required by the court that the MoEF should issue detailed guidelines within three months from May 2001.

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<sup>216</sup> Interlocutory Application No. 397, Dt. 15.6.1998

Various saw mills challenged the report of the expert committee for regulating the saw mills and implementation of its orders. About nine interventions were filed by more than 300 saw mills owners against the report of the expert committee in the State of Bihar alone. The committee concluded that more than 1lakh cm<sup>3</sup> wood is available on a sustainable basis from the forest and another 4lakh cm<sup>3</sup> wood was available from the private plantations and imports. Based on the above figures the expert committee recommended that 1110 saw mills may be allowed to operate in the State of Bihar on a sustainable basis as against the then existing 3991 saw mills in the State. The excess numbers of saw mills were recommended to be closed in phases within a period of three years. The Central Empowered Committee decided on the application filed by the saw mill owners and upheld the decision of the State of Bihar in phasing out the saw mills and implements the orders of the court. The Supreme Court accepted the recommendations of the Central Empowered Committee.

Some State Governments also filed application for grant of license to unlicensed saw mills especially those which were in existence prior to 1981 in the State of Maharashtra<sup>217</sup>. The Central Empowered Committee found that these unlicensed saw mills did not fulfill the rules framed by the Government of Maharashtra even in 1981 and they should have been closed down in that year itself. The government had in fact allowed the illegal saw mills to function in violation of its own rules. The Central Empowered Committee took a strong stand and recommended that all those saw mills should be closed.

The PCCF of the State of Jammu & Kashmir had issued an order relating to closure of veneer mills situated within 8Kms of demarcated forest. The High Court of Jammu and Kashmir set aside the order of the PCCF. Mr. Harish Salve in his capacity of Amicus Curiae filed a special leave petition to the Supreme Court against the order of the High Court. The Supreme Court stayed the order of the High Court and decided to hear bulk applications that had been filed against its 12.12.1996 order in Godavarman case and directed the Central Empowered Committee to examine the matters. The Central Empowered Committee in its recommendation examined the applications in the light of the 12.12.1996 order wherein it was stated the order was to be complied by all concerned in supercession of any order at variance that may have been made all is likely to be made by any authority including the Central or State Government or any court or tribunal. The Central Empowered Committee ordered the restoration of the order of the PCCF.

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<sup>217</sup> Interlocutory Application No. 414, Dt. 1999

The matter was again examined in context of Andaman & Nicobar Islands. The applicants were NGOs namely Society for Andaman & Nicobar Ecology, the Bombay Natural History Society and Kalpavriksh. In their application they drew the attention of the court to the serious threat to the Rain Forest of Andaman & Nicobar islands as well as the local tribes inhabiting the islands due to the unrestricted activities of these large number of wood based units functioning in the island. Considering these impacts the court appointed a commission which made the following recommendations:

1. There should be a complete ban on establishment of any new wood based unit for the next 10 years.
2. The existing small scale wood based units should be relocated within industrial estate or where industrial estate are not feasible the locations contiguous to the forest officers or otherwise convenient for the forest department to monitor.
3. The relocation was to be completed within one year and the non-complying saw mills was to be closed down.
4. The existing medium and large scale wood based industries were to be allowed to function provided they import their entire requirement of wood and other forest based raw materials from abroad or the main land. No subsidy was to be allowed to them.
5. No timber either as logs or as sawn timber or plywood or veneer or in any other form should be transported out of the island through any means whatsoever.

The Supreme Court accepted the recommendations of the commission and ordered that:

- a) The license of the wood based industries and saw mills was not to be renewed. The authorities were not debarred from cancelling licenses in accordance with the law if the conditions were not complied with.
- b) Since the ecology of the area does not permit any kind of industrial activity for which wood is likely to be consumed the license to wood based industries shall stand cancelled but they may clear their existing stock.
- c) The Union of India if it thinks appropriate may relocate the dislocated wood based industries anywhere in main land India but not within the vicinity of any forest area.

Only the government saw mills may be allowed to operate to meet the local demands for timber.

- d) No fresh wood or logs shall be given to any saw mill or wood based industries till fresh working plans were prepared and submitted before the court for approval.

The Central Empowered Committee is entrusted with monitoring the court order and prepares a status report for submission before the court. The Central Empowered Committee heard applications from the owners of the closed saw mills in Port Blair and upheld the order of the Supreme Court.

**Operation of Unlicensed Saw Mill:** The most significant order with respect to existing saw mills and wood based industries was the direction given that no State or Union Territory shall permit any unlicensed units to operate. They are directed to close such unlicensed units forth with and no State Government or Union Territory shall permit opening of any such units without prior permission of the Central Empowered Committee.

## CONSTITUTION OF AUTHORITIES AND COMMITTEES

The Godavarman case and the Environment Awareness Forum case started an avalanche of legal activity, certainly not foreseen by Godavarman and perhaps not even the Supreme Court of India. The Supreme Court is already burdened with huge number of pending, indisposed cases and the huge legal activity initiated by the Godavarman case necessitated decentralization and delegation for which it became necessary to constitute Authorities and Committees.

The 1980 Act does not provide for setting up of a tribunal or adjudicatory authorities or committee. In order to deal with the huge number of applications and petitions pouring in from all over India, the Supreme Court put reliance on Section 3 (3) of the Environment (Protection) Act 1986<sup>218</sup>.

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<sup>218</sup> Section 3(3) of the Environment (Protection) Act, 1986 reads as follows:-

“The Central Government may, if it considers it necessary or expedient to do so for the purpose of this Act, by order, published in the official gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the powers to issue

**High Power Committee:** The Supreme Court constituted a High Power Committee (HPC)<sup>219</sup> to oversee the strict and faithful implementation of the orders passed by the Supreme Court from time to time specially with reference to the North Eastern region. The committee was entrusted the task of overseeing the preparation of inventory of all timber in all forms. The Arunachal Pradesh Forest Authority (APFA)<sup>220</sup> was constituted under Section 3(3) of the Environment (Protection) Act, 1986. The mandate of the authority was to monitor and implement the directions of the Supreme Court, and empowered to issue necessary directions for disposing felled timber, determining the sustainable number of wood based industries, approving industrial estates, timber pricing, and scientific management of forest. In 2001 the State Empowered Committee was formed for the State of Madhya Pradesh and Chhattisgarh for expeditious disposal of pending Interlocutory Application of these States.

**Central Empowered Committee:** In Interlocutory Application Number 296 heard on 12 April 2000 the Supreme Court considered the feasibility of constituting a National Level Committee as well as State Level Committees on the line of Arunachal Pradesh Forest Authority (APFA) under Section 3(3) of the Environment (Protection) Act, 1986. The National Level Committee was to be Supervisory cum Appellate Authority over the State Authorities. Since the constitutions of the State Authorities were time consuming, the court directed that the Central Government constitute the National Level Authority having technical expertise to deal with problems currently being handled by the Supreme Court and the High Courts<sup>221</sup>. Since there was delay in constituting this authority under the Section 3(3) of the Environment (Protection) Act, 1986, the Supreme Court constituted the Central Empowered Committee (CEC)<sup>222</sup>. The task assigned to the CEC included the monitoring of the implementation of the orders of the court, removal of encroachment, implementations of working plan, compensatory afforestation plantation and other conservation issues.

The committee also emerged as an advisory body to the Supreme Court on all matters in the Godavarman case and the Environment Awareness Forum Case. All pending applications, the task of examining the reports and the affidavits filed by the States were to be done by the

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directions under section(5) of the Central Government under this Act) and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise the powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures”.

<sup>219</sup> By order dated 4<sup>th</sup> March 1997

<sup>220</sup> By order dated 17<sup>th</sup> September 1998

<sup>221</sup> Order dated 13 April 2000

<sup>222</sup> Order dated 9<sup>th</sup> May 2002

CEC. Any individual aggrieved by the steps taken by the government or any other authority in compliance with the order of the Supreme Court could directly approach the CEC. Only those applications that could not be appropriately disposed of by the CEC were to be referred to the court. Initially then CEC was a five member body of which three members were from the Central Government and two members represented the NGOs. The chairperson of the CEC is nominated by the Ministry of Environment and Forest.

Consequent upon the CEC starting to function reports of immense significance were submitted to the courts prominent among them being the serious problem of encroachment of forest land filed before the Supreme Court by Amicus Curiae<sup>223</sup>.

Subsequently, the MoEF brought about a draft notification under section 3 (3) of Environment (Protection) Act, 1986 constituting a CEC which was shown to the court. The CEC was constituted for period of five years and the members were appointed in their personal capacity so that they did not feel obliged to change with changing administration and political pressure. The CEC was not limited only to 1980 Act but was extended to the Forest Act 1927 and the Wild Life (Protection) Act, 1972 including the rules regulations and guidelines framed under these Acts. The CEC has been conferred wide powers. It can call for documents from any person, summon any person and received evidence from such person either on oath or on affidavit. The CECs activities included field visits, conducting public hearing, meeting with NGOs etc. The CEC was also empowered to pass interim orders in situations demanding immediate action. With the setting up of CEC<sup>224</sup> a new chapter in Godavarman case began. Due to simplification of procedure for filing and hearing of cases the number of cases increased. Over the years the CEC has given at least a hundred significant recommendations, reports and orders on matters of vital importance to the conservation of forest and wild life. The reports of the CEC are significant documents and as per the order of the Supreme Court they are treated as Interlocutory Applications<sup>225</sup>. The Supreme Court conferred additional functions on the CEC<sup>226</sup> and directed that no State or Union Territory shall permit opening of any saw mills, veneer and plywood industry without prior condition of the CEC and further directed that their shall be no relaxation of rules with respect to grant of license without prior concurrence of CEC.

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<sup>223</sup> Interlocutory Application No.703 of 2001, dated 5<sup>th</sup> August 2002.

<sup>224</sup> Notification No. 1-1/CEC/2002-03 dated 14/6/2002

<sup>225</sup> Supreme Court order dated 22<sup>nd</sup> October 2002

<sup>226</sup> Supreme Court order dated 29<sup>th</sup> October 2002

## **Social Forestry and Compensatory Aforestation**

Prior to the order of the Supreme Court compensatory aforestation was carried out in accordance with the guidelines issued by the MoEF under the Forest Conservation Act. According to the guidelines compensatory aforestation is to be done over an equivalent non-forest area at the cost of user agency. If non-forest area is not available then compensatory aforestation has to be done over double the degraded forest area by the user agency. After the fund for compensatory aforestation are deposited with the concerned State Governments the lands for this purpose is transferred and mutated in favor of the forest department. A formal approval for diversion of forest land for non-forest use under section 2 of the Forest (Conservation) Act, 1980 is given by the MoEF. Compensatory aforestation is generally done by the forest department of the respective States.

In hearing dated 12.4.2000 the Central Government through its counsel Kirit Raval placed a statement before the court showing the position of cases approved for diverting forest land, the compensatory aforestation done and the utilization of the fund. The court took suo moto action on the same and treated the statement as an Interlocutory Application<sup>227</sup>.

The court found the statement of the government to be dismal and issued notices to the States of Arunachal Pradesh, Assam, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Mizoram, Orissa and Tamilnadu to explain why the money realized for compensatory aforestation have not been utilized for the same.

While dealing with an application of M/S. South Eastern Coal Ltd seeking permission to fell trees for mining operation the court dealt with the forest clearance procedure under the Forest (Conservation) Act, 1980 and the rules under it and raised a pertinent question regarding the present practice that is being followed of depositing money with the State Government for carrying out aforestation. The court felt in order to ensure regeneration of forest, the primary responsibility should be of the concerned applicant who desires to use the forest. The court issued a set of innovative order:

1. The government must specify the time frame within which aforestation must be commenced and completed.

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<sup>227</sup> | A no. 566

2. The State should require an ‘environmental audit’ to ensure that the survival rates of the saplings are high.
3. The government should require each applicant that is obliged to carry out afforestation to publish the result of the ‘environmental audit’. Every year in news paper and forward the same to the Central Government.
4. The applicant is not only responsible for planting trees but also to look after maintain and ensure its survival.

The court further directed that the MoEF should formulate a scheme whereby the responsibility for compensatory afforestation should be that of the user agency<sup>228</sup>.

The CEC considered all aspect of the compensatory afforestation and consulted both the MoEF and all the State Governments. Despite guidelines there was no uniformity in the matter. In many States the money for compensatory afforestation were deposited in the department of forest as “Forest Deposits” that do not form a part of the consolidated fund of the State<sup>229</sup> and the department could easily utilize the fund for afforestation. In other States the money for compensatory afforestation is deposited as “Revenue Receipts” of the State Government and is made available to the forest department only as a budgetary allocation. This causes problem of timely release of the fund for compensatory afforestation. In view of this it was felt a separate fund “Compensatory Afforestation Fund” should be created for the deposit of the compensatory afforestation money and subsequently released directly to the implementary agencies whenever required. With regard to the fund received for diversion of forest land comprised of protected areas like National Parks and Sanctuaries, the CEC recommended that although such money should be recommended in the assigned fund it should be exclusively used for protection and conservation purposes by the States and Union Territories.

**Assisted Natural Re-generation:** The existing method of compensatory afforestation is heavily dependent on artificial means of regeneration<sup>230</sup>. However, most States felt that it does not compensate the laws of natural forest. The States felt that the fund should be used for assisted natural regeneration were natural forest are allowed to regenerate by undertaking

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<sup>228</sup> IA no. 566, order dated 23/11/2001

<sup>229</sup> Chhattisgarh, Madhya Pradesh, Uttaranchal, Uttar Pradesh etc.

<sup>230</sup> Plantation in identified areas

silvicultural and cultural operations such as fire tracing, signaling of seedlings, protection etc. that help to regenerate the wood stocks that already exists in the degraded forest.

**Net Present Value of the Land (NPV):** In whichever way the compensatory afforestation may be made it cannot adequately compensate for the loss of natural forest cover. The CEC noted that in some States<sup>231</sup> the NPV recovered ranged from Rs.5.80 lakhs-Rs.9.20 lakhs per hectare of forest land depending upon the quality and the density of the forest land diverted for non-forest purposes. The CEC recommended that the NPV for forest land diverted for non-forest purposes should also be recovered from the user agency while according approval under the 1980 Act. The fund so recovered should be utilized for undertaking specific activities of protection and conservation.

**Special Purpose Vehicle (SPV):** The CEC made a distinction between public sector user agencies and private sector user agencies and recommended that large public sector undertakings such as NTPC, Power Grid Corporation should set up special SPV for identifying the non-forest areas in advance for raising plantations. Since the private sector agencies do not possess the technical know-how, afforestation could continue to be done by the forest department. The private sector agency should be involved in monitoring and protection. The recommendation of CEC was accepted by the Supreme Court<sup>232</sup>.

**Felling of Trees:** The court laid down guide lines for felling of trees from forest areas as well as non-forest areas including plantations. As per the order the felling of trees from forest areas could be allowed only as per the approved working plan/schemes and from non-forest area in accordance with the guidelines prepare by the State Governments in concurrence with the Central Government<sup>233</sup> and laid down the following:

- a) The felling from forests, non-government forest, land which is require to be treated as forest under the order of the Supreme Court should be only in accordance with the working plans/schemes approved by the MoEF.
- b) During the execution of the working plan/schemes it shall be ensure that no felling is done unless and until sufficient budgetary provision exists for regeneration of trees in such areas.

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<sup>231</sup> Chhattisgarh and Madhya Pradesh

<sup>232</sup> Order dated 22.10.2002.

<sup>233</sup> SC order dated 15.01.1998 read with order dated 12.05.2001

- c) For felling of trees in non-forest areas and plantations on non-forest areas the State Governments shall frame rules and guidelines with the concurrence of MoEF within a period of three months and the MoEF must give concurrence within one month which shall include provisions of penalties, mode of disposal of timber felled in violation of rules and guidelines.
- d) Till such rules/guidelines become effective no felling shall be done from any of the areas specified.

### **WORKING PLAN**

The issue of working plan was extensively dealt with in the order dated 15 January 1998 in which the States were directed to prepare working plans and obtain approval from the Central Government. The term State Government included the Union Territories and the District councils under Schedule VI of the Constitution of India. The plans would have to be prepared within two years of the passing of the order. The intervening period should be worked in accordance with an annual felling programme approved by the MoEF. In respect to private and community holding the felling shall be regulated under the respective State rules and regulations. For the purpose of preparing the working plans the States were directed to constitute a State level Expert Committee to be headed by the PCCF.

With respect to North Eastern States the court order directed identification of ecologically sensitive areas in consultation with institutions like the Indian Council of Forestry Research and Education, Wild Life Institute of India, North Eastern Hill university, North Eastern Regional Institute of Science and Technology and leading NGOs to ensure that such identified ecologically sensitive areas are totally excluded from any kind of exploitation. The court further stipulated that the minimum extent of such area shall be 10% of the total area of the State.

The order dated 12.5.2001 clarified that working plans shall be needed for felling of trees from any non-government forest area including the lands which are required to be treated as forest under the court order dated 12/12/1996. For felling of trees from non-forest area the State Government was required to frame detailed guidelines and rules and seek approval of the MoEF. The court emphasized that while implementing the working plans/schemes

sufficient financial provision for regeneration of the area shall be made. The issue of working plan was among the central focus of the recommendation of the commission appointed to report on the status of the forest and other allied matters in the Andaman and Nicobar Islands. The commission observed that one of the major threats to biodiversity of the forest of the Andaman and Nicobar Islands is the stress on commercial forestry. For over a hundred years the forests have been subjected to increased commercial exploitation. The forest department follows a conversion forestry system where the natural forest are worked, commercial species extracted and the worked forest regenerated and managed in a manner that there is a resultant preponderance of commercial species for future harvesting.

In order to protect the natural biodiversity of the Islands the commission recommended that no felling of tree should be allowed in the un-worked area.<sup>234</sup> In other areas felling may be allowed as per the prescriptions of the working plans approved by MoEF subject to condition that such areas are not within Sanctuaries or National Parks or tribal reserves or located in the little Andaman's. In view of the stress laid on commercial forest tree, the commission recommended that the working plans should contain action plans for removing trees of commercial species that are in concentration in a given area (density) in phased manner. It was further recommended that endeavor should be made to bring back the forest to its natural profile by encouraging/reintroducing the species of flora and fauna that had naturally occurred in the area.

The court on 7<sup>th</sup> May, 2002 while considering the recommendation of the commission recognized the ecological importance of the Islands and the threat faced due to commercial felling and order that Andaman & Nicobar Islands is one of the hot spots and is in the eco-fragile area having the eco-diversity and thereby has to be preserved. For this it is essential that the natural forest be protected and regeneration be allowed to take place.

While accepting the recommendation of the commission the court issued the following directions:

1. Reworking of the working plan of the Andaman Nicobar Island and suggested that first there should be compulsory aforestation/regeneration, and the felling condition should be based upon the extent of regeneration of forest undertaken.

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<sup>234</sup> Area where felling of trees as per working plans/schemes or approved working plans have not taken place

2. In the new working plan there should be a committee consisting of a ecologist who is proficient with the ecology of Andaman.
3. The tree felled under working plan should be utilized for the requirement of local inhabitants.

## **FOREST DEPARTMENT**

The forest department plays a key role in the protection, management and administration of the forest area and is in fact the custodian of the forest. Therefore, in order to have effective implementation of the Supreme Court's orders it was necessary to take suitable steps to boost the morale of the forest department. In a detailed order<sup>235</sup> the Supreme Court concerned itself with the issue of reforming the forest administration in the North Eastern States. In view of the multidimensional issues impinging upon forest protection it made the following directions:

1. A full proof institutional arrangement is to be put in place and made functional under strict supervision of the North Eastern Council.
2. The MoEF was directed to provide technical support by opening a separate cell in the ministry under an officer of the rank of CCF.
3. To start a satellite office of the Forest Survey of India (FSI) situated at Shillong (Meghalaya).

The court further directed the PCCF or the CCF of the States and Union Territories to prepare detailed action plans for intensive patrolling and protective measures to be undertaken in the identified vulnerable areas. These officers were directed to send quarterly report for approval to the Central Government. Recognizing the discrepancies in the power and authority of the forest officers in the North Eastern States and the forest officer of other States the court directed that the forest officials of the North Eastern States be empowered on similar lines of the forest officers in other States.

In order to strengthen the forest department the court felt it was necessary to take action against those responsible for illegal felling of trees. It directed that those areas where illegal felling has taken place significantly should be identified within 45 days of passing of the

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<sup>235</sup> Order dated 15/1/1998

order and disciplinary or criminal proceeding be initiated against those responsible for the situation and a report be submitted to the court within three months and then followed up by quarterly reports. The Chief Secretaries of the North East States were entrusted with reviewing the action taken against the erring officers.

Godavarman case did not remain confined to Environmental Law only but also entered the domain of Administrative Law. The court concerned itself with who would be the competent person to write the Confidential Report (CR) of an officer belonging to the forest department. Such administrative control of officers belonging to the forest department was not within the department itself. For this purpose the court went on to interpret expressions like 'Reporting Authority' and 'Reviewing Authority'. The other directions of the court were as follows:

1. The forest departments and the administration should publish at the beginning of each year the proposed uses of natural resources including forest and at the end of each year state the actual use, deviations from the proposal and then reasons for it.
2. The various working plans, Protected Area Management Plans should be accessible to the public as soon as they are approved.
3. All officers of the administration including the forest officers should undergo an orientation training of at least five days every three years to orient themselves with the ecological characteristics, options available for economic development in a economically and socially sustainable manner.
4. The forest departments should be strengthen immediately to prevent poaching and the officers should be given adequate powers under the Indian Forest Act, 1927 as is done in other States to meet the threat of poaching.
5. The mechanism for coordination should be set up comprising forest department, civil administration, the coast guards, and the combined defense commands.

## **ENCROACHMENT<sup>236</sup>**

The Government of Madhya Pradesh made a request to the Central Government for regularization of encroachment during the period 1.1.1977 to 25.10.1980. In response to this the court felt that encroachment continue after each regularization. It also noted

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<sup>236</sup> I A no. 424, Order dated 22.9.2000

that the condition precedent prescribed for regularization is hardly ever fulfilled. In view of this the court was of the opinion that the Central Government should consider that regularization may be done only after fulfillment of the condition precedent laid for it.

The CEC drew the attention of the court on the serious problem of encroachment. This was pursuant to the application filed by the Amicus Curiae wherein it was pointed out that encroachments were taking place in almost all the eco sensitive areas and the national parks and sanctuaries. The reasons identified by the States for encroachment were inter alia lack of political will, victimization of officials, expectation of subsequent regularization, non-deterrent punishments, weak legal framework, poor boundary demarcation, poor land and revenue records, non-compensation for environmental losses so on and so forth. In view of this huge list of causes submitted by the States the CEC made the following recommendations:

1. Regularization of encroachment in any manner for encroachments prior to 1990 is strictly prohibited except those which are eligible for regularization in conformity with the 1990 guidelines of the MoEF.
2. The first offence report under the Forest Act shall be the basis to decide whether the encroachment took place prior to 1980. All encroachments other than those eligible for regularization shall be evicted immediately and the Chief Secretary of the State shall be personally responsible for ensuring effective and timely compliance.
3. In case of failure of the State Government to expeditiously remove encroachers it shall be liable to pay compensation for environmental loss for continuing encroachment at the rate of Rs.1000 per hectare per month to be deposited in a separate bank account.
4. The performance of the revenue, police and the forest officials shall be recorded in their annual confidential reports.
5. Compensation for environmental loss, destruction of habitat flora and fauna shall be recovered by the State from the encroachers.

6. The order is to operate and be implemented superseding any other order passed by any government, authority, tribunal, court and High Court.
7. In Centre for Environmental Law, *WWF India v Union of India*<sup>237</sup>, it was laid down that no de-reservation of any forest, National Park, or Sanctuaries is permitted without the approval of Supreme Court.

The issue of encroachment was the focal point in the case of Andaman and Nicobar Islands and the court made the following orders:

1. Any regularization of encroachment or use of forest land for any purpose shall be strictly prohibited.
2. All families who had encroached forest land prior to 1978 must shift to the allotted rehabilitation sites within one month, failing which their allotment shall be cancelled and they shall be forcefully evicted from their encroached occupation. They must also vacate any extra land occupied by them within one month, failing which the same consequence shall follow.
3. All post 1978 encroachers shall be completely evicted within three months.

The States were required to prepare necessary plan of action in this regard. This formula was also applicable to all the illegal encroachment in the Sundarban area. The CEC directed the MoEF to file an affidavit regarding the situation of compliance of its directives not only in the Andaman & Nicobar Islands but also in the Sundarban area.

## **POLICY CONCERNS**

The Supreme Court in Godavarman case ventured into the area of the policy framing. The first land mark order was the order dated 12<sup>th</sup> December 1996 wherein the Supreme Court interpreted the word “Forest”. Prior to this order the Forest (Conservation) Act, 1980 was applicable to areas classified as ‘forest’ in government records. The court expanded the meaning of the word forest to include those areas that are statutorily recognized as ‘forest’ but also forests as understood in the dictionary sense and also all forest irrespective of ownership and classification. The court clarified that the orders made in Godavarman case

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<sup>237</sup> WP (C) No. 337 of 1995

will be applicable to autonomous hill councils also<sup>238</sup>. This was a major step as most forest areas in the North Eastern States, prior to this order were outside the purview of the provisions of Forest (Conservation) Act, 1980.

Constitution of Central Empowered Committee (CEC) was another significant policy decision. The Arunachal Pradesh Forest Protection Authority, The High Powered Committee (HPC) for North Eastern States, the Empowered Committee for Madhya Pradesh and Chhattisgarh are some of the policy making steps of the Supreme Court by creatively using section 3(3) of the Environment (Protection) Act, 1986. Prior to this there were very few instances of applying this provision of the Act for the purpose of protecting the forest. The CEC today has original and advisory jurisdiction in dealing with a range of policy issues.

Another important aspect dealt by the court was the issue of 'forest compensation'<sup>239</sup>. The court emphasized that it is essential that in areas where natural forest exists should be preserved and there should be no further depletion of forest cover as located in Madhya Pradesh, the Western Ghats, North Eastern Region and the Himalayas. The court felt that the political boundaries are drawn for various considerations but as far as the environment is concerned a holistic view is to be taken. It noted with concern that majority of States fall short of the national average as far as the forest cover is concerned. It therefore felt it must be ensured that forest cover continues to exist in the areas mentioned above and the forest deficient States should be asked to contribute towards the preservation of forest by means of compensating the forest rich States, so that they maintain their existing forest cover. The court visualized a partnership between different States for maintenance preservation of the forest cover. The suggestion of the court was to be considered by a committee comprising of Finance Secretary, Secretary of MoEF and Chief Secretaries of all States. Following the directions of the court the above committee was constituted and it held discussions with various State Governments<sup>240</sup>. About 12 states<sup>241</sup> which were deficient in forest cover expressed their reservation in accepting the court's suggestion. The Supreme Court, on hearing this, issued notices to the Chief Secretaries of all the above States and also to the Government of India to consider the suggestion that if in Government of India's opinion the forest deficient States cannot be asked to compensate the forest rich States, in such a situation

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<sup>238</sup> Order dated 4.3.1997

<sup>239</sup> Order dated 8 January, 2001

<sup>240</sup> The matter was heard on 8 January, 2001

<sup>241</sup> Tamil Nadu, Bihar, Rajasthan, Karnataka, Maharashtra, Delhi, Haryana, U.P, Orissa, Gujarat, Punjab, West Bengal and Arunachal Pradesh.

the Union of India should be able to bear the expense of maintaining the natural forest cover in view of Article 48 A of the Constitution of India<sup>242</sup>.

## **IMPACT OF GODAVARMAN CASE ON KERALA, WEST BENGAL, ASSAM, TRIPURA, MEZORAM AND OTHER NORTH EASTERN STATES**

This research work is also an empirical study on five states in India with particular reference to the State of Tripura. Godavarman case made specific impact on all States but particularly upon North Eastern States. The impact upon the respondent States is analyzed below:

### **A. The State of Kerala<sup>243</sup>**

**i. Encroachment:** The Chief Secretary of Kerala among many other States are directed to reply in relation to the steps required to be taken by them to prevent further encroachment of forest land and in particular the land in the hilly terrains, National Parks and Sanctuaries, etc. Government order of no removal of pre October 2005 forest encroachers stayed. The SC stayed the order of the Government of Kerala based on newspaper report in 'Hindu' which stated that no removal of pre October 2005 forest encroachers will be allowed. The decision of the State Government was contrary to the policy guidelines issued by MoEF. Encroachment in Cardamom Hill Reserve, Kerala: The SC ordered the State of Kerala to respond to CEC report listing the extent of encroachment in Cardamom Hill Reserve, a notified reserve area home to rich biodiversity. The encroachments allegedly are on basis of forged pattas. The report further highlights that the list of encroachers included powerful and influential persons. The encroachments in the Cardamom Hill Reserve raise serious concerns on the state of ecological sensitive areas in the State of Kerala. Perhaps the Supreme Court has to distinguish the encroachments of the kind described above and the 'encroachments' by forest dwelling communities as they stand on different social, economic and cultural parameters.

**ii. Forest land for religious tourism in Periyar Tiger Reserve:** On an application made by Travancore Devaswom Board (TDB) for use of 12.675 hectares of forest land in Periyar

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<sup>242</sup> In writing the commentary on the case T.N. Godavarman Thirumulpad v. Union of India the researcher solely relied on, Ritwick Dutta, Bhupendar Yadav, Supreme Court on Forest Conservation, Universal Law Publishing Co. Ed.2005, ISBN NO. 81-7534-461-X. The researcher acknowledges his indebtedness to the authors and the book.

<sup>243</sup> In writing the commentary on the impact of the judgment of Godavarman case on the respondent States the researcher solely relied on: Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaiish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

Tiger Reserve for development of Sabrimala Temple in Pathanamthitta district of Kerala, the Standing Committee of National Board of Wildlife (NBWL) conveyed its approval for use of forest land as stated in the communication dated 20.05.2005 of MoEF to the Principal Secretary, Forest and Wildlife Department, Government of Kerala. The CEC too filed its comment to which the TDB sought time to respond and the application was ordered to be put up after the response of Board is filed in Court. In the meanwhile the Government of India was permitted to issue orders for diversion of the aforesaid land.

**iii. Permission to Power Grid Corporation in Peechi Vazani Wildlife Sanctuary:**

Supreme Court granted permission to Power Grid Corporation of India Ltd. (PGCIL) for use of 0.8694 ha. of forest land falling in the Peechi Vazani Wildlife Sanctuary, Kerala for relocation of one damaged tower of 400 KV double circuit of the Udumalpet-Trichur transmission line. The CEC has examined the proposal and has recommended the same subject to the following conditions which are acceptable to the project proponent:

1. For use of forest land approval under FCA to be obtained;
2. Felling of trees will be kept to the minimum possible;
3. The condition imposed by the Chief Wildlife Warden to be strictly complied; and
4. The NPV at the prescribed rate for the forest land falling within the Sanctuary as well as outside the Sanctuary will be deposited by the user agency<sup>244</sup>.

**B. The State of West Bengal**

**i. Ban on felling of trees in any forest, public or private:** The Supreme Court imposed a ban on felling of trees in any forest, public or private. The ban was not to affect felling in any private plantation comprising of trees planted in any area which is not a 'forest' and which has not been converted from an earlier 'forest'. In a 'forest' the State Government may either departmentally or through the State Forest Corporation remove fallen trees or fell and remove diseased or dry standing timber from areas other than those notified under section 18 or section 35 of the Wildlife Protection Act, 1972 or any other Act banning such felling or removal of trees. The State Government was directed to constitute an expert Committee comprising a representative from MoEF, a representative of the State Government, two private experts of eminence and the MD of State Forest Corporation (as Member Secretary),

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<sup>244</sup> 503 I.A. No. 703, 502, order dated 08.02.2002 504 See order dated 28.04.2006 in I.A. No....of 2006 (Application filed by AC) 505 See order dated 07.10.2005 in I.A No. 1408 506 I.A. No. 1373 and order 25.08.2005 507 See order dated 09.05.2008 in I.A. No. 2257 in I.A. No. 1093 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

who will fix the qualitative and quantitative norms for the felling of fallen trees and deceased and standing timber. The State shall ensure that the trees so felled and removed are in accordance with these norms. Felling of trees in any forest or any clearance of forest land in execution of projects shall be in strict conformity with the Forest Conservation Act, 1980 and any other laws applying thereto. Moreover, any trees so felled, and the disposal of such trees shall be done exclusively by the State Forest Corporation and no private agency is to be involved in any aspect thereof.

**ii. Methodology for increasing forest cover:** The Court had directed that the Central Government should evolve a method for making the States deficient in forest cover pay the States abundant in forest wealth as a means for preserving forest wealth. A report of the Committee of Secretaries received on this aspect stated that there was no consensus amongst the States on the point in issue, while some of the States have welcomed the idea. The Committee had discussions with representatives of various State Governments but about twelve States including West Bengal which are deficient in forest cover expressed their reservation in accepting the suggestion of the Court. The Court directed the Chief Secretary to be represented to present its view on this issue.

**iii. Encroachment:** The Chief Secretary West Bengal, among other States were directed to reply in relation to the steps required to be taken by them to prevent further encroachment of forest land and in particular the land in the hilly terrains, National Parks and Sanctuaries, etc.

**iv. Diversion of forest land permitted to “Darjeeling Water Supply Pumping Scheme”:** The Department of Public Health Engineering, Government of West Bengal sought permission to implement a drinking water supply project namely “Darjeeling Water Supply Pumping Scheme” at an estimated cost of rupees forty nine crores seventeen lakhs which requires diversion of 0.99 ha of forest land falling in Senchal Wildlife Sanctuary<sup>245</sup>. The CEC has examined and imposed the condition that a sum of rupees two crores forty six lakhs i.e. five percent of the project cost be deposited in the Compensatory Aforestation Fund for undertaking conservation and protection of National Parks and Sanctuaries in the State of West Bengal by the State Government.

**v. Permission to operate wood based industries and units on imported timber:** In the State there are two thousand nine hundred twenty seven units seeking permission to start wood based industries. The total timber available from the forest area was assessed to be

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<sup>245</sup> 496 See order dated 12.12.1996, 497 See order dated 20.09.2000 in I.A. No. 424, 498 See order dated 08.01.2001, 499 I.A. No. 703, 502, order dated 08.02.2002, 500 See order dated 21.11.2008 in I.A. No. 2318 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

14.25 lakh cu.m. as against 25.52 lakh cu.m. assessed by the State Government. The available timber is adequate only to accommodate seven hundred fifty saw mills. It has been suggested by CEC that seven hundred fifty saw mills, can be given licenses as per the guidelines and suggestions issued by it. On the issue of units running on imported wood, CEC has suggested that these wood based industries should be located at such places which are away from the forest land and also to ensure that these wood based industries are not using non imported timber. On the acceptance of these conditions licenses can be given by the State Government.

**vi. Regulating mechanized boats on Jambudwip islands:** On a report of CEC dated 02-04.12.2002 placed before the Court perhaps regarding their role in transportation of timber and adverse environmental implications it was ordered that no trawler or mechanized boat shall enter the water adjoining Jambudwip Island until further orders<sup>246</sup>.

### **C. The State of Assam**

**i. Saw mills, veneer and plywood mills closed: Interstate coordination directed:** After the closure of all saw mills, veneer mills and plywood mills in Tirap and Changlang in Arunachal Pradesh and within a distance of one hundred kilometer from its border, in Assam, the State of Assam was also directed for interstate coordination to implement the said order.

**ii. Wood based industries: Regulation and relocation:** On 03.03.1998, the learned Amicus Curiae had submitted that the Government of Assam has issued an order on 12.02.1998 whereby wood based units, which have been cleared by the HPC have been permitted to “procure further stocks” from any other units so cleared by the HPC and convert these procured stocks and dispose of finished stocks. He contended that under the cover of the implementation of the order of the Supreme Court dated 15.01.1998, fresh activity appears to have been permitted to the units, which runs counter to the spirit of the said order of 15.01.1998. The Court thus directed the Amicus Curiae to file an application in this regard.

### **iii. Relocation of wood based industries in Assam by declaration of**

**industrial estate:** In December 1998, the State Government of Assam declared certain areas as industrial estate by issuing a notification in this regard to comply with the Supreme Court order of relocating the wood based industries to a specific area so that the monitoring becomes easier and large scale destruction of forest and pilferage of timber by the wood based industries are reduced.

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<sup>246</sup> See order dated 20.10.2008 in I.A. Nos. 1519-1520 502 I.A. No. 920, order dated 25.08.2003 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

**iv. Setting up of private saw mill:** One Mr. Komor Uddin Ahmed, wanted to set up a saw mill on his private property on the ground that he has 7 acres of land in Dhubri district and the trees forming his 7 acres of land would be sufficient to meet the requirements of the saw mill which he proposed to start in his property. This matter was examined by CEC. On the basis of their recommendation SC declined permission for setting up private saw mill on the ground that as there was a large scale felling of trees in these areas, the saw mills in these parts of Assam were allowed to be located in the industrial area so that there may not be any illegal transport of timber. Moreover the timber which may be produced in his 7 acres of land may not be sufficient to sustain the saw mill and it is likely that there would be some illegal supply of timber to this saw-mill<sup>247</sup>.

**v. Encroachment:** The Chief Secretary of Assam, among many other States are directed to reply in relation to the steps required to be taken by them to prevent further encroachment of forest land and in particular the land in the hilly terrains, National Parks and Sanctuaries, etc<sup>248</sup>.

#### **D. The State of Tripura**

**i. Disposal of timber:** The Court made some generic orders regarding disposal of timber from plantations and community holdings. It stated that existing inventorised stock of timber originating from plantations in private and community holdings in the States of Tripura among other States may be disposed of by their owners under the relevant State laws and rules. In States where such laws and rules do not exist, the necessary laws and rules may be framed within six months. The State in Tripura needs to be ascertained in this regard. Note that externally aided projects such as the one being currently carried out with the help of the Japan Bank need to take into design such legal and policy measures as suggested by the SC. It would be a logical next step to ascertain whether such measures are being taken or not.

**ii. Regulating wood based industries in approved industrial estates:** As per the recommendations of CEC, the Court directed that within eight weeks the MoEF in consultation with the State of Tripura, will review number of HPC cleared wood based

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<sup>247</sup> 305 See order dated 03.03.1998, 306 See order dated 10.12.1998, 307 See order dated 15.01.1998, 308 See order dated 11/01/2008 in I.A. Nos. 1358 in I.A. No. 992 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

<sup>248</sup> I.A. No. 703, 502, order dated 18.02.2002 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

industries vis-à-vis total area available in the approved industrial estates to decide if additional industrial estates are needed at Agartala, Tripura<sup>249</sup>.

### **E. The State of Mizoram**

i. Movement of sawn and un-sawn timber allowed as no industrial estate

exist The Supreme Court stipulated that movement of sawn and un-sawn timber shall be permitted only if processed in HPC cleared wood based units situated inside approved industrial estates except in respect of Mizoram where no industrial estates exist. Round and hand sawn timber save in cases where specific approval is accorded by the HPC/MoEF shall not be allowed to be transported outside North East except in the case of Mizoram. It was further stated that movement of timber and timber products for Mizoram shall be regulated as per guidelines prescribed by the Special Investigating Team. The status of these guidelines must be ascertained to get a clearer picture about movement of timber in Mizoram<sup>250</sup>.

## **NORTH EASTERN STATES**

The North Eastern States of India were perhaps the biggest trigger for the ongoing activism of the Supreme Court. The 12.12.1996 order had far reaching consequences in the region. The seven North Eastern States were brought under the purview of the ban on movement of timber. The Court's future strategies on dealing with the forest case in a comprehensive manner started with the directions on the North East. Constitution of committees, information on wood based industries, reporting, compliance monitoring were all part of a thought out strategy.

### **The order stated that:**

- a. All States were required to constitute an expert committee;
- b. All State Governments were required to file a report regarding saw mills, veneer mills and plywood mills;
- c. All States would constitute an expert committee; and
- d. Submit the report of the expert committee for ensuring compliance to the orders of the Apex Court.

### **Regulating Timber:**

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<sup>249</sup> See order dated 13.1.1998, 315 I.A. No. 798, 947, 433, 515 and 594 order dated 01.08.2003 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaiish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

<sup>250</sup> See order dated 12.05.2001 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaiish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

Regulating timber has been the biggest challenge for the Court around the country. The case of North East is perhaps the most complicated which the Court has tried to resolve. Movement of timber, felling, transportation, disposal, inventory and pricing are some of the issues that the Court has been grappling with.

**a) Ban on movement of timber and cut trees:** The seven North Eastern States were brought under the purview of the ban on movement of timber in 1996. The only exception was the passage for certified wood for defense and movement of timber from plantation as per law. The Court observed “a complete ban on the movement of cut trees and timber from any of the seven North Eastern States to any other State of the country either by rail, road or water ways”. However, passage to certified timber for defense and any other Government use would be allowed and the timber from private plantation as per the law applicable shall also be left out of the purview of the above mentioned ban. There was also a ban on movement of cut trees from North East to other parts of the Country. In fact, the ban on movement of cut trees, timber or veneer from any of the seven North Eastern States to any other State in the country in any manner applies to the grown and /or felled timber from any private plantation.

**b) Felling and transportation of timber Banned:** Another order stated “ban on felling and transportation of timber to continue”.

**c) Fresh felling banned:** Fresh felling of timber was completely banned in the North Eastern States till the disposal of legal and illegal timber. It was ordered that there shall be no fresh felling in the forests belonging to the Government, district and regional councils till the disposal of their existing stocks of legal and illegal timber.

**d) Transportation of auctioned timber from the North East only through railways:** The Court also ordered that the transportation of auctioned timber (as well as legal timber) including sawn timber outside the North Eastern Region shall only be done through railways under the strict supervision of the forest department. The Railway Board shall give priority for providing racks/wagons for such transportation. The modalities for transportation of timber/timber products and alternative modes in case of difficulties in transportation by Railways will be worked out by the State Government in concurrence of the Ministry of Environment and Forests.

In view of the report of the High Powered Committee, and taking into account the factors which require an order to be made by the Court for disposal of the felled timber and ancillary matters which are lying in the North Eastern States, the Court made several orders on different aspects of disposal of felled timber including inventory, forest depots, proprietary regime, disposal of timber from plantations and pricing of timber among others.

**a) High Powered Committee directions to be followed in stacking the felled timber these also include micro management issues such as stacking of felled timber.** As directed by the High Powered Committee, the Court said, the State Government shall take all measures necessary to bring the felled timber lying in the forest to the depots or storage points and have it stacked.

**b) Usage of felled timber and transit passes:** The Court also ordered that after the inventory of the felled timber gathered at the depots or storage points is complete, the HPC may permit sale of such rounded timber for utilisation within the State to the extent it is from a lawful source. Further, the movement of rounded timber within the State as well as the movement of finished products within and outside the State shall be under transit passes – the issuance and disposal of which will be under the overall supervision of the HPC. The Court further ordered “after the process of inventorisation is over, the HPC may permit saw mills and other wood based industries to utilize their own legitimate stocks of timber for conversion into finished produce. Such finished produce may then be disposed of by these mills under supervision of the HPC and the State Forest Department. The permission granted by the HPC to these mills shall be on suitable terms to ensure that no malpractice occurs in the future and the mills shall be required to file an undertaking to comply with such terms, any breach thereof having the same consequence as a breach of the order of this Court”.

**c) Disposal of timber only after inventorisation of all felled timber:**

The Court reiterated in another order that disposal of timber shall commence only after the concerned Principal Chief Conservator of Forests irrevocably certifies that inventorization of all felled timber in the State has been completed. As a first measure all inventorised timber including seized timber lying in the forest should be immediately transported to specified forest depots.

**d) Timber as per inventory cleared by HPC may be allowed to be used in a prescribed manner:** More detailed prescriptions were issued in another order where it was stated that timber as per inventory cleared by HPC may be allowed to be converted or utilized, if the unit is located within the notified industrial estate<sup>251</sup>. As the relocation in proposed industrial estates may take some time, existing units with only legal stocks may convert this timber, as one time exception, till such stocks last subject to the maximum period as per the norms

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<sup>251</sup> 264 See order dated 13.01.1998,265 The Constitution function and rationale of High Powered Committee has been explained later in Court strategies,266 See order dated 13.01.1998,267 See order dated 08.05.1997,268 See order dated 08.05.1997,269 See order dated 13.01.1998,270 See order dated 13.01.1998 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

prescribed by the HPC, or six months whichever is less. Any stock remaining thereafter shall vest in the State Government. However, fresh trees or timber will be allotted to these units only when they start functioning within the designated industrial estates. The territorial Deputy Conservator of Forests or Divisional Forest Officer shall be responsible for ensuring that such units process the legal stocks only and will closely monitor the various transit permits (inward and outward) and maintenance of the prescribed records. All such records shall be countersigned (with date) by an officer not less than the rank of an Assistant Conservator of Forests.

Such timber may also be allowed to be sold to other units, which are located in these industrial estates subject to the condition that such transactions are routed through an authority notified or constituted by

the Principal Chief Conservator of Forests. Further, the State Government shall ensure disposal of illegal timber before permitting the conversion or disposal of legal or authorized timber available with the wood based industries.

**e) Illegal or illicit timber to be disposed of as Government timber:** The Court ruled that all illegal or illicit timber found in possession of an offender or abandoned in the forest shall be confiscated to the State Government and shall be disposed of in accordance with the procedure to be adopted for disposal of Government timber.

**f) Seized timber to be converted into finished product of veneer and plywood:** Out of the seized timber, logs found suitable for manufacture of veneer and plywood shall be processed by the State Government within their own factories and by hiring such facilities. The finished product can be marketed freely.

**g) Timber belonging to Government to be first offered for sale for bonafide official use:** The Court also significantly ruled that the remaining timber belonging to Government and district councils shall be first offered for sale to Government Departments for their bonafide official use and the rest shall be sold in public action or through sealed tenders later fixing floor price by an expert committee with a representative from the MoEF.

**h) Disposal of private timber stocks cleared by HPC:** Private timber owners whose stocks have been cleared by HPC shall have the option of selling the timber in the auctions organized by the State Forest Department or Forest Development Corporation or direct as the case may be. In an important order, the Court also clarified that clearances given by the HPC to the inventory of the timber other than the timber owned by the Government or Government owned forest corporations, which has not so far been transported to the notified industrial estates, would stand confiscated to the State Government free from all liabilities.

**I) Disposal of Timber from Plantation and Community holding:**

The Court also made some generic orders regarding disposal of timber from plantations and community holdings. It stated that existing inventorised stock of timber originating from plantations in private and community holdings in the States of Meghalaya, Mizoram, Tripura, Manipur and Nagaland may be disposed of by their owners under the relevant State laws and rules<sup>252</sup>. In States where such laws and rules do not exist, the necessary laws and rules may be framed within six months. It would be interesting to study the implications of this order in the plantations and community lands which sometimes forms the majority of lands in the north east in many States. Further, what are the new rules that have been made in this regard would be an interesting insight into the minds of the States regarding timber.

**J) Pricing of timber:**

To be decided by a committee The Court directed that the State Governments shall ensure that timber or forest produce is supplied to industries, including Government undertakings, at full market rate. The existing royalty shall be reviewed and revised upwardly by a committee constituted under the chairmanship of Principal Chief Conservator of Forests with representatives from the concerned Departments and shall also include the concerned Departments and a representative of Ministry of Environment and Forests. The price of timber for which royalty has not been realized in full shall also be reviewed by this committee and the concerned industry shall be required to pay the revised price or the royalty (including surcharge, fee etc.) whichever is higher after deducting the part royalty already paid.

**K) Sawn and unsawn veneer or timber:**

The Court came down heavily on all concerned including railways, errant officials as well as saw mills when on 12.03.2001, the Special Investigation Team – Action Taken Report was filed which pertained to seizure of 200 wagons of timber in Delhi. According to the particulars given, the loading stations were in the North Eastern States including Assam. According to the report, a large quantity of timber did not have proper hammer marks and some of the transit passes were also invalid. The Railway Board was directed to file within ten days the details with regard to movement of wagons from this North East loading stations

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<sup>252</sup> 271 Vide the HPC third Report, 272 See order dated 13.01.1998, 273 See order dated 13.01.1998, 274 See order dated 13.01.1998, 275 See order dated 12.05.2001 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

indicated in the analysis attached to the affidavit of the Union of India to places outside the said States in the last three years. The Amicus Curiae also apprehended laxity on the part of the authorities. The Court observed that it has been their experience that illegal felling and transportation of timber is firstly caused by the existence of licensed and unlicensed saw mills and the transportation of the timber by road and rail. In a hard hitting move the Court directed “Till we receive information of the State of affairs from the respective Chief Secretaries, we hereby prohibit movement of all timber (sawn and unsawn) and veneer from any of the North Eastern States to any other part of the country either by road or by rail or by waterways or in any other manner whatsoever. We further direct the States to take immediate action to suspend immediately the working of all the errant saw mills which are shown as the consignors in column ten of the analysis of the detained wagons because it is from these saw mills that the illegal timber has found its way to Delhi”.

The Court also directed that cutting of trees with or without permit shall be banned in NE States till further orders.

**L) Specific process stipulated for movement of sawn and un-sawn timber from the North Eastern States:**

The SC modified its order dated 23.04.2001 regarding movement of sawn and un-sawn timber from the NE States to the rest of the country. It stated that the movement of sawn and un-sawn timber from the NE States shall be permitted on the intent of the District Forest Officer or any other authorized Forest Officer on an application made by the registered timber transporter<sup>253</sup>. In case any illegal timber is found to be transported, it will be open to take action against the concerned forest official under whose supervision and control the seal has been affixed on the railway wagon. In the event the seals are tampered with the railways can also be proceeded against. The responsibility of the above two is in addition to the primary responsibility of the registered timber transporter on whose application the indent was made.

The Supreme Court further stipulated that such movement of sawn and unsawn timber shall be permitted only if processed in HPC cleared wood based units situated inside approved industrial estates except in respect of Mizoram where no industrial estates exist. Round and hand sawn timber save in cases where specific approval is accorded by the HPC/MoEF shall not be allowed to be transported outside North East except in the case of Mizoram.

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253. 276 See order dated 13.01.1998, 277 Ibid, 278 See order dated 23.04.2001, 279 See order dated 12.05.2001 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

### **Regulation of wood based industries:**

Apart from timber, the Court specifically also laid down several parameters to regulate wood based industries which include licensing, supervision, institutional structures and location among others.

a) Wood based industry to be only regulated in terms of capacity and location: Bonafide local needs recognised The Court held that though the proliferation of wood based industries has been the main cause of degradation of forests in the North Eastern States, considering the extent of forests (sixty four percent of the geographical area) and the dependence of the local people on the forest resources in the region, it is

neither feasible, nor desirable, to ban completely either the timber trade or running of the wood based industries in the north east. However, their numbers and capacities need to be regulated qua the sustainable availability of forest produce and they are also required to be relocated in specified industrial zones. Moreover, the industrial requirements have to be subordinated in the maintenance of environment and ecology as well as bonafide local needs.

b) Notification of industrial estate for wood based industries

The State Government shall formally notify industrial estates for locating the wood based industrial units in consultation with the Ministry of Environment and Forests. The Court also suggested that wood based industries should be localized with inputs from the MoEF. Further, wood based industries which have been cleared by the HPC without any penalty shall have the option to shift to industrial estates which shall be identified by the States within forty five days and developed within six months thereafter. This should also be examined in the north east context. The Court further made it clear that unit who do not want to shift to the designated industrial estates shall be allowed to wind up as per law.

c) Number of wood based industry to be regulated as per sustainability Number of wood based industries shall be determined strictly within the quantity of timber, which can be felled manually on sustainable basis as determined by the approved working plans from time to time. If it is found that units after relocation in industrial estate have excess capacity then their capacities shall be reduced pro-rata to remain within the sustainable levels<sup>254</sup>.

Licensing of wood based industries:

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<sup>254</sup> 280 See order dated 13.01.1998,281 See order dated 13.01.1998,282 See order dated 13.01.1998,283 See order dated 13.01.1998,284 See order dated 13.01.1998, See order dated 12.05.2001 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

Suspension, renewal and moratorium The Supreme Court also tightened the noose on the wood based industries by first suspending all licenses to wood based industries.

a) Renewal of license made dependent upon lack of irregularity The Court categorically stated that licenses of units shall be renewed annually only in those cases where no irregularity is detected.

b) Moratorium on issue of new licenses for next five years Further, there shall be a complete moratorium on the issue of new licenses by the State Governments or any other authority for the establishment of any new wood based industry for the next five years after which the situation shall be reviewed with the concurrence of Ministry of Environment and Forest. This needs to be freshly reviewed.

c) Renewal of license through High Powered Committee: Scrutiny and not against public interest The Court has often resorted to innovative measures for wood based units giving them enough opportunity to prove their credentials and bonafide. In the order dated 13.01.1998 it stated that the wood based units which have been penalized because they were found to exceed normal recovery norms, but were within fifteen percent of the said norms, will have a right to approach the HPC on or before 09.02.1998. The HPC shall examine all relevant material in particular the income tax and excise records for the preceding three years. The HPC shall dispose of all such applications within forty five days thereafter and such mills may be granted licence if the HPC finds that it is not against public interest so to do288. Ironically, what constitutes public interest in the case of wood based industries was not explained or elaborated further by the Court.

d) Stocks of erring units to be confiscated: Conditions on relicensing

The Court came down heavily against units which have not furnished details or information to the HPC so far or which have not been cleared by the HPC. It directed that such units shall not be granted any license and the stocks in their custody if any, shall be confiscated to the State Governments. In case of leased mills belonging to corporations or trusts or cooperative societies owned or controlled or managed by the State Government and where the lessees have been penalized by the HPC, the leases shall stand revoked.

Such mills shall, however be eligible for re-licensing subject to the condition that these mills are not leased out in future except to a entity fully owned by the Government.

### **HPC to dispose of assets of defaulting wood based industries in the North Eastern States:**

Another important observation made in the significant order dated 30.10.2002, the HPC was allowed to dispose of the assets on such defaulting units, including plants, machinery, land, shed, timber and timber products who have not paid the penalty imposed by the HPC of the wood based units of North Eastern States<sup>255</sup>. This was however made subject to such orders, which may be passed by the CEC. The role of CEC with regard to disposal of assets of defaulting wood based industries in the north east was further strengthened.

### **Forest protection, conservation and regulation in the North East:**

There is enough evidence of the numerous initiatives of the Supreme Court to specifically deal with the issues of forest protection and conservation in the north east. Several specific measures including restrictions on entry, institutional structures, creation of ecologically vulnerable areas, patrolling and planning have been mandated by the Supreme Court.

a) Regulation of entry in reserve forest: In an order as early as 08.05.1997, the Supreme Court directed that entry in to reserved forest should be regulated, and entry should not be without the written permission of the PCCF. It ordered “No person other than a local inhabitant, a Forest Officer or Police Officer or any other personal on official duty shall be permitted to enter the reserved forests except in accordance with permission in writing issued by the PCCF”.

b) Foolproof institutions required for forest protection under the supervision of North East Council

The Court observed in a significant order<sup>292</sup> that in view of the multi dimensional issues impinging upon forest protection, foolproof institutional arrangements need to be put in place, and made functional

under the direct supervision of the North East Council (NEC). Technical backstopping in the forestry matter will be provided by MoEF by opening a separate cell in the Ministry under an officer of the rank of CCF and starting a satellite office of the Forest Survey of India at Shillong. It would be worthwhile to examine the nature of institutions created or whether any such technical backstopping cell has been created in the MoEF.

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<sup>255</sup> 285 See order dated 13.01.1998, 286, 287 The ban imposed on opening new saw mills/wood based industries and/or issuance of new licences in Nagaland State extended for another five year by order dated 30.10.2002, 288 See order dated 13.01.1998, 289 See order dated 13.01.1998, 290 See order dated 30.10.2002 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaiish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

c) Forest conservation initiatives by Court in the North East: Vulnerable areas, ecologically sensitive areas and maximum permissible yield In this very order the Supreme Court has given some specific directions regarding forest protection and scientific management of the forests.

**On Forest Protection:**

The Court devised several measures which include the following:-

i. Action plan for patrolling of vulnerable areas: An action plan shall be prepared by the Principal Chief Conservator of Forest/Chief Forest Officer for intensive patrolling and other necessary protective measures to be undertaken in identified vulnerable areas and quarterly report shall be submitted to the Central Government for approval. The approved plan together with the modifications if any shall be acted upon.

ii. Powers of forest officers to be enhanced to enable them to ensure protection of forest wealth: To ensure protection of the forest wealth, the forest officers in the North Eastern States may be empowered with authority to investigate, prosecute and confiscate on the lines of the powers conferred on the forest officers in many other States in the country<sup>256</sup>.

iii. Security and forest protection shall be the responsibility of the State Government: The State Governments shall be responsible for providing all facilities including security and police force to strictly ensure forest protection measures to stop illicit felling, removal and utilization of such

timber. The Chief Secretary shall review the various matters concerning forest protection and development in his State at least once every six months with senior forest officers up to the rank of Conservator of Forests. Regional Chief Conservator of Forests or MoEF shall be invited to all such meetings.

**On Scientific Management of Forest:**

**i. Working plan for each forest division to be made:** Working plans for all forest divisions shall be prepared by the State Governments and get approved by the Government of India. Forest working shall be carried out strictly in accordance with the approved prescriptions of the working plans. The working plans should be prepared within a period of two years. During the interregnum the forests shall be worked according to an annual felling program approved by the MoEF which shall be incorporated in the concerned working plan. In case of working plan is not prepared within this time frame, future felling will remain suspended till

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<sup>256</sup> 291 See order dated 08.05.1997 292 See order dated 13.01.1998, 293 See order 13.01.1998 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

the regular working plan is prepared and got approved. The status of these working plans needs to be ascertained as it is the logical next step.

**ii. Working schemes for the district, regional and village forest:** The forests under the district, regional and village council shall be worked in accordance with working schemes which shall specify both the program for regeneration and harvesting and whose period shall not be less than five years.

**iii. Maximum permissible yield shall not exceed annual harvestable yield determined by MoEF:** The maximum permissible annual yield in the interim measures suggested above, shall not exceed the annual harvestable yield determined by MoEF. The plantation schemes raised on private and community holdings shall be excluded from these requirements but shall be regulated under respective State rules and regulations.

**States to identify ecologically sensitive areas:**

Ten percent of total forest area It is perhaps for the first that a definitive percentage of setting aside areas as ecologically sensitive areas was mandated in the north east. The order stated that the States shall identify ecologically sensitive areas in consultation with leading institutions like the Indian Council of Forestry Research and Education, Wildlife Institute of India, North Eastern Hill University, North Eastern Regional Institute of Science and Technology, leading NGO, etc. and ensure that such areas are totally excluded from any kind of exploitation. The minimum extent of such areas shall be ten percent of the total forest area in the State.

**Court Strategies:**

Regulating bodies such as High Powered Committee formed A High Powered Committee (HPC) was constituted for overseeing the implementation of the orders of the SC in the north eastern States<sup>294</sup>. Constitution and functions of this HPC were also spelled out in the order<sup>257</sup>.

**a) Constitution of High Powered Committee:**

A Committee comprising of-

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<sup>257</sup> 294 See order dated 04.03.1997 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro - Legal Defence Firm, [ELDF and WWF India 2009]

- Shri T V Rajeshwar, Chairman;
- Shri R N Kaul, Retired. I G of Forests – member; and
- one representative nominated by the Ministry of Environment and Forest (MoEF) – Member Secretary was constituted.

**b) Functions of the High Powered Committee**

i. Inventory: The HPC was directed to oversee preparation of inventory of all timber in all forms including timber products lying in the forest or in transit depots and lying in mill premises. The inventory should, wherever possible, indicate the origin and source of the timber. The Committee may for this purpose select suitable person who would be made available by the concerned State Government at its request. As far as possible, such inventory was to be prepared within a period of eight weeks.

ii. Regulating sale of timber or timber products: The Committee may, if it considers appropriate, permit the use or sale of any part of the timber or timber products. Any sale shall be effected through the Forest Corporation of the State under overall supervision of the Committee. The net sale proceeds after deduction of the transaction related costs and payment of wages to the labor and staff shall be deposited by the Forest Corporation or through forest department in a designated account. The modalities will be worked out by the Committee.

**c) Enabling and Strengthening of High Powered Committee:** The Court not only created but also enabled and strengthened the HPC through various measures. The HPC, for example, through the Amicus Curiae, ask for such directions from time to time from the Court as it considers appropriate. Further, the MoEF was required to make available as far as possible within a week, office space and provide secretarial and all other related facilities (including local transport and telecommunication) befitting the stature of the committee. The MoEF was also required to make arrangements for and meet expenses of travel of the Committee. All arrangements for stay etc. of the committee (outside Delhi) as may be necessary, would be the responsibility of the State Government concerned. The Assam Government will make similar office and other facilities available in Guwahati. It is for the sake of convenience at this stage that the Central Government and the State Governments are being directed to make certain payments and meet all the expenses. However, the question of liability for payment of these amounts would be considered at the final hearing and suitable directions for the purpose given at the stage indicating the principal for determining the liability for making the payment.

**d) Other North Eastern States allowed responding to High Powered Committee and approaching the Court for any direction with regard to timber.**

The other North Eastern States which want any order to be passed in respect of the timber in their State may respond to the comments of the HPC made in relation to it and also approach the HPC with their request to enable HPC to give its comments thereon. The request so made by concerned North Eastern States together with the comments of the HPC could then be considered for issuing the appropriate directions, if any. The State desirous of seeking any directions in this behalf should approach the HPC within a week. The HPC is requested to give its comments till 05.01.1998. The above demonstrates the short term measures that the Supreme Court employed to take into control the enormity of issues of the north east<sup>258</sup>.

**e) Working of High Powered Committee sought to be clarified:**

An Intervention Application was filed by the Amicus Curiae regarding the working of the HPC and it sought to strengthen the HPC further. Among others it sought to increase the penal powers of the HPC where it requested that the orders passed by the HPC imposing a penalty based on actual adjudication at the behest of the unit, even if it results in the imposition of penalty larger than the penalty originally imposed are valid and permissible. Further, it also sought to clarify that no unit in respect of whom an order had not been made by HPC on or before 15.01.1998 would be permitted to shift to the industrial estate or to revive and / or restore its licence. The Court held that the HPC was and would be entitled to impose penalty larger than the penalty originally imposed, as long as this penalty is based on the records so produced. The Court also clarified regarding the date of 15.01.1998. It said "A question has arisen with regard to cases where orders had not been made by the HPC on or before 15.01.1998. This Court's order dated December 1998 had contemplated documents being filed and orders being passed by 15.01.1998. It is possible that due to volume of work, the HPC may not have been able to pass orders by 15.01.1998 even though papers and other relevant material had been submitted to the HPC by that date. It is therefore made clear that the HPC would be entitled to look into the records and pass orders in every case where documents and material had been placed before the HPC by 15.01.1998". The Court further made it clear that wherever any penalty and/or additional penalty has been imposed by the HPC, the unit concerned will have a right to approach the HPC to examine the matter afresh.

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<sup>258</sup> 295 See order dated 16.12.1997 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro - Legal Defence Firm, [ELDF and WWF India 2009]

The Court also set up an appellate mechanism with the HPC where it permitted any unit in respect of which penalty and/or additional penalty has been levied by the HPC to approach the HPC for reconsideration on the basis of the material which it may choose to produce provided such a request is made by the unit within one month of the passing of the order by the HPC or, in those cases where orders have already been passed, within one month from today i.e. 01.05.2000. The Court also laid down that in as much as the HPC would in effect be discharging quasi-judicial functions, it will be appropriate that the HPC may briefly indicate the reasons in support of the order passed by it. The Court further clarified that wherever the HPC had given clearance to a unit after 09.02.1998, the unit will be entitled to relocation. It, however,

made it clear that no unit which had not furnished the record and particulars before 15.01.1998 will be entitled to the benefit of this order.

**f) High Powered Committee reconstituted and given some additional responsibilities:**

The HPC was reconstituted by an order dated 17.04.2000 with Shri S C Sharma, Additional IG (Forests) as the Chairman of the Committee and with Shri G K Pillai, Joint Secretary, NE in the Ministry of Home Affairs as the other member. They were also ordered to look into several new issues that emerged in the north east including supervising the transportation of all the illegal timber since none of it has been sold despite orders made by the Supreme Court from time to time. Other responsibilities include overseeing investigation into specific cases of illegal felling and certain other matters referred to in the confidential report given by the HPC to the Supreme Court and reexamining the matter of licensing of the units in the light of events which had occurred in the interregnum, particularly the seizure of a very large quantity of timber originating from North Eastern States – Nangloi, Rajpura and Tinsukia<sup>259</sup>.

**g) High Powered Committee and Special Investigation Team:** Empowered including confiscation powers-

In a significant order<sup>300</sup> the Court directed that “all concerned State Government and railways shall strictly follow the guidelines issued by the Special Investigation Team. The HPC, SIT or any other authority constituted under the directions of this Court are empowered to issue orders for confiscation of any vehicle including trucks used for movement of any timber or timber products which have been or were being used for transportation of

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<sup>259</sup> 296 See order dated 01.05.2000 ,297 Ref I.A. No. 565 and SC order dated 17.04.2000,298 In modification of paragraph 14 of the order of December, 1996,299 See order dated 17.04.2000 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

timber/timber products in violation of the order of this Court”. It further asked the State Government and other concerned authorities to provide all necessary assistance sought for this purpose. The Court also observed that the HPC, SIT and / or any other authority constituted under its order shall be at liberty to issue directions for detention, verification, secure, confiscation, and disposal etc. of timber or timber products including that in transit. Such directions issued to the registered timber transporters, consignors, owner of the consignee, transporter of State Government, railways or any other authority shall be binding on them.

**h) SIT to regulate railway wagons for transportation of timber:** The Court also directed that the SIT shall from time to time prescribe the maximum number of railway wagons for and of the approved loading stations, which may be allowed for each quarter for transportation of timber including sawn timber. The railway shall ensure that in no way the limits are exceeded.

**i) Demurrage, disposal and wharfage:** SIT Empowered The Court made it clear that the question of demurrage or shortage claimed by railways in respect of goods detained shall be decided in such manner it may order. Pending such decision, the SIT will be at liberty to dispose of the confiscated goods and keep the proceeds in a separate bank account after payment of direct expenses and will abide by the orders of the Court for its utilisation. It further directed the railways not to object in the goods being lifted without payment of demurrage or wharfage in view of this arrangement.

**j) HPC order can be appealed against only in the Supreme Court:** Guwahati High Court restrained from entertaining any such appeal When the Amicus brought to the notice of the Supreme Court that there are cases which have been or are pending in the Guwahati High Court in variance with the order of the Supreme Court, the Court ordered:

“we restrain the Guwahati High Court, including any of its Benches, from entertaining any writ petition in connection with any order passed by the HPC if any person has a grievance against the order passed by the HPC, the only course open is to approach this Court. The Registrar of the Guwahati High Court is directed not to register any writ petition so filed”.

**k) Action against officials:** Another effective strategy adopted by the Court was the threat of punishment to erring officials. The Court ordered that the State Government shall identify within 45 days all those forest divisions where significant illegal felling have taken place and initiate disciplinary criminal proceedings against those found responsible. The first action

taken report (ATR) in this regard would be submitted to the Central Government within three months, which shall be followed by quarterly reports till the culmination of the matter<sup>260</sup>.

**l) Onus on highest officials such as Chief Secretaries to act within a given time line:** The Court employed effective strategies by putting the onus of implementing its orders to the highest ranking officials in the State Governments namely the Chief Secretaries. These include responsibilities for reviewing the action taken against officials and others found responsible for significant illegal felling; those involved in movement of illegal timber seized/confiscated by the SIT ; departmental proceeding or criminal proceedings as may be necessary and the like to assure this Court that the States are serious in creating an environment of deterrence against illegal felling of trees. The Court also directed for an action taken report by the concerned Chief Secretaries within sixty days, which inter alia should include their concern about adequacy of the action taken against the concerned officials. Further it required that the proceedings for confiscation of trucks and other vehicles used for movement of illegal timber especially where such movement has taken place using fake/tampered/expired transit passes may also be reviewed. Such review shall also be done by the Chief Secretaries while taking half yearly review measures as per order dated 15.01.1998<sup>304</sup>. The railways were also asked to review the action taken and take corrective measures<sup>261</sup>.

## **I. The State of Nagaland**

### **1. Industrial Estates**

Every State including Nagaland earmarked areas as industrial estate for the operation of the wood based industries. Thus when the State of Nagaland issued a notification dated 15.06.1998, without consulting the MoEF, the Court observed that it ran in the teeth of the directions issued by the Supreme Court. Thereafter the State Government issued a draft notification complying with the Supreme Court order indicating the location of the industrial estates and minor industrial estate and the same was approved was MoEF. The said notification regarding the industrial estates in Nagaland was allowed<sup>311</sup> and the SC directed the State to publish this notification and act strictly as per this notification in future.

### **2. No new saw mills in Nagaland for another period of five years:**

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<sup>260</sup> 300 See order dated 12.05.2001,301 See order dated 12.05.2001

<sup>302</sup> See order dated 12.05.2001,303 I.A. No. 685, order dated 18.02.2002 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

<sup>261</sup> <sup>304</sup> Especially para 28 of the order dated 15.01.1998 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

As per the first Monitoring Report of the CEC, one of the three suggestions put forward and accepted by the Union of India and consequently directed by the Court was that the ban imposed with regard to the opening of the new saw mills and other wood based industries by the Court's order dated 15.01.1998 in the State of Nagaland would be extended by a further period of five years i.e. from 30.10.2002 to 29.10.2007. This order needs a fresh look due to the fact that it expired technically on 29.10.2007<sup>262</sup>.

## **II. The State of Meghalaya**

The State of Meghalaya was directed to file an affidavit containing detailed particulars of wood requirement of the tribal population, wood based industries and minerals being mined from the forest<sup>316</sup>. This was in response to the State of Meghalaya' asserting that a significant quantity of timber is required for use in the State itself by the rural tribal population. The State had also asserted that there is a loss of revenue to the State Government on account of restrictions placed by the order of 12.12.1996 and a large number of people of the State have been deprived of the employment. It is in this light that the State Government was asked to furnish full and complete particulars of:

- a. The quantity of timber which comes from its forest for use by the rural tribal population, the extent to which it is made available to the rural tribal population including the terms on which it is so made available.
- b. The revenue derived by the State by way of royalty from the minerals, mines and forest area, purchase tax on export of timber, sale value of timber drawn from the Government forests and the extent and quantity of such sale and the manner of sales;
- c. The number of wood based industries within the State and the number of persons employed in such industry. The Court has almost uniformly applied the above set of parameters to all the States and Meghalaya is no exception.

**1. Permission for natural forests and artificial forests on private holdings sought:** State of Meghalaya wanted that the natural forests including artificially generated pine plantations on private holdings in Meghalaya may be allowed to be harvested in accordance with the time honoured customary and traditional rights subject to the rules and regulations framed by the concerned autonomous district councils under the provisions of their management and Indian Forest Act, thus read with the provisions of the Meghalaya Forest (Removal of

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<sup>262</sup> 311 Reference I.A. No. 397,312 See order dated 16.04.1999,313 See order dated 30.10.2002 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

Timber) Regulation Act, 1981 and preserved norms as per duly approved working schemes. MoEF will give its response to this request at the next date of hearing.

**2. Mining by a huge corporate without forest clearance:** The applicant has a lime stone quarry in the State of Meghalaya. It is covering an extent of 100 ha. and is on the border of India and Bangladesh. AC has brought to the notice of the Court that the lime stone quarry is in the forest area and the mining operation has been commenced without obtaining prior permission of the Court. It has been submitted that the mining area is not in a forest and the mining operation itself is as a result of agreement between India and Bangladesh. A report has been called for in this matter<sup>263</sup>.

### **III. The State of Arunachal Pradesh**

The 12.12.1996 order of the Supreme Court also came down heavily on Arunachal Pradesh.

#### **1. Ban on felling of evergreen forests in Tirap and Changlang:**

Firstly, there was a complete ban on felling of any kind of trees in the tropical wet evergreen forests of Tirap and Changlang in the State of Arunachal Pradesh on the pretext of maintaining ecological balance and that such forests are needed to preserve biodiversity. Apart from the site specific order there were several other implications of the above order.

#### **2. Saw mills, veneer and plywood mills closed:**

Interstate coordination directed All saw mills, veneer mills and plywood mills in Tirap and Changlang in Arunachal Pradesh and within a distance of one hundred kilometer from its border, in Assam, was asked to be closed immediately. The State of Assam was also directed for interstate coordination.

#### **3. Permit system in Arunachal Pradesh abolished:**

In States like Arunachal Pradesh where permit system was prevalent felling is permitted only as per the terms and conditions of the permit. However, the permit system in Arunachal Pradesh was abolished. It was ordered that the State Government may provide financial assistance in cash or kind in the form of timber only for the bonafide use of the local tribals alone. Such concessional timber shall not be bartered or sold. Felling of trees for such purpose shall be carried out only by a Government agency.

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<sup>263</sup> 316 See order dated 04.03.1997, 317 See orders dated 28.09.2007 in I.A. No. 1868 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

#### **4. Utilization and disposal of illegally felled timber:**

a) Ownership of illegally felled timber to be of the State Government The Court observed that the ownership of all illegally felled timber within the forest area including that in the depots is of the State of Arunachal Pradesh and, therefore, the proceeds thereof must go to the State.

b) Supervision of auction of all illegally felled timber by High Powered Committee- In order to fetch a proper price for the same, it is necessary to make suitable directions for the disposal/ utilisation of all such timber in a manner so that the proceeds thereof are available to the State Government.

Therefore, it was directed that all the illegally felled timber within the forest area including the depots would be sold by public auction at Delhi under the supervision of the HPC after permitting inspection of the same at the site to the intending bidders. The modalities for the performance of this exercise would be laid down by the HPC and the entire exercise of permitting inspection of the timber and its auction after due advertising, would be under the supervision of the HPC<sup>264</sup>. It was also directed that the State of Arunachal Pradesh and Union of India would render full assistance to the HPC in the performance of this exercise including the facilities for the removal of the purchased timber by the buyers thereof. The Court also observed that the prohibition on movement of timber outside of NE States shall not apply to the movement of such auctioned timber. The prohibition against movement of timber outside the North East region, enforced by the earlier orders, would thus stand modified to this extent.

c) Sale proceeds to go to the State Government: The total sale proceeds of the said timber would go to the State of Arunachal Pradesh which will utilize one half of that amount for raising plantation by local tribal population within the State so that this part of the amount would be utilized only for the purpose of forestry and assistance to the local tribal population. The remaining one half of the total sale proceeds, after deduction of the expenses there from, would go to the State coffers for other developmental activities in the State.

#### **5. Court strategies:**

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<sup>264</sup> 318 See order dated 12.12.1996, 319 See order dated 13.01.1998 320 See order dated 16.12.1997 related to I.A. No. 260/97, as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaiish Uppal and Priya Gupta [Edited], WWF-India, Enviro -Legal Defence Firm, [ELDF and WWF India 2009]

The Arunachal Pradesh Forest Protection Authority was created by the Central Government under EPA, and the Supreme Court seized the opportunity to transfer all related matters to this authority which has to decide them as per the mandate of the SC orders. The Court also ordered that it shall also be open to any party, whose application is not pending before it and who wishes to seek some directions in the matter, to approach the authority directly. It further laid out the procedure by directing that the Authority shall consider the applications, both, referred by this Court and filed directly before it, and give appropriate directions, subject, however, to the condition that no direction, which is inconsistent with any of the orders or directions made by this Court. Should the authority, however, find it necessary to seek any modification or variation of any of the orders or directions issued by the Supreme Court, so as to be able to give effective relief to the concerned parties, the Authority shall be at liberty to approach it for such modification/variation. A time line was also mandated and the Court observed that “we expect that the Authority shall dispose of the applications concerning Arunachal Pradesh within a period of eight weeks from the date of applications are received by it from this Court and also within the same time from of eight weeks, from the date when an application is filed directly before the Authority by any of the parties”. A mechanism for reporting was also set up and the Authority was required to submit a report regarding disposal of the applications, together with the orders made thereon to this Court every three months. A three months review suggested that the Arunachal Pradesh Forest Protection Authority was doing well and the SC directed that the Central Government should explore the possibility of replicating this example in other States as well.

#### **6. Permission to army for construction of road through an alternative route:**

The Army wanted to construct a road in the forest area. As per existing process the proposal was examined by the CEC and CEC was of the view that initially the proposal was not feasible as it would cause more damage to the forest and ecological balance. Then MoEF suggested an alternative proposal and it was accepted by the Army. SC accepted the proposal and the permission were granted to Army for construction of this road<sup>265</sup>.

## **A CRITICAL APPRAISAL OF GODAVARMAN CASE**

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<sup>265</sup> 321 Environment Protection Act 1986, section 3; The notification has been issued on 17.09.1998 detailing the powers and jurisdiction of the Authority 322 See order dated 17.09.1998 323 SC order dated 10.12.1998 324 See order dated 11.01.2008 in I.A. No. 1354 in 1154 as cited in Sanjay Upadhyay, Shilpa Chohan and Archana Vaidya, INDIA'S FORESTS AND THE JUDICIARY: THE GODAVARMAN STORY, Sejal Worah, Vishaish Uppal and Priya Gupta [Edited], WWF-India, Enviro - Legal Defence Firm, [ELDF and WWF India 2009]

The Supreme Court expanded the Godavarman case from a matter of ceasing illegal operations in one forest into a reformation of the country's forest policy. In its order on the Godavarman case the court suspended tree felling across the entire country paralyzing the wood based industries. This had far reaching implications. The court has heard around 800 Interlocutory Applications since 1996. The court has assumed the role of policy maker, administrator of policy, and interpreter of law<sup>266</sup>. This is an unprecedented assumption of power by the Supreme Court. The Godavarman case opened a Pandora's Box that affected the wood based industries and the forest dwellers across India in a far reaching manner. The order of the Supreme Court that stopped all non-forestry activities such as saw mills and mining operations which had not been expressly approved by the Central Government and suspended all tree felling in all forests except those under State Governments Plans effectively froze India's timber industries and trade. In 1998 all license of wood based industries were suspended and the saw mills were relocated in industrial estates for better monitoring<sup>267</sup>. The Supreme Court assumed the role of executor and administrator of law concerning the management of already felled timber in a manner laid down by the court itself<sup>268</sup>. To maintain its control over the case the Supreme Court excluded the jurisdiction of lower courts in matters concerning ceased illegal timber and chose to micromanage the proceeding<sup>269</sup>.

After suspending all activities like tree felling, illegal saw mill operations and disposal of already felled trees, the Supreme Court ordered investigations into various complaints of illegal mining operations<sup>270</sup>. The court found blatant irregularities in the mining operations and demanded a response from the State Government. In doing so the Supreme Court assumed the role of policing and constituted its own committee to investigate and report on illegal mining so that proper action could be taken.

With the Godavarman case, the court made itself a director and an overseer of forest issues, involving itself in national and local forest protection, timber pricing, timber transport, licensing of timber industries, management of forest revenue, and enforcement of its own orders concerning forest law, all independent of the Central and the State Governments. The

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<sup>266</sup> Armin Rozen Cranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>267</sup> T.N. Godavarman Thirumulpad v. Union of India AIR 1998 SC 769

<sup>268</sup> T.N. Godavarman Thirumulpad v. Union of India (1997) 7 SCC 440

<sup>269</sup> T.N. Godavarman Thirumulpad v. Union of India (2001) 10 SCC 645

<sup>270</sup> T.N. Godavarman Thirumulpad v. Union of India (IA- NOs. 71, 79, 104, 105, 107, 113, 121, 166, 260, 261, 262 in Writ Petition(c) No.202 of 1995) with Environment Awareness Forum v. State of Jammu & Kashmir (IA -No. 13 in Writ Petition (c) No. 171 of 1996), AIR 1999 SC 97 (1998)

Supreme Court's far reaching measures to control deforestation resulted in confusion among State and National Organizations, mismanagement of forestry issues and attempts at forest protection at the expense of human rights. The problem became un-manageable with eventual involvement of State Governments, the MoEF and the CEC which the Supreme Court created into 2002<sup>271</sup>.

As the problem of managing the complexity of its own orders grew, the Supreme Court increasingly micromanaged problems that would normally have been dealt with by Government Agencies. In November 24,2001 the Supreme Court asked the MoEF to put together guidelines for compensatory aforestation so that States could grant diversion of forest land while simultaneously ensuring a stable percentage of forest cover in the country. The court asked that these guidelines be provided by February 18, 2002 but on that date no such guidelines were submitted and in the absence of such guidelines the MoEF could adequately implement any policy allowing diversions of forests for commercial use while increasing forest land in other areas<sup>272</sup>.

To compensate for the failure of MoEF to cooperate the Supreme Court began making its own guidelines for management of aforestation in October 2002. It require the States pay the Net Present Value (NPV) of the forest land that they divert for public sector projects, mining companies and private companies. This NPV could be Rs.5.8 lakhs and Rs. 9.2 lakhs depending on the density and the quality of the forest land diverted<sup>273</sup>.

The Supreme Court also curbed the diversion of funds to non-aforestation activities by ordering the creation of a Central Fund for all money collected by NPV payments. The North Eastern states and a few other States were not spending all the funds collected for aforestation and diverted some funds for other purposes<sup>274</sup>. In accordance with the Supreme Court order the MoEF constituted the Compensatory Aforestation Management and Planning Agency (CAMPA) to manage the collected funds CAMPA can redistribute funds directly to organizations engaging in aforestation effectively bypassing the State Governments<sup>275</sup>. The member Secretary of the CEC which recommended Central Fund to the Supreme Court suggested that the CAMPA could be handling up to Rs.2000 corers per year.

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<sup>271</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>272</sup> Ibid

<sup>273</sup> Ibid

<sup>274</sup> Prabhjot Singh, SC Orders Body on Aforestation Fund, The Tribune (Chandigarh, India), November 24, 2002

<sup>275</sup> Ibid

In 2005, the Supreme Court issued another order concerning NVP, detailing the legal motivation and justification for NPV, the specific means by which the value of forest can be calculated and management of the collected funds. The legislature has responsibility for implementing the equivalent of a tax on foreign land use and for managing that policy, but through the Godavarman case, the Supreme Court assume a legislative role and has not only created fees for the wood based industries using NVP but has also defined the details of monitory management. In addition to interpreting the law, Supreme Court has actually designed it and has enquire the other government organizations, which have had no role in developing the law, to implement it<sup>276</sup>.

**Effect of the Judgment on North Eastern States:** The North East States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura contain one fourth of India's forest and account for one half of the domestic timber trade<sup>277</sup>. A total of 31700 hectares of forest on which many of the States poor forest dwellers depended were being cut down every year by the timber industries. When the Supreme Court implemented ban on tree felling, it dealt a powerful economic blow on these States. More than 90% of the product ion units closed and India's import of timber rouse from 10% to 90%. In Arunachal Pradesh the States revenue dropped drastically from Rs.49 corers in 1995-1996 to Rs.7.9 corers in 2000-2001 showing a drop of about 84%, in Manipur the revenue earned from forest products dropped from Rs. 2.9 corers in 1996-1997 to Rs. 0.6 corers in 1999-2000<sup>278</sup>, in Meghalaya more than 200 thousand people (11% of States population) are directly or indirectly affected. More than the economic loss it is the loss of employment and consequent poverty that is alarming<sup>279</sup>.

The Supreme Court did not consider the potential economic loss to the States while passing its order in 1996<sup>280</sup>. In fact the Supreme Court did not even provide any projection on the expected increase of the forest cover as a result of the orders passed by it. This lack of foresightedness has caused economic setback in North Eastern States. This stand taken by the Supreme Court was challenged in Sabia Khan v. State of Uttar Pradesh<sup>281</sup>. Since the orders

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<sup>276</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>277</sup> Down to earth, Logjam, March 15, 2002 online edition

<sup>278</sup> Ibid

<sup>279</sup> Down to earth, Logjam, March 15, 2002, Available at <http://www.downtoearth.org.in/content/logjam>

<sup>280</sup> Shyam Divan and Armin Rozencranz, Environmental Law and Policy in India 304 (2001), <http://elr.info/sites/default/files/articles/37.10032.pdf>

<sup>281</sup> (Writ Petition (c) No. D2117 of 1998), AIR 1999 SC 228 (1998)

passed by the Supreme Court cannot be questioned on their merit, this petition was held not maintainable even though it raised important issues.

**Failure of Working Plans:** In 1996 the Supreme Court permitted commencement of tree felling on condition that the States develop a working plan to be approved by the Central Government presumably by the MoEF. The States were extremely slow in preparing the working plan and implementing them. Between 1997 and 2002 only 14% of the working plans were completed and in 2001 the States of Manipur and Mizoram had not yet developed any working plan. Instead of surveying all of the forest including the private forest, the Government of Meghalaya asked the MoEF to recognize its forests “plantation forest” in order to exclude them from working plan requirements. Rather than using the system to benefit its constituency the Government of Meghalaya complained about the system and try to exempt itself from a policy framework which would benefit the State. The Supreme Court provision for monitoring timber operations through working plans proved in effective but instead of changing its orders to adapt to the political and economic climate of the nation that deters development and execution of the working plans, the court find the MoEF Rs.5000 for not devising a comprehensive and effective working plan<sup>282</sup>. The State Governments did not comply with the orders of the Supreme Court and the Supreme Court while passing the orders did not solicit the opinion of the States; this reveals a gross failure of cooperation The Supreme Court had required representation of all the States within the Union of India to participate in the process by issuing notices to the respective Chief Secretaries but no response was received, thereafter the court directed the Chief Secretaries of the seven North Eastern States to personally appear before it . Without direct representation in the Supreme Court’s decision making process the State Governments had little motivation to change the local policies that reflect the local political situation. The disincentive is especially potent when enforcement of the courts orders would be detrimental to official’s political carrier in future elections. The Supreme Court failed to account for the States interest and the competing interest at the local level<sup>283</sup> . The result of the Supreme Courts lack of consideration has been an increase in corruption and has undermined the courts effort at extending the forest canopy of the nation. In Assam 60% of the timber in the city is illegal. There are reports of large illegal timber transport operations among the districts and the forest

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<sup>282</sup> Down to earth, Logjam, March 15, 2002 , Available at <http://www.downtoearth.org.in/content/logjam>

<sup>283</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court’s Breach of Constitutional Boundaries in Managing India’s Forests, 37 ELR 10032, <http://www.eli.org>

officials and the police personal are suspected of being involved in these operations<sup>284</sup>. Officials turn a blind eye to illegal timber operations or even grant approval without authorization to gain favor in upcoming elections. Government officials or wealthy land owner's who operate or are involved in logging operations attempt to earn illegal profit rather than preserves the limited resource for long term gains. The economic incentive for preserving forest disappeared with the ban imposed on felling<sup>285</sup>.

The States could have partially counteracted the decline in revenue by instituting working plan. The States failure to do so left many to peruse illegal forest activities and cultivation that degraded the forest further. In some places the situation did not improve because felling was reduced, though in some places improvement was noticed. Since people no longer have control of the forests they were logging, they have less or no incentive to protect those forests with sustainable practices. State and local agencies also lack funding, the personnel and the expertise necessary to enforce Supreme Court's order and develop viable working plans compatible with environmental concerns. By not having the representation of State and local bodies, by not addressing the local ground realities, by oversight of the State level needs and inefficiency, the Supreme Court created policies that are extremely difficult to implement successfully<sup>286</sup>.

**Impact on MoEF:** The Supreme Court's creation of national and local level policies interfere with the work of MoEF which has the primary responsibility of managing India's forest and wild life. During Godavarman case the MoEF had to work closely with the Supreme Court and enforce its regulations. By imposing policies in the MoEF and expecting it to execute them the MoEF found itself in a position where its organizational structure was not suited for it. As a consequence the MoEF has become less scientific and more bureaucratic. Insufficient funding has made the management of India's forest more difficult<sup>287</sup>. Moreover, the MoEF has to also consider the relationship between the environment and people who are dependent on the forest land for their sustenance. The Supreme Court's have forced the MoEF to enforce policies without enough resources and

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<sup>284</sup> Northeast Vigil, 40000 Hectares Added to State Forest Cover, Issue No. 5.22, June 16, 2004

<sup>285</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>286</sup> Ibid

<sup>287</sup> Especially given the countries size of 3, 287, 590 Km<sup>2</sup>

research. The issue of encroachment on forest land by people whose livelihoods depend on forest is the perverse impact of the Supreme Court's decision<sup>288</sup>.

In 1999 three Non Governmental Organizations (NGOs) filed an Interlocutory Application on behalf of Onge Tribe<sup>289</sup> living in little Andaman Island in Bay of Bengal<sup>290</sup>. The encroachments on forest lands were destroying the environment on which the Onge tribe dependent. The Calcutta High Court in its order<sup>291</sup> prohibited the felling of naturally grown trees on the Island<sup>292</sup>. On November 23<sup>rd</sup> 2001 Harish Salve submitted an amicus intervention petition to Supreme Court in the Andaman's application<sup>293</sup>. Salve cited forest encroachments as one of the biggest threats to deforestation. He pointed out various cases of forest degradation as a result of encroachments and accused states of allowing encroachment despite the Supreme Court's order<sup>294</sup>. Salve suggested that the court require all States to remove encroachers who had not regularized their encroachments before 1980 deadline for doing so<sup>295</sup>. The Supreme Court asked the States to respond to Salve's assessment<sup>296</sup>. The States responded and the Supreme Court replied that it would review the States' reports and issue a response in six weeks<sup>297</sup>. Motivated by the Supreme Court's attention to the matter, the MoEF issued directives to all States requiring that they summarily evict all illegal encroachers on forest land and regularize only eligible encroachments before 1980<sup>298</sup>. This meant that if a group had legitimately used certain forests lands before 1980, then they could still be allowed to use those lands now. If any group did not meet this criterion then the State would evict them as illegal encroachers. This task had to be completed by 30 September 2002<sup>299</sup>. This directive of the MoEF adversely affected many tribal communities in India.

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<sup>288</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>289</sup> Interlocutory Application No. 502

<sup>290</sup> Down to Earth, Deep in the Woods, January 15, 2003, <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/.../11683.pdf>

<sup>291</sup> October 2001.

<sup>292</sup> Down to Earth, Deep in the Woods, January 15, 2003, <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/.../11683.pdf>

<sup>293</sup> Ibid

<sup>294</sup> December 12, 1996, Ibid

<sup>295</sup> Down to Earth, Deep in the Woods, January 15, 2003, <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/.../11683.pdf>

<sup>296</sup> Armin Rosencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, [elr.info/sites/default/files/articles/37.10032.pdf](http://elr.info/sites/default/files/articles/37.10032.pdf)

<sup>297</sup> Down to Earth, Deep in the Woods, January 15, 2003, <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/.../11683.pdf>

<sup>298</sup> Circular dated 3<sup>rd</sup> May 2002; Down to Earth, Deep in the Woods, January 15, 2003, <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/.../11683.pdf>, see also Samudra, Traditional Fisheries: Jammed in Jambudwip (2003), available at <http://www.icsf.net/jsp/publication/samudra/pdf/english/issue34/art10.pdf>

<sup>299</sup> Down to Earth, Deep in the Woods, January 15, 2003, <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/.../11683.pdf>

Like Supreme Court the MoEF also failed to take into account the inefficiencies and inadequacies of the forest departments in the States. Consequent upon the MoEF's directive the State of Assam used elephants to destroy huts and homes in the encroached forest area<sup>300</sup>. The inhabitants of the encroached land were not provided any time for evacuation. They were not given an opportunity of fair hearing. In Maharashtra eviction notices were issued to families which had standing crops<sup>301</sup>. The government destroyed homes and left hundreds homeless<sup>302</sup>.

Many tribal people are illiterate and / or do not have documentation for their land, as a result many tribal families who had been living on forest land even prior to 1980 were evicted since they could not produce any proof of their occupation. Some protested that they were being evicted from land that was never a forest land. Inaccurate and intentionally altered service and maps led the forest departments to evict people who were not encroachers at all. It may be noted that the Supreme Court had already expressed its concern over the problem of inaccurate forest service. It had required the states to form a committee to survey forest lands and determine which the actual forest areas are<sup>303</sup> and a committee to survey forest land had been constituted. This committee would also calculate the sustainability of different forest in order to ascertain how much use the forest could with stand without becoming degraded<sup>304</sup>. Had this information been available, the MoEF, the State Forest Departments could have regulated the forest resource effectively. It would have been better if the States had done proper assessment, categorized claims and submitted them to a committee comprising of a DFO and a SDO (revenue) and a representative from Tribal Department. The MoEF neglect to do so caused wide spread oppression and injustice against the tribal people<sup>305</sup>.

The 1988 Forest Policy states that having regard to the symbiotic relationship between the tribal people and the forests a primary task for all agencies responsible for forest management should be to closely associate the tribal people in the protection, regeneration and development of forest so as to provide gainful employment to people living in and around

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<sup>300</sup> Down to earth, Logjam, March 15, 2002, Available at <http://www.downtoearth.org.in/content/logjam>

<sup>301</sup> Ibid

<sup>302</sup> Ibid

<sup>303</sup> Order dated 12/12/1996; Forest (Conservation) Act, 1980, Section 2(ii)

<sup>304</sup> Ibid

<sup>305</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

forest<sup>306</sup>. In addition to promoting a cooperative existence between people and forest the government is responsible for using the tribal people to protect the forest that they use and for ensuring that tribal people find employment. In many Public Private Partnership (PPP) Programmes and Joint Forest Management (JFM) programmes the tribal people have successfully contributed in patrolling the forest for prevention of illegal and non-forestry operations. In exchange for their service they receive permission to use the forest for their subsistence. They are instructed on the modalities of sustainable use of the forest resources, they get employment and in effect they contribute towards sustainable management of the forest but the consequence of Godavarman case is that these contributions made by the tribal's were completely overlooked<sup>307</sup>.

In the judgment of *Samatha v State of Andhra Pradesh*<sup>308</sup>, a five judge bench of the Supreme Court recognized that for tribal's forests are their traditional source of sustenance. They have a historical right to minor forest produce and to communal residence on forest land. The Godavarman case failed to address this aspect of tribal life. The restriction placed on forest use and access had a debilitating effect on the tribal community of the North Eastern States as it is there is a continuing immigration from Bangladesh which is causing demographic and social shift in this region and the displacement caused by the Godavarman judgment resulted in creating more pressure on the already scares resources, jobs and land<sup>309</sup>. Since the tribal's have no training or skills other than forest industries it is unfair and inequitable to expect the tribal to be able to engage himself/herself to any other vocation or calling. The State Governments did not represent this matter effectively before the Supreme Court and the Supreme Court did not pay much pay attention to the issue<sup>310</sup>. This led to 50 civilian deaths by October 2004<sup>311</sup>. The causal link between terrorism and the tribal people can be traced to steady deterioration of the way of life of the tribal's which was compounded by the orders of the Godavarman case<sup>312</sup>.

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<sup>306</sup> National Forest Policy, 1988

<sup>307</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, *The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests*, 37 ELR 10032, <http://www.eli.org>  
<sup>308</sup> (1977) 8 SCC 191

<sup>309</sup> Malobika Das Gupta, "Land Alienation Among Tripura Tribal's" XXVI Econ & Pol. Wkly, p-2112 (1991)

<sup>310</sup> T.N. Godavarman Thirumulpad v. Union of India, Writ Petition (C) No. 202 of 1995 under Article 32 of the Constitution of India

<sup>311</sup> Arijit Mazumdar, *Back to Roots of Violence*, Retrieved from <http://www.northeastvigil.com/>.

<sup>312</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, *The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests*, 37 ELR 10032, <http://www.eli.org>

After receiving complains that the tribal's are being treated unjustly, the MoEF issued a circular<sup>313</sup> modifying its earlier stand on dealing with encroachment and taking a just, fair and equitable step forward<sup>314</sup>. This circular distinguishes between disputed claims and proposals for the regularization of encroachments. Hearing on the regularization of encroachments had only considered the 1980 deadlines and were decided summarily whether the encroachment was an eviction or not. The Governments of the North East also try to create schemes of Participatory Resource Management involving tribal people. A number of States of began active JFM<sup>315</sup>. These resolutions had two fold objectives in view, firstly involving the tribal population on money generating basis and secondly to regenerate the degraded and unclassified forest. However these schemes were not very successful because of the frequent interventions by the Supreme Court. In 2005 the eviction of the tribal's has been stopped and the Schedule Tribes (Recognition of Forest Rights) Act, 2005 was passed. The bill recognizes the vest forest rights and occupation of forest land by forest dwelling Schedule Tribes whose rights were not recorded prior to 1980<sup>316</sup>.

**Role of Committees and Authorities Constituted by the Supreme Court:** The Supreme Court constituted the Central Empowered Committee (CEC) to enable any individual having any grievance against the steps taken by the Government or any other authority purportedly in compliance with Supreme Court orders may approach the CEC for seeking appropriate relief<sup>317</sup>. The CEC also filled the gap created due to the MoEFs failure to create a mechanism for addressing grievances and it's premature and insufficiently plans actions. Now the action taken by the State Government may be challenged before the CEC<sup>318</sup>. Because the CEC is not an 'authority' it can pass orders only in confirmation of orders passed by the Supreme Court outside that the CEC can only make recommendations. After it's constitution the CEC reported that an estimated area of at least 725861 hectares had been encroached<sup>319</sup>. Calculating the monitory cost of environmental damage to the area for over 50 years the CEC arrived at a figure of Rs.4,59,978 Corers approximately<sup>320</sup>. The CEC compiled a list of reasons provided by the State Government officials as reasons for not evicting encroachers as

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<sup>313</sup> February 5, 2004.

<sup>314</sup> MoEF Circular No. 2-1/ 2003-FC (Pt), Feb 5, 2004.

<sup>315</sup> Government of Nagaland JFM Resolution, March 1997, Government of Tripura JFM Resolution, December 1991, Government of Mizoram JFM Resolution, September 1998, Government of Arunachal Pradesh JFM Resolution, October 1997. The Tripura resolution was taken before the institution of Godavarman case.

<sup>316</sup> See generally also Meena Menon, Campaign for Forest Rights to Tribal's, The Hindu, 24 August 2005

<sup>317</sup> CEC notification no. 1-1/CEC/2002, dated June 20, 2002

<sup>318</sup> Ibid

<sup>319</sup> 2002 recommendations of the CEC in IA no. 703 of 2001 in IA no. 502 of 2000 in WP (c) 202 of 1995

<sup>320</sup> Ibid.

per MoEF order and identify that the most common reason for non-eviction was lack of political will. It not only tolerated encroachment but actually encouraged it in order to gain support before elections or to generate profit by allowing illegal commercial use of forest land. Here too, the CEC like the MoEF and the Supreme Court failed to address the smaller ground level issues<sup>321</sup>. Where the claim for the land was not supported by any documentary evidence the CEC could embark upon its own enquiry into the matter<sup>322</sup>. The 1996 Supreme Court order accepted an interim report that explained the necessity of a thorough investigation, including a study of current forest practices, testimonies of inhabitants, and related documents filed by the local government<sup>323</sup>. By not providing guidelines for investigation of disputes and settlements, the CEC did not allow tribal groups the opportunity to legally remain on their homeland. The Supreme Court passed off responsibility for grievances and for all the problems that arise from its orders to the CEC, and once again failed to respect the responsibilities of the MoEF. It created a committee to perform functions that would normally be performed by the MoEF. The MoEF has not adequately dealt with the problem. By attempting to deal with the problem on its own, and by creating new organizations to effectively replace the MoEF's functions, the Supreme Court has complicated the system of managing India's forests while failing to effectively address local people's relationships to the forests<sup>324</sup>.

**Overreaching the Boundaries of Judicial Activism:** The *Godavarman* case marks hitherto unseen assumption of powers by the Supreme Court. It has profound implications for the further rise of judicial activism in India. This case marks a culmination of a process by which the Court has gradually usurped the role of every arm of the government<sup>325</sup>. In the *Godavarman* case, the Court impinged upon the power of the legislature by banning the transport and felling of timber and by creating the CEC. It assumed the role of the executive in administering its own interpretation of the law in addition to its specific orders. Rather than directing, guiding, and motivating the existing national and state bureaucracies to realign their infrastructures and goals toward more stringent and effective forest management, the Supreme Court bypassed their authority and attempted to selectively micromanage the entire country's forests. The Court, rather than the legislature, became responsible for creating

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<sup>321</sup> Ibid

<sup>322</sup> Videh Upadhayay, Understanding "Encroachment", India Together, June 2003 (citing WP no. 1778/1986, Supreme Court of India), [elr.info/sites/default/files/articles/37.10032.pdf](http://elr.info/sites/default/files/articles/37.10032.pdf)

<sup>323</sup> Ibid

<sup>324</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>325</sup> Supreme Court Advocates-on-Record Association v. Union of India, (1993) 4 S.C.C. 441, 688; the Constitutional Obligation of the Judiciary Hon'ble Mr. J.S. Verma, Chief Justice of India, (1997) 7 S.C.C. (Jour) 1.

environmental regulations, and the Court, rather than the executive branch of the government, assumed responsibility for enforcing its own interpretations and regulations<sup>326</sup>. Consequently, when national, state, or local organizations do act, it is often in competition with the Court's orders, as seen in the MoEF's premature order against encroachments. By assuming the powers of other government actors through judicial activism, the Supreme Court has restricted the growth of a responsible and independent bureaucracy<sup>327</sup>. The Court has also extended its assumption of powers beyond a reasonable time frame. Under the Constitution, the writ of mandamus is restricted to compelling action with reference to previously existing and clearly defined duties<sup>328</sup>. The Court has also extended its assumption of powers beyond a reasonable time frame. Under the Constitution, the writ of mandamus is restricted to compelling action with reference to previously existing and clearly defined duties. Mandamus is not a creative writ under the cloak of which the court can usurp the role of lawmaking and policy formulation. In the *Godavarman* case the Court micro-managed the implementation of its orders by keeping the case open. This practice of "continuing mandamus" is not envisaged by the Constitution<sup>329</sup>.

**Lack of Viable Alternatives:** Part of the problem of the Supreme Court's intervention in forest policy management is the fact that the judicial system is currently unable to handle even ordinary litigation; it faces a huge backlog of undecided cases and now has to contend with a large array of public interest litigation (PIL). The writ jurisdiction of the higher judiciary has been used to entertain PIL. The principle of *locus standi* is abandoned in the name of social justice and lifting up the downtrodden sections of society. Ordinary writs, PIL, and appellate matters have ensured that the higher courts find it difficult to control the flood of litigation. The problem is compounded by the continuing vacancy in posts of judges, especially in the High Courts<sup>330</sup>. This increases the pressure on the Supreme Court to deliver justice expeditiously in multiple cases. Furthermore, spending on the judiciary by the government is abysmally low<sup>331</sup>. Judges do not have the human or financial resources to ensure compliance with their orders. The MoEF could and should bear the responsibility for doing what the Supreme Court is doing, but it too does not have the monetary resources to

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<sup>326</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, *The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests*, 37 ELR 10032, <http://www.eli.org>

<sup>327</sup> Divan, as cited in Armin Rosencranz & Michael Jackson, *The Delhi Pollution Case: The Supreme Court of India and the Limits of Judicial Power*, 28 Colum. J. Envtl. L. 121 (2003).

<sup>328</sup> *Mansukhlal Vithaldas Chauhan v. State of Gujarat*, (1997) 7 S.C.C. 622.

<sup>329</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, *The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests*, 37 ELR 10032, <http://www.eli.org>

<sup>330</sup> N.L. Rajah, *India's Courts: The Long Wait for Justice*, *The Hindu Friday*, Sept. 30, 2005.

<sup>331</sup> 127th Report of the Law Commission of India (1988).

monitor the country's forests, to research forest problems, or to develop new methods of dealing with forest issues that would protect the environment while providing local people with sustainable livelihoods. The MoEF also lacks sufficient professional and trained personnel necessary for dealing with local circumstances and creating policies that will have ecological and economic benefits. The legislature has proven itself inadequate in managing forest issues because it reacts primarily to crises or interest groups. Deforestation is difficult to recognize as a crisis, and interest groups are not powerful enough to effect new national forest policy. The MoEF and the legislature seem content to defer to the Supreme Court's forest management rather than building their own capacity, professionalism, and frameworks for dealing with forest issues. This deference absolves them of responsibility. Environmental and natural resource protection NGOs seem to prefer judicial direction of forest policy to management by corrupt and incompetent bureaucrats<sup>332</sup>.

**Impact of the Judgment:** The Supreme Court was attempting to address the very important problem of forest management, or mismanagement, in India in Godavarman case. The Supreme Court used the case as justification for implementing and administering national forest policy to a degree far beyond the original scope of the case. The Supreme Court recognized the importance of forest preservation and observed the increasing destruction and degradation of forest land. The Supreme Court noticed that those national and state organizations responsible for forest management were failing in their duties. In light of national and state governments' inaction, the Supreme Court's unusual assumption of powers seems justified, especially given India's alarming statistics on forest cover. The Forest Survey of India (FSI) last reported India's forest cover as 20.64% of the country's geographic area<sup>333</sup>. With the goal of increasing the national forest cover to 33% by 2012, India still seems under forested<sup>334</sup>. Moreover, the methodology behind this statistic suggests that the figure of 20.64% is meretricious. The measurement of forest area breaks down as follows:

- a. Very dense forest (more than 70% forest cover) 1.56% of the geographic area.
- b. Moderately dense forest (40-70% forest cover) 10.32% of the geographic area.
- c. Open forest (10-40% forest cover) 8.76% of the geographic area.

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<sup>332</sup> Armin Rozenzanz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

<sup>333</sup> State of Forest Report, 2003, Forest Survey of India, Ministry of Environment and Forests, Dehradun, June 2005. Until 2001, when the scale for mapping from satellite data was 1:50,000, the scale for satellite mapping was 1:250,000. So while recorded data since 1987 (when the forest cover was recorded 19.49%) suggests that forest cover has increased by 1% to the current 20.64%, the increasing accuracy of measuring forest cover suggests the possibility that no significant change has occurred. J.K. Rawat, et al., *Application of Satellite-Based Remote Sensing for Monitoring and Mapping of India's Forest and Tree Cover*, available at <http://www.gisdevelopment.net/application/environment/ffm/ma04067pf.htm>.

<sup>334</sup> National Forest Policy of India (1988).

d. Total forest cover: 20.64% (includes mangroves, 0.14% of the geographic area)<sup>335</sup>. FSI reports that 8.76% of India's forest cover is open forest, but what is "open forest?" With a minimum area of 1 hectare (or 2.471 acres) for measurement, land with a canopy density of only 10% hardly seems to qualify as "forest." Furthermore, FSI does not distinguish between private and public land, i.e., it does not distinguish between forests and fruit orchards or tea and coffee plantations. The survey counts all perennial woody vegetation with a canopy density above 10%, regardless of its ownership or makeup. Open forest could be too thinly covered to be considered forest in measurement of India's ecological health. Because FSI's idea of open forest includes sparsely vegetated land in its total count and because it fails to distinguish among different types of vegetation and ownership, the real forest cover of India could be as low as 12%, a far greater distance from the national goal of 33%. Given the problems with the current statistics and the alarmingly low percentage of real forest cover, the Supreme Court's intervention in forest policy was, at least in this respect, justified. National and timely action was necessary to curb deforestation. In many ways, the Supreme Court's aggressive stance toward forest management has had some positive effects. India already had environmental laws to manage forests and encroachments, but sub-competence, insufficient staffing, and corruption prevented the executive branch and its underlying agencies like the MoEF from enforcing policies and adapting them to India's changing environmental needs. Hence, the Supreme Court's radical orders and its wide assumption of powers slowed and possibly reversed two ecologically dangerous trends: that of an ineffective government and that of decreasing forest cover. By so aggressively and controversially addressing forest issues, the Supreme Court has also raised awareness concerning India's forest cover. Although its hastiness caused many predictable and perhaps avoidable effects, these efforts have in many ways benefited India's environment and given advocacy groups a renewed opportunity to protect India's forests. The Supreme Court's actions have also addressed negligent forest management. India recognizes that the constitutional right to life depends on the right to a clean and healthy environment. To enforce the right to life, the government has the legal responsibility to effectively conserve forests and biodiversity. The governments past inaction and inadequate response to environmental issues can be viewed not as exercises of executive discretion, but as violations of law that would warrant the Supreme Court's intervention. From this perspective, the Supreme Court's policies have attempted to uphold the right to life when it was being

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<sup>335</sup> Supra note 96

seriously neglected. Although decisive action may have been necessary, the Supreme Court's orders made demands far beyond its control. The Supreme Court assumed too much power too quickly to effectively manage it. Its orders may have been logically sound, though incomplete, from a policy perspective, but from a practical perspective, they demanded too much from India's weak state and local governments. The Supreme Court did not exercise sufficient caution in extending its role to directly oversee forestry issues. Despite the Supreme Court's defense of the right to a clean and healthy environment as part of the right to life, the Court's aggressive policymaking violated people's right to life by severely disrupting the timber industry, i.e., people's right to a livelihood, and sparking violent action against tribal peoples and alleged forest encroachers. The Supreme Court could have limited its decisions to the scope of the original *Godavarman* case or even delegated responsibility for handling certain issues to government agencies. Slowing down its intervention in forest management or limiting its geographical scope might have prevented states from hastily and unjustly evicting tribals from their homelands in response to an order by the MoEF. So while the Supreme Court has in some ways improved India's approach to forest issues, its aggressive role in the process has disrupted the balance of powers among government organizations and caused severe economic and social turmoil. By assuming so much power, the Supreme Court has perpetuated an incompetent government bureaucracy that defers to the Supreme Court for policymaking.

The MoEF's recent efforts to correct its past mistakes concerning tribal encroachments suggest that the government is making the necessary adjustments to ease the economically and socially harmful effects of the Supreme Court's orders. But the process of building the bureaucratic infrastructure, which hung loosely behind the Supreme Court for so many years, will require more time. Even though the MoEF is improving its policy toward tribals, the *Godavarman* case has provided it with ample opportunity to expand its powers, and it has vigorously done so. Similarly, the CEC has immense influence with its authority to issue orders consistent with the Supreme Court. The CEC is comprised of the former Secretary of the MoEF as its chairman, the Additional Director General of Forests of the MoEF as its MoEF representative, and the Inspector General of Forests as its member secretary<sup>336</sup>. As the MoEF has representation in every national forest-related committee, it continues to grow in power as new committees are constituted to manage forest issues that states have been unable to handle. The centralization of forest management bypasses much state inefficiency. It also

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<sup>336</sup> Central Empowered Committee, notification No. 1-1/CEC/2002, June 20, 2002.

increases the distance between the administrators of forest policy and the tribal people who are affected by it and who are inextricably involved with forest protection. The Supreme Court's "continuing mandamus" in the case also leaves open the possibility for further judicial activism that might interfere with the progress of other agencies toward fair and productive forest and human rights policies<sup>337</sup>.

**Possible Alternatives:** To protect India's forests, particularly in the North East, the state governments need to prevent illegal tree felling and deforestation. This can be achieved not through more rigorous attempts at control, but rather by addressing the simple fact that people need work to earn a living. The states need to develop, gain approval for, and execute working plans to provide jobs for those people who now resort to illegal tree felling. For those people who are not satisfied with the available working plans and who do not participate in them, the government must impose strict regulation on their activities to prevent deforestation. People cannot be completely blamed for illegally felling trees when they need to do so to feed themselves and their families. Before states can effectively reduce illegal tree felling, they need to ensure that sufficient working plans are in place so that most, if not all, the people who have lost their jobs can be provided with new ones. At the same time, the MoEF, instead of the Supreme Court, needs to develop afforestation guidelines by which states can revive their timber industries at little or no expense to the forests. With the proper afforestation efforts, timber industries can improve the forests while using them as commercial resources. If states do not file working plans, then individual logging companies must be given permission from the central government for tree felling and afforestation. In the current system, states must develop a plan and get approval from the central government through the MoEF. The individual timber companies, in turn, must provide plans and get approval from the state government. But companies are limited by the states' inefficiencies. Instead of delegating responsibility to the states, the MoEF could setup the same approval program for companies on a national level and work directly with companies, completely bypassing the states. While this results in the centralization of powers, the facts of the situation indicate that direct central regulation of timber companies might be necessary and beneficial, at least temporarily. While micro-managing all the forests of all the states is too much responsibility for the central government, reviewing applications of companies seeking to bypass state inefficiencies through local MoEF branches would not be an impossible task. In terms of dealing with the relationship between tribals and forests, the Center-Left parties in

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<sup>337</sup> Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests, 37 ELR 10032, <http://www.eli.org>

India now insist on a bill that would grant rights to certain scheduled tribes but not to all local communities in the forests. Because of such political self-interest and favoritism, it is clear that another round of conflict will arise around the issue of encroachments.

Instead of entertaining this partisan legislation, the Supreme Court could, under the mandate of Article 48A of the Directive Principles of State Policy of the Indian Constitution, invoke the duty of the state to prepare comprehensive legislation, which would:

1. Amend the Forest Conservation Act, incorporating the beneficial points of the *Godavarman* judgments;
2. Institutionalize the CEC and CAMPA and formulate layered redress mechanisms which would involve the Supreme Court only at the appellate stage;
3. Involve industry-based federations in the process of economic evaluation and control of commercial felling of timber;
4. Formulate concrete principles for the participation of the local communities in forest management through the panchayat system (This is instead of adopting the path taken in cases of joint forest management, which tried to implement the principle of community participation in forestry management. This principle emanated from the older Forest Policy of 1988 and instead of being laid out clearly, was enforced through ad hoc orders.);
5. Clearly lay down the role of the executive branch of the government and distinguish the role of the MoEF from the role of state forest departments; and
6. Set up an ombudsman mechanism such that the Supreme Court can be relieved from its role of continual review.

Legislation along these lines would more evenly distribute responsibilities for managing India's forests among the various parts of the government. Instead of playing the role of the legislature and the MoEF, the Supreme Court would spend its time interpreting constitutional rights. It would motivate national organizations to clearly delegate responsibilities to organizations whose infrastructures and personnel exist to manage India's forests. With these changes, the Supreme Court would stay in the background to check that national and state organizations fulfill their duties. By not trying to replace government organizations, the Supreme Court would help build a stronger and more effective bureaucracy<sup>338</sup>.

When the Supreme Court received the *Godavarman* case in 1995, India's environmental policy was in dire need of reform. The Supreme Court's actions, although extreme, addressed

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<sup>338</sup> Ibid

an issue vital to the human and natural health of the country and gave heart to advocates of forest protection. However, in raising awareness of environmental issues and bringing them to the forefront of national and judicial concern, the Supreme Court began the disquieting practice of “continuing mandamus.” In hearing over 800 interlocutory applications since 1996, the Supreme Court has extended its involvement in forest issues and thereby increased the country’s dependence on the Supreme Court for forest management.

This dependence on a judicial institution that has already exceeded the boundaries of its responsibilities has been further complicated by the lack of monitoring of the Supreme Court’s orders and the vagueness of the legislative and executive roles regarding forest issues. With its micro-management of forest issues and the increasing number of Supreme Court-instituted organizations, the potential for conflict is hardly over. How long will the Supreme Court maintain an active continuing mandamus and monitoring the Court’s hundreds of decisions, interpretations, and policy judgments to ensure it does not roam dangerously far beyond the boundaries of its constitutional role is a task not yet entrusted to any institution. As the centralization of power to government organizations like the MoEF increases, the executive, legislature, and judiciary need to cooperatively manage India’s forests, or else the Supreme Court’s far-reaching assumption of powers will clash with the central government’s policies. Amidst the delegation, redistribution, and reorganization of responsibilities and powers, India’s forests and the tribal people will suffer irreversible harm. The Supreme Court’s aggressive forest management has incurred large economic and social costs. It remains to be seen whether the Court can successfully transfer control to the appropriate governmental organizations, whether it can effectively manage the organizations it has formed, and whether it will avoid further economic and social disruption while attempting to restore India’s forest cover<sup>339</sup>.

## **OTHER INITIATIVE BY THE JUDICIARY**

### **Forest & Forest Produce:**

The word ‘forest’ is derived from the Latin word “Foris” which means outside by natural extension. This has reference to boundary, fence, or limit of locality. Beyond this limits any collection of trees, shrubs, herbs, grass including wild life is termed as ‘forest’. As early as

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<sup>339</sup> Ibid. For writing this part of the chapter the researcher solely depended on the article Armin Rozencranz, Edward Boenig, and Brinda Dutta, The Godavarman Case: The Indian Supreme Court’s Breach of Constitutional Boundaries in Managing India’s Forests, 37 ELR 10032, <http://www.eli.org>. The research acknowledges his indebtedness to the authors of the article.

1953 in *Laxaman Iccaram v. District Forest Officer*<sup>340</sup> the Nagpur bench defines forest as an extensive tract of land covered with tress and undergrowth intermingled with pasture. The importance of forest was discussed by the Supreme Court in *Rural Litigation and Entitlement Kendra v State of Uttar Pradesh*<sup>341</sup> stating that the trees in the forest draw water from the bowls of the earth and release the same into atmosphere by the process of transpiration and the same is received back by the way of rain as a result of condensation of clouds formed out of the atmospheric moisture. Forest thus helps the cycle to be completed. Trees are responsible to purify the air by releasing oxygen into the atmosphere through the process of photosynthesis. It has, therefore, been rightly said that there is a balance between earth, air, water, soil and plant. Forests hold up the mountains, cushion the rains, discipline the rivers and control the floods. They sustain the springs; they break the winds; they foster the bulks; they keep the air cool and clean forests also and prevent erosion.

This judgment of the court appears to be in tune with the Supreme Court's definition of forest in *Godavarman case*<sup>342</sup>. It is to be noted that unlike popular belief that the Supreme Court acted innovatively while defining forest, in reality the Supreme Court drew upon its immense wisdom and wealth of experience and innumerable precedence to define 'forest'.

In *Indian wood-products Co. Ltd., v. State of Uttar Pradesh*<sup>343</sup>, the Supreme Court has stated that "forest produce" includes as follows:

- (a) The following whether found in, or brought from, a forest or not, that is to say, timber, charcoal, caoutchouc, catechu, wood-oil, resin, natural warmish, bark, lac, mahua flowers, mahua seeds, kuth and myrobalans, and
- (b) The following when found, or brought from a forest, that is to say:-
  - i. Trees and leaves, flowers and fruits and all other parts or produce not hereinbefore mentioned, of tress.
  - ii. Plants not being trees including (grass creepers, reeds and moss) and all parts or produce of such plants.
  - iii. Wild animals and skins, tusks, borns, bones, silk, cocoons, honey and wax, and all other parts or produce of animals and
  - iv. Peat, surface soil, rock and minerals (including lime-stone, laterite, mineral oils and all products of mines or quarries)

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<sup>340</sup> AIR 1953 Nag 51

<sup>341</sup> AIR 1988 SC 2187

<sup>342</sup> T.N. Godavarman Thirumulpad v. Union of India, (1996) 9 S.C.R 982

<sup>343</sup> AIR 1999 All 222

Even factory-made 'Kattha' or 'Catechu' is a forest produce within the meaning of Section 2(4) of the Indian Forest Act, 1927.

In *Woodman Industries Araria v. State of Bihar*<sup>344</sup>, it was held that veneer being a finished product on certain type of timber it must be called 'fashioned timber' within the meaning of Section 2 (6) and therefore, a 'forest produce' under Section 2(4) of the 1980 Act. Veneer is not a part of the tree in its natural form but it is the result of a mechanical process and human labour. It is a distinct commodity in commercial world. But it is not correct to say that it was the end product or final product. It is in fact a raw material for making plywood but this is not the true test. The true test is whether there it is a forest produce. In terms of Section 2(6) of the 1980 Act all wood whether fashioned or hollowed out for any purpose or not is timber and therefore, forest produce under Section 2(4). Merely because layers extracted by mechanical process or as a result of human labour it did not mean that it loses its identity as timber. Therefore transit permit was required for the movement within and outside the State of Bihar.

*M/s. Mahavir Timber Marchant v. Government of Andhra Pradesh & Another*<sup>345</sup> it was held by the Supreme Court that timber is a forest produce even after it is cut or sawn in a sawmill-cut and sawn timber if found in a cart track or any other vehicle, it is a forest produce and transit rules are applicable to it.

In *Ashoke Kumar Anandani v. State of Uttar Pradesh*<sup>346</sup>, Court held that goods which are brought from forest and which cross forest during transportation would be covered under definition of "Forest Produce" under Section 2(4)(b)(iv). Thus transit fee was payable on stone ballast, khanda and boulder if they cross forest during transportation. As petitioner was using National Highway for transporting goods and there were several forest block on that highway, hence, levy and demand of transit fee would be perfectly within four corners of Transit Rules.

Under the 1927 Act an area can be declared as reserved forest. In *Ajit D. Padiwal v. Union of India and Others*<sup>347</sup>, it was held that the boundaries of the reserved forest are most important element and not the survey number or its extent. On the same line In *State of Uttar Pradesh and Others v. Deputy Director of Consolidation and others*<sup>348</sup>, it was held that once a notification under Section 20 of the Indian Forest Act, 1927 declaring a land as reserved

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<sup>344</sup> 2000 Cri. LJ 1075 (Pat)

<sup>345</sup> AIR 2002 AP 58 FB

<sup>346</sup> AIR 2006 All 246

<sup>347</sup> AIR 1998 Guj 147

<sup>348</sup> AIR 1996 SC 2432

forest is published then all rights in the said land claimed by a person comes to an end and are no longer available. The notification is binding on the consolidation authorities in the same manner as a decree of the civil court.

## **FOREST CONSERVATION**

In *Anupama Minerals v. Union of India and Others*<sup>349</sup>, the court made it clear that conservation means preservation and protection of the existing forests and also re-forestation.

The 42<sup>nd</sup> amendment to the constitution in 1976 transferred forest from State List to Concurrent List. Such transfer authorizes the Central Government to act directly in managing the India's forest. The year 1980 is the watershed in the history of forest management as the Forest (Conservation) Act, 1980 came into force and was subsequently amended in 1988.

In *K. V. Shanmugam v. State of Tamil Nadu*<sup>350</sup>, it has been held that if the State Government desires to grant lease for mining operation then prior approval of the Central Government is mandatory as because mining operation was a non-forest activity. In *Rural Litigation and Entitlement Kendra v State of Uttar Pradesh*<sup>351</sup>, it has been held that the 1980 Act does not permit mining in forest area if there was provision of renewal lease agreement the provisions of the Act must be complied with. In *Golden Granites v. K. V. Shanmugam*<sup>352</sup>, it was held that the 1980 Act imposes a blanket bar on any non-mining activities in the forest notwithstanding anything contained in any other law for the time being in force in the State. No State Government or any authority shall make accept with the prior approval of the Central Government any order directing de-reservation of any reserved forest or use of any forest or forest land for the purpose of non forest activities. Noncompliance of Section 2 of the 1980 Act shall result in cancelling the grant in favour of the grantee.

With respect to protection of forest in *State of Tripura v. Sudhir Ranjan Nath*<sup>353</sup>, the Supreme Court considered the 1980 Act as one to preserve, protect and promote forest wealth in the interest of the nation.

The *Supreme Court Monitoring Committee v Mussoorie Dehradun Development Authority and Others*<sup>354</sup>, the Supreme Court has held that a non forest activity could not be carried on in the forest area without the prior approval of Central Government. It further held that a non-

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<sup>349</sup> AIR 1986 AP 225

<sup>350</sup> AIR 1997 Mad 338

<sup>351</sup> AIR 1988 SC 2187

<sup>352</sup> AIR 1988 Mad 150

<sup>353</sup> AIR 1997 SC 1968

<sup>354</sup> (1997) 11 SCC 605

forest activity destroys ecology. The forest land should be need for forest purposes only. In *Pradeep Krishna v Union of India*<sup>355</sup>, the court held that one of the reasons for shrinkage of the forest is the entry of villagers and tribal's living in and around the forest, sanctuaries, and National Parks. There can be no doubt that urgent steps must be taken to prevent any destruction or damage of the environment, the flora and fauna and wild-life in these areas. Besides felling trees certain other acts are also prohibited in the reserved forests such as hunting, shooting, fishing, trespass or pasture cattle's. The same line of thought has been emphasised in *Animal and Environment Legal Defence Fund v. Union of India*<sup>356</sup>, wherein the court held that "while every attempt must be made to preserve the fragile ecology of the forest area and protect the Tiger Reserve, the right of tribals formally living in the area to keep body and soul together must be receive proper consideration. Undoubtedly, every effort should be made to ensure that the tribals, when resettled are in a position to earn their livelihood". Tribals or forest dwellers, obviously, do not have unrestrained right to access to all forest produce. If they are given rights over standing trees, the rights will definitely be subject to condition imposed by regulations. In *Salehbhai Mulla Mohmadali v. State of Gujarat*<sup>357</sup> the Supreme Court has held that the forest dwellers and tribal people could have no greater rights than those they had before the formal legal system became applicable.

In *Nagarahole Budakattu Hakku Stapana Samity v. State of Karnataka*<sup>358</sup>, the court has held that no one has any right on or over the land in the area of National Park unless it is specifically granted. Under Section 2(iii) of the Forest (Conservation) Act, 1980 no forest land or portion could be assigned by way of a lease or otherwise to anybody. The court has noted that the expression 'otherwise' made a lease or even a easement incapable of being assigned. The lease being contrary to laws relating to both, wild-life and forest conservation, the court ordered to handover the possession of the building to the State Government.

In *M.C. Mehta v. Kamalnath*<sup>359</sup>, the court has quashed the prior approval for the lease as the bank of the river which was part of protected forest and it had been leased out for commercial purpose and held that the State Government committed a patent breach of public trust by leasing out the ecologically fragile land for a hotel to facilitate eco-tourism. It further held that the State has a trustee of all natural resources is under a legal duty to protect the natural

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<sup>355</sup> AIR 1996 SC 2040

<sup>356</sup> AIR 1997 SC 1071

<sup>357</sup> AIR 1993 SC 335

<sup>358</sup> AIR 1997 Kant. 288

<sup>359</sup> (1997) ISCC 388

resources and these resources meant for public use cannot be converted into private ownership.

Mining operations are a significant non-forest activity which has a negative impact upon conservation of forest it has been an earnest endeavour of the Supreme Court to control and regulate mining activities in order to conserve forest. In *Selur Mines v. Government of Tamilnadu*<sup>360</sup>, the High Court held that when application is made for the lease to the State Government the State Government must ascertain whether it is feasible to grant the lease or not. If ultimately the State Government decides in favour of granting the permission then the question of prior permission of the Central Government comes up otherwise each and every application for mining or quarrying lease would have to be sent to the Central Government for prior approval whether such application deserves to be considered or not. Grant of lease for the purpose of mining or quarrying is an exclusive domain of the State Government. The Central Government would come in the picture only if such mining or quarrying lease happens to be within forest area and the prior approval of the Central Government in such an eventuality becomes mandatory. In *Ambika Quarry Works v. State of Gujarat*<sup>361</sup>, the appellants sought the renewal of quarry leases. It was found that further deforestation would occur and the deforested area could not be claimed back. The Supreme Court stated that the lease cannot be renewed. And further observed that the primary purpose of the 1980 Act is to prevent deforestation and any action that subverts this objective of the Act notwithstanding the approval of the Central Government is not tenable.

The right to assign land for private forest can be done only after the land vests in the State Government<sup>362</sup> and it has to be with the prior approval of the Central Government<sup>363</sup>. Once the land has legally vested in the State Government, the power of assignment of such land for the purpose of private forest is still subject to the provisions of the Forest (Conservation) Act, 1980 and if any State law is inconsistent with the provisions of the 1980 Act than the provisions of the 1980 Act shall prevail and notwithstanding any order or provision made by any law or authority. Prior approval of the Central Government is mandatory before assigning any forest land for private forestry.

A major problem that is faced with regard to the forest is the problem of encroachment. The encroachment in forest land cannot be sustained and the State Government must see the approval of the Central Government mandatorily before clearing any forest or regularising or

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<sup>360</sup> AIR 2003 Mad. 188

<sup>361</sup> AIR 1987 SC 1073

<sup>362</sup> Section 2, Forest (Conservation) Act, 1980 read with Article 254 of the Constitution of India

<sup>363</sup> *Nature Lovers Movement v. State of Kerala and Others*, AIR 2003 Ker. 18

allowing any encroachment to the forest. In *Sunil Kumar v. Divisional Forest Officer*<sup>364</sup>, the question was regarding subsisting encroachment. The State of Kerala had accorded sanction for leasing out an area of 146.42 acres including 108 acres of cardamom cultivated area under the possession of the petitioner and 38.42 acres cultivated area which was resumed by the forest department at Nelliampathy to Sri.Thirumalai Swami Gounder managing partners of the Miraflores Estates on the terms and conditions mentioned therein. The court felt that the impugned order was passed without reference to the revised and comprehensive rules and guidelines framed under the Forest (Conservation) Act, 1980. The court opined that even though a specific reference has been made by the petitioner, the State Government was under an obligation to seek approval of the Central Government before according sanction for lease of the above mentioned land. The court held that the land was reserved forest at the time it was encroached by the said Miraflores Estates. Therefore leasing out the land without prior approval of the Central Government cannot be sustained<sup>365</sup>.

In *State of Bihar v. M/s. RMC Dill Co. 9 (p) Ltd.*<sup>366</sup>, it has been held that the provision of Section 2 of the Forest (Conservation) Act would prevail over the provisions of the Mining Act and Rules; that for grant or renewal of mining lease for non-forest activity, the provisions of Section 2 have to be complied with and any non-forest activity in a forest area without prior approval of the Central Government is banned.

In *V.R. Thirumalai Swami Gounder v. Chief Conservator of Forest Trivandrum*<sup>367</sup>, it was held that the absence of any pleading regarding clearing of land for the purpose of planting cardamom and on evidence that the forest was cleared prior to planting of cardamom and before the coming into operation of the 1980 Act, it is not possible to hold that the Forest Conservation Act, 1980 does not have any application.

In *Joseph Kurian v. Union of India*<sup>368</sup>, where the issue was banning consideration of proposals for utilisation of forest land by private individual came up for consideration the court held that conservation and preservation of the environment has long seized to be the luxury of the developed nations and has now become an imperative obligation for preservation of humanity. The planet earth is in peril and the environmental depredation can be reversed only by positive efforts, concerted actions and carefully planned initiatives with determination. It is a realisation of this grave situation that has led to the enactment of the

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<sup>364</sup> 2000 (2) KLT 7 (C. No.7)

<sup>365</sup> Ibid

<sup>366</sup> AIR 1998 Pat. 20

<sup>367</sup> AIR 1996 Kel. 213 at 218

<sup>368</sup> 2009 (2) KLT SN 50 (C. No.54)

Forest (Conservation) Act, 1980. The legislature has, in its wisdom, decided that conservation was too important a matter to be left to the localised decision making of the respective States and has entrusted the Central Government with the said duty. This duty has to be approached in the national and global perspective. The Central Government has overriding powers under the Act in superstition of all other enactments, to implement the policy of conservation. Forest constitutes the invaluable wealth not only of this nation but the entire humanity, which are to be preserved not only for the present generation but also for the future generation and for posterity. For realising the above objective it is open to the Central Government to ban all activities of the private persons inside the forest.

### **TIMBER TRADE**

Timber trade has been recognised as one of the major causes of deforestation and unsustainable forest management. These issues were extensively and widely considered by the Supreme Court in the Godavarman case<sup>369</sup>. However the Supreme Court has considered the issue in various other cases also. In State of Uttar Pradesh v. Mahendra Singh<sup>370</sup>, it has been held by the court where it was evident that the forest wood recovered was sold by auction with a direction that the sale proceeds should be deposited under proper head. Held, since ownership of the wood was not claimed by the respondent accused, they are not entitled to claim withdrawal of the sale proceeds deposited after auction.

In State of Tripura v. Sudhir Ranjan Nath, it was decided by the Supreme Court that in Vam Organic Chemical Industries v. Collector of Central Excise<sup>371</sup> and Bihar Distilleries v. Union of India<sup>372</sup>, the High Court was, therefore, not right in proceeding on the assumption that every fee must necessarily satisfy the test of quid pro quo and in declaring the fees levied by the sub-rules (2) and (4) of Rule 3 of the Tripura Transit Rules as bad on that basis. It was held that, the fee levied by the said sub-rules is regulatory in nature, the said levy must be held to be valid and competent, being fully warranted by Section 41 of the 1927 Act.

M/s. Mahavir Timber Merchant v. Government of Andhra Pradesh & Another<sup>373</sup> it was held by the Supreme Court that timber is a forest produce even after it is cut or sawn in a sawmill-cut and sawn timber if found in a cart track or any other vehicle, it is a forest produce and transit rules are applicable to it.

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<sup>369</sup> (1996) 9 S.C.R 982

<sup>370</sup> 2003(4) AIC 459 (U'chal)

<sup>371</sup> (1997) 1 JT (SC) 625 at 641

<sup>372</sup> (1997) 2 JT (SC) 20

<sup>373</sup> AIR 2002 AP 58 FB

In the State of Bihar v. Ranchi Timber Traders Association<sup>374</sup>, it has been decided by the Supreme Court that, on hearing counsel for the parties on the subject, and giving earnest consideration, the court got to the view that the conclusion of the High Court was totally erroneous. The variety of subjects provided in the sub-heads of sub-section (2) of Section 41 are precluded with the expression “in particular and without prejudice to the generality of the forgoing power”, wholesome power stands conferred on the State Government to make rules under sub-section (1) of Section 41 with regard to transit of timber and other forest produce by land or water. Conferral of such powers inheres in it the power to frame rules in order to regulate places for stoppage, reporting, examination and marking of timber or other forest produce. Necessarily, duty, fee, royalty or charges due thereon become due, if imposed. In order to avoid breach of the rules, Section 42 gets into line. Then comprehensive power on the subject is given generally to the State Government as additional powers to make rules to carry out the provisions of the Act. No one can be permitted to deny that regulating the activity of keeping a saw-pit or a depot is not an activity to which the provisions of Indian Forest Act, 1927 would not be attracted. Thus requiring all the saw-pit holders, or depot holders to obtain regulatory licences, squarely fall within clause (d) of Section 76 if not (without holding so) under the power to regulate transit by land or air available under Section 41 of the Act. These three provisions namely Sections 41, 42 and 76 reflect an integrated scheme to carry out the provisions of the Act and as the preamble of the Act is suggestive to consolidate the laws relating to forests, the transit of forest produce and the duty leviable on timber and other forest produce. The power to regulate by license the upkeep of saw-pits and Depots is in any event ancillary to the main power.

In Anil Chandel v. State of Himachal Pradesh<sup>375</sup>, it was alleged that the accused had transported the timber in illicit manner in a tempo. It was pleaded by the accused that he was not present in tempo as he was admitted to hospital at relevant time. Accused had produced OPD Slip and discharge slip in support of his plea. Driver of tempo stated before police that he was all alone in tempo. Witnesses were not cross-examined on this point. Such non-examination amounted to admission of fact stated by witnesses. Conviction of accused was liable to be set aside as case against accused could not be said to have been made out. In State v. Mariamma Varghese<sup>376</sup> the court stated that it is the duty of the owner of the vehicle to show that he had taken reasonable and precautionary measures against the use of the vehicle

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<sup>374</sup> AIR 1984 Pat 261

<sup>375</sup> 2008 Cri LJ 1792 (HP)

<sup>376</sup> 1999 (1) KLJ 872

involved in forest offence. He cannot plead mens rea. He cannot contend that owner was unaware of the dubious dealings of the driver of the vehicle.

In *State of Kerala v. Mathew*<sup>377</sup>, it was held that it is not sufficient that the owner establishes his innocence alone; it must further be shown that the person who was in charge of the vehicle had taken reasonable and necessary precautionary measures against such use of the vehicle. In *Manoj Kumar Sharma v. State of Bihar*<sup>378</sup>, it has been decided by the court that there is no escape from the conclusion that once it is established that vehicle has been used in commission of forest offence, the onus shifts on the owner of the vehicle to establish that the vehicle was used without his knowledge or connivance or that of his servant and agent and also to establish that he had taken all reasonable and necessary precaution against the use of the vehicle. Nothing has been brought on record by the petitioner to satisfy those requirements and as such the authority did not err in confiscating the truck in question.

In *Nand Lal v. State of Uttar Pradesh*<sup>379</sup>, it has been decided by the court that it did not prohibit that license to operate saw-mills should be granted on any condition. The basic condition is that the license for saw-mill shall not be granted in a forest area. The second proviso to Rule 5 itself provides that an application for grant of license for saw mill situate within 10Kms area of any existing forest shall not be deemed to have been allowed if not disposed of within 60 days as provided under the first proviso to Rule 5. This provision implies that an application for grant of license to establish, erect or operate any existing saw mill if it situate within 10Kms area of any existing forest is not to be granted. It is for the State Government to define the forest area and the area within which the license to establish, erect or operate the saw mill should be granted. The application was rejected without considering this aspect of the matter.

In *G.N. Saw Mill v. State of Assam*<sup>380</sup>, it was stated by the Supreme Court that pendency of a civil suit about lease in respect of land on which saw mill is situated could not be a sufficient ground to refuse renewal of license.

In *Ottav's Timber Merchant Association v. State*<sup>381</sup>, the court held that the expression "specified in local limits" is not with reference to area of any local authority or local body in context of regulating transit of forest produce, to specified limits whichever it might be.

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<sup>377</sup> 1995 (2) KLT 772

<sup>378</sup> 2004 Cr.LJ 1156 at 1158-1159

<sup>379</sup> AIR 2002 All 141 at 145-146

<sup>380</sup> AIR 1988 Gau. 28

<sup>381</sup> AIR 1987 MP 57,61,62

The Bombay High Court in *Kantilal Premjith Patel v. State of Maharashtra*<sup>382</sup> stated that “the submission that the provisions of Section 52 of the Kerala Forest Act, 1961 do not empower the forest authority to seal the machinery in the saw mill cannot be accepted.

In *Surma Valley Saw Mill (P) Ltd. v. State of Assam*<sup>383</sup>, Gauhati High Court held that “the language of the amended Section 49 of the Assam Forest Regulation enables the forest officer to seize the machinery, including machinery used in saw mill located outside the forest area if there is reason to believe that the same has been used in the commission of a forest offence.

In *Jairaj A.P. v. The Chief Conservator of Forest (Wildlife), Thiruvananthapuram*<sup>384</sup>, it was held that any rate, there is no doubt multiplicity of trees have to be cut and removed, though appellant would say that more than a dozen trees are to be chopped off for this purpose. Hence, whatever be the number of trees involved it is held that clearance of forest land is necessary for constructing the proposed Forest Lodge.

However, this judgment, today has no value because of the rulings of the Supreme Court in series of Godavarman cases which bans cutting of trees for any purpose whatsoever unless it is under the State Working Plan approved by the Central Government

In *T. N. Godavarman Thirumulpad v. Union of India*<sup>385</sup>, it was held by the Supreme Court that State Government and its functionaries are directed not to cut any tree, even the alleged diseased trees, unless it is confirmed that only the diseased and infectious trees are being cut.

The Supreme Court is alleged to have over stepped the boundaries of separation of powers while dealing with a series of Godavarman cases. The Supreme Court took the Godavarman case as an opportunity to address the forest (mis)management that led to progressive decrease of forest cover in the country. Unless some drastic measures were quickly adopted and strictly implemented the countries ecological stability and biodiversity were under threat. Ordinarily this should have been recognised by the executive and the loss should have been ruthlessly implemented. Unfortunately this did not happen. Therefore it can be said that the Supreme Court had no other alternative but to overstep the boundaries of judicial separation and intervene in the matter. The Supreme Court noticed that those authorities at the National and State levels responsible for protecting the forests were failing as custodians of forest. To

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<sup>382</sup> 1986 Cr.LJ 536 / 1986 (3) Bom.CR 613

<sup>383</sup> AIR 1988 Gau. 35

<sup>384</sup> AIR 1996 Ker 362/ILR 1996 (2) Ker 270 / 1996 (1) Ker LJ 364

<sup>385</sup> AIR 1999 SC 43

this extent it would be unjust to criticise the Supreme Court instead of that the executive should be under critical review. Given the alarming statistics the action of the Supreme Court is fully justified. The 2003 report of the Forest Survey of India (FSI)<sup>386</sup> reports 20.64% of the countries geographic area under forest cover which should ideally have been 33%. This shows that India is still under-forested. FSI reports that 8.76% of India forest cover is open forest which means the density of the forest is merely 10% per hectare. Moreover, there is no distinction made between private and public land, orchards, plantations (coffee, tea, rubber & cardamom). Therefore the report does not reflect the actual natural forest cover of India and is pseudo-optimistic.

Given the above situation Supreme Court's aggressive stance towards forest management is welcome. One may also like to recall here the Supreme Court's pro-active role in sustainable environmental management. India already had environmental laws for environmental protection and protection, preservation and conservation of forest, but sub-competence, lack of infrastructure and staff, corruption and overall lackadaisical attitude of the executive compels the Supreme Court to wear the hat of environmental policing as well. Supreme Court's radical orders and assumption of wild powers appears to have arrested ecologically dangerous activities. The Supreme Court has also raised awareness concerning forest. Although its orders may have caused many predictable and unpredictable consequences but it has certainly benefited the forest of India. It has successfully controlled and regulated the timber trade in India with the help of a series of logically sound and ground level reality oriented policies which on one hand benefitted the forest but on the other hand challenge the weak and corrupt executives at the state and local level. An argument runs that the Supreme Courts orders violated the right to life of several people and community by banning and or severely controlling the timber industry, but one is constrain to recall that right to a clean and healthy environment is also right to life just as right to livelihood is also a right to life. Between these two competing claims of right to life the Supreme Court's action in controlling timber trade appears to be justified because the alternative is too frightening with climate change, desertification, loss of biodiversity, loss of water and untold miseries. The Supreme Court merely has chosen a lesser evil path to forestall a greater evil consequence. It is another argument altogether that the efficiency of Supreme Court will perpetuate an incompetent, inefficient, corrupt, bureaucracy. The centralization of forest management with the help of

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<sup>386</sup> The State of Forest Report, 2003, Forest Survey of India, Ministry of Environment and Forest, Dehradun, June 2005

the Central Empowered Committee (CEC) has much desired effect on efficient forest management.

Illegal tree felling and deforestation is a sinequanone to preservation of forests. This can be achieved through rigorous implementation of the laws, vigilant control of illegal activities in the forests and also addressing the people need to work. The States need to develop and execute working plans with the prior approval of the Central Government which will provide livelihood to those involved in illegal tree felling. The Individual timber companies must also play a pro-active role for protection and aforestation and re-forestation of the forest.

The Supreme Court's action although extremely harsh addresses the issues of health both of the human being and nature. It helps not only in forest protection but also in raising awareness of environmental issues and bringing them to the forefront of national and judicial concern. Its aggressive Forest Management Policy may have incurred large social and economic costs but it has definitely benefitted the nation by forest conservation, regulated timber trade and avoidance of further social and economic disruption.

## **CHAPTER 4**

### **LOCATING TIMBER TRADE IN INTERNATIONAL TRADE: A CONSPECTUS OF WTO REGIME**

#### **The Frame**

The frame of this chapter is the legal regime of international Trade. Timber trade is not confined to domestic market only; it has a strong international market. However the location of timber trade within the framework of the international trade regime is not very clear. There is need for a control and regulation of timber trade at the international level

#### **The focus**

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.

## Objective

The objectives of this chapter is to explore a number of issues which affect the international context in which action against illegal logging and the associated trade in illegally logged timber can be undertaken. Specifically, it looks at activities designed to exclude illegal products from final consumer markets, and other similar potential initiatives and their interaction with the following:

- The World Trade Organization (WTO) agreements and the WTO's current Doha Round of trade negotiations.
- Bilateral agreements on trade or agreements which influence trade: US Free Trade Agreements, and EU Economic Partnership Agreements.
- The International Tropical Timber Agreement.

The questions to be explored are to what extent does these agreements affect the potential for measures to exclude illegal products and to what extent do they provide an opportunity for existing or new measures to exclude illegal products

Finally, the chapter examines the questions which arise from provisions of WTO itself including, ultimately, to a multilateral arrangement and barriers of trade.

The general agreement on tariff and trade (GATT) was concluded as early as in 1947. In 1994 it was re negotiated and World Trade Organization (WTO) was created. There was no explicit provision in GATT in 1947 that directly addressed environmental protection or timber trade. Article 20 of GATT may be interpreted as dealing with environment directly<sup>387</sup>. GATT'S competence limited to trade policies and those trade related aspects of environmental policies that may result in significant trade effects for contracting parties. It

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<sup>387</sup> Article 20, GATT reads as follows:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where same condition prevail, or a disguised restriction on International Trade, nothing in the agreement shall be construed to prevent the adoption or enforcement by any party of measures.....(b) necessary to protect , human, animal or plant life or health.....(g) Relating to conservation of exhaustible natural resources, if such measures are made effective in connection with restrictions on domestic production or consumption.

does not concern itself with reviving national environmental policies or policies relating to trade in environmental (forest) produce. It also does not set any environmental standards or priorities at global level. Therefore it is difficult to consider GATT at domestic context or in relation to trade in a particular product. Therefore in case of timber depletion of forest, endangered species etc are of no concern to GATT. Concern for environment has become acute almost from the decade of the eighties and is at present both a global and national priority. So there is a rationale in applying the “Technical Barrier to Trade”. Signatories of the Tokyo Round Agreements on “Technical Barrier to Trade” are required to notify the other party through GATT Secretariat of products to be covered by their proposed technical regulations, To the best of the knowledge of the present researcher no such notification regarding timber trade has been made.

The Uruguay Round<sup>388</sup> was launched before environmental concerns became so prominent but there is an expectation among the stake holders that GATT will make some contribution towards trade in Environmental (Forest) Produce.

The Preamble of WTO<sup>389</sup> stipulates that resources are to be used according to the objective of sustainable development seeking both to protect and preserve the environment.

Relation between trade and environment are covered under different branches of international law viz. International Environmental Law and International Trade Law. There are a series of multilateral agreements under International Environmental Law which is already discussed in Chapter 2 of this thesis. WTO and GATT both come within the purview of International Trade and Law.

The final Act of GATT 1994 includes the following provision of health safety and environment:

- **Technical Barrier to Trade:** Standard technical regulation and conformity assessment procedures such as testing, inspection and certification may not be used by the government to discriminate or otherwise create obstacle for trade. It advances procedure where testing by one country may be accepted by another country.

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<sup>388</sup> September 1986 to December 1993.

<sup>389</sup> Preamble.WTO: “Recognizing that relation in the field of trade and economic endeavor should be conducted with a view of raising standards of living, ensuring full employment and a large and steady growing volume of real income and effective demand and expanding the production of trade in goods and services while allowing for the optional use of the worlds resources in accordance with the objective of sustainable development seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development.”

- **Sanitary and Phytosanitary Measures:** Regulation measures aimed to protect human, animal or plant life or health from risk of plant and animal borne pests and data must be based on scientific principles and should not be maintained without sufficient scientific evidence.

Despite the above it allows members to provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information where there is insufficient scientific evidence. Under the trade provisions there are effects of new forms of packing, labeling requirements and transparency of trade related environmental measures.

Member Governments have notified GATT of some 300 environmental regulations and standards which include domestic scale, restrictions on trade in hazardous products, environmental packing, marketing, labeling requirements and waste disposal regulation and requirement.

The final Act of GATT 1994 contained a decision on trade in service and the environment in Article XIV, Paragraph (b)<sup>390</sup>.

**COMMITTEE ON TRADE AND ENVIRONMENT (CTE):** This was set up in 1995 after the Uruguay Round. It has two fold mandates.

- a. Identity relationship between trade measures and environment measures.
- b. Make recommendation whether any modification to WTO provision is required with respect to goods, services and intellectual property rules.

**MINISTERIAL CONFERENCE OF WTO, SINGAPORE 1996:** It observed that the CTE has made an important contribution towards fulfilling its work programme and it will continue to examine, inter alia, the scope of the complementarities between liberalization, economic development and environmental protection.

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<sup>390</sup> "Nothing that since measures necessary to protect the environment typically have as their objective the protection of human, animal or plant life or health, it is not clear that there is need to provide for more than is contained in paragraph (b) of Article XIV decides as follows:

In order to determine whether any modification of Article XIV of the Agreement is required to take account of such measures, to request the committee on Trade and Environment to examine and report with recommendations, if any, on the relationship between services, trade and the environment including the issue of sustainable development, the committee shall also examine the relevance of inter-Governmental agreements on the environment and their relationship to the Agreement. The committee shall report the results of its work to the first biennial meeting of the Ministerial Conference after the entry into force of the Agreement establishing the WTO".

Full implementation of WTO will help to achieve sustainable development. The CTE will continue to coordinate at the national level as well.

**MINISTERIAL CONFERENCE OF WTO, GENEVA, 1998:** It included indirectly the issue of link between trade and environment in its declaration in the form of other issue.

**MINISTERIAL CONFERENCE OF WTO, SEATTLE, 1999:** It is differed from the issue of trade and environment.

**MINISTERIAL CONFERENCE OF WTO, DOHA, 2001:** The conference declared that “with a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudicing their outcome of:

- (i) The relationship between existing WTO Rules and specific Trade obligations set in Multilateral Environmental Agreements (MEAs).
- (ii) Procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, the criteria for granting of observer status.
- (iii) The reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

We instruct the committee on Trade and Environment to give particular attention to:

- (i) The effect of environmental measures on market access;
- (ii) The relevant provisions of the Agreement on TRIPs; and
- (iii) The labeling requirements for environmental purposes.

The committee shall report to the 5<sup>th</sup> session of the Ministerial Conference, and make recommendations, where appropriate, with respect to future action, including the desirability of negotiations” (paragraph 31)

The 5<sup>th</sup> Ministerial Conference was held at Cancun of Mexico in 2003. The declaration states about ‘environment negotiations’ thus:

“They take note of the progress made by special session of the Committee on Trade and Environment in developing a common understanding of the concepts contained in its mandate in paragraph 31 of the Doha Ministerial Declaration”

The 6<sup>th</sup> Ministerial Conference of WTO was held at Hong Kong in 2005. The declaration states on ‘environment negotiation’ thus:

“They reaffirm the mandate in paragraph 31 of the Doha Ministerial Declaration aimed at enhancing the mutual supportiveness of the trade and environment and welcome the significant work undertaken by the Committee on Trade and Environment (CTE) in special session. They instruct members to intensify the negotiations without prejudging their outcome, on all parts of paragraph 31 to fulfill the mandate”

The developing countries fear that their concern for the environment and working conditions in the developing countries are really a subterfuge for protectionism. So, the developing countries opposed the proposal of the link between trade and environment in WTO.

International trade in forest products and services is an important contributor to deforestation and forest degradation, especially in developing countries<sup>391</sup>. The World Trade Organization (WTO, 1997)<sup>392</sup> has concluded that international trade has little to do with unsustainable forestry and deforestation, and WTO’s Committee on Trade and Environment expressed the view that trade and sustainable forest management are mutually supportive when cross-sectoral collaboration and coherent policies are in place<sup>393</sup>. Nonetheless, with international trade in all categories of forest products measured in round-wood equivalents having increased by more than 400% over the past 10 years, concerns over continued forest degradation and loss of forest cover are increasing the pressure on governments, the private sector and international institutions to address the impact of trade on sustainable forest management<sup>394</sup>.

With issues of sustainable forest management driving the current policy agenda, the economic value of world trade of wood products is at stake. This value in the main categories of round-wood, sawn-wood, pulp and paper, was estimated at approximately 150 billion US dollar in 2003 with paper continuing for nearly half. Trade in secondary processed wood products added approximately 40 billion US dollar to the total. The trade in all products

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<sup>391</sup> . Dudley, N & Nectoux, F. 1995. The Timber Trade: a study for the expert panel on trade and sustainable development. Bristol UK, Equilibrium.

<sup>392</sup> . World Trade Organization (WTO), Committee on Trade and Environment. 1997. Environmental benefits of removing trade restrictions and distortions. Note by the Secretariat. WT/CTE/W/67. Geneva, Switzerland.

<sup>393</sup> .WTO Committee on Trade and Environment. 2003. Report to the fifth session of the WTO Ministerial Conference in Cancun. Paragraphs 32 and 33 of the Doha Ministerial Declaration. WT/CTE/8. Geneva, Switzerland. Available at: [docsonline.wto.org/ddfdocuments/t/wt/cte/8.doc](http://docsonline.wto.org/ddfdocuments/t/wt/cte/8.doc).

<sup>394</sup> . Rytönen, A. 2003. Market access of forest goods and services. Background paper of global project: Impact Assessment of Forest Products Trade in Promotion of Sustainable Forest Management, GCP/INT/775/JPN. Rome, FAO. Available at: [www.fao.org/forestry/foris/data/trade/pdf/rytkonen.pdf](http://www.fao.org/forestry/foris/data/trade/pdf/rytkonen.pdf).

categories of tropical timber accounted for only 16 billion US dollar in 2002. While most of the international trade in forest products takes place between developed countries and rapidly emerging markets such as China and India, exports from developing countries offer much needed opportunities for income. However, forest production for international markets is limited to a relatively small number of developing countries, either those with an important resource base or those with rapidly expanding plantations<sup>395</sup>.

## CONSPECTUS OF WTO REGIME

The General Agreement on Tariffs and Trade (GATT) came into existence, alongside the World Bank and International Monetary Fund, as a result of the discussions on the post-war international economic architecture held at Bretton Woods in 1944. Its aim was to remove barriers to trade between participating countries, and to end discrimination in trade, both between domestic and foreign products and between products originating in different countries. Its scope and effect were steadily enlarged through a series of rounds of negotiations, of which the Uruguay Round, completed in 1994, was the eighth<sup>396</sup>.

More ambitious and long-drawn-out than its predecessors, it led to the creation of a permanent rule based body, the World Trade Organisation (WTO), which came into being in 1995. The WTO oversees the implementation of the GATT and the range of additional agreements which came into place alongside it, together with a quasi-judicial system of dispute resolution which requires consensus among WTO members to overturn any decision – taken together, a much more powerful and far-reaching system of trade rules than had previously existed. To date the WTO has been less successful, however, than the GATT in extending its reach further. This is not particularly surprising. Because of the achievements of successive trade rounds in reducing tariffs, particularly on manufactured products, the attention of trade negotiators increasingly turned to other factors affecting trade in goods – for example, product standards imposed for reasons of health and safety, or environmental quality – which are much more difficult to harmonize, or approximate, between countries. In

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<sup>395</sup> . C. Mersmann Links between Trade and Sustainable Forest Management: An overview, <http://www.fao.org/docrep/008/y5918e/y5918e02.htm>.

<sup>396</sup> . Duncan Brack, Action against illegal logging: interaction with international trade agreements, [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp).

addition, the growth in WTO membership (which now stands at 150, compared to twenty-three original signatories of the GATT) vastly complicates the negotiations<sup>397</sup>.

The first WTO round finally got off the ground in 2001, after an abortive attempt at Seattle in 1999. Dubbed the 'Doha Development Round' (with the Doha Development Agenda, (DDA)) the negotiations were supposed to focus in particular on the needs of developing countries. Four new issues which are investment, competition, government procurement and trade facilitation were included, mainly at the request of developed countries, but for developing countries more important was the implementation of Uruguay Round commitments, mainly on market access. However, it became clear at the fifth WTO ministerial, in Cancun in 2003, that developing countries were still not convinced that an acceptable balance was being struck, and the conference ended in failure. Many of the more ambitious components of the DDA, including investment, competition and government procurement, were dropped or sidelined; the main remaining issue, and the most difficult, was agriculture, the 'last major frontier for trade liberalization', as one observer put it. In contrast to manufactured products, trade distortions in agriculture, including export subsidies, domestic support and limitations on market access, remain extensive. Although agricultural and related activities are not of great economic significance to most developed countries (their priorities lie in further liberalisation of services and non-agricultural goods), farmers' organisations and pressure groups still retain considerable political power.

The difficulties over agriculture contributed to the limited outcome of the Hong Kong ministerial, in December 2005. Members were able to agree on the phasing out of agricultural export subsidies by 2013, but only if subsequent agreement was reached on numbers and formulas for cutting tariffs and subsidies for both agricultural and non-agricultural products. Successive deadlines for this agreement, in April and June 2006, were missed, and in late July the Doha Round talks were suspended indefinitely, as the key trading nations failed to reach any agreement on the crucial issues: US agreement to deeper cuts in domestic farm support, EU willingness to accept increased agricultural market access, and commitment by developing countries to lower industrial tariffs<sup>398</sup>.

Although past trade rounds have often looked deadlocked until the very final stages, and although the Uruguay Round itself at several points looked close to failure, few observers are optimistic about the future of the Doha Round. According to Indian trade minister Kamal

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<sup>397</sup> Ibid.

<sup>398</sup> Ibid

Nath, the round, although not dead, was ‘between intensive care and the crematorium’<sup>399</sup>. Maintaining the medical analogy, in December 2006, the chair of the Agriculture Committee, Crawford Falconer, claimed that the negotiations – being carried out through informal talks – seemed to be showing ‘signs of life’, although it was possible that these amounted to little more than a minor ‘twitch’<sup>400</sup>. His reasons for suggesting this, though, seemed to amount to little more than the observation that participants had engaged less in ‘empty posturing’; no one argued that anyone had actually changed their position<sup>401</sup>.

In summer 2007 the US administration’s trade promotion (or ‘fast-track’) authority, which enables it to put any WTO agreement through Congress as a single item, expires, and the prospects for renewal now seem very slim. This represents yet another obstacle to the completion of the Doha Round. One area of discussion that has made some progress is over the need for ‘aid for trade’, based on the recognition that financial assistance is needed for most developing countries to enable them to take advantage of the potential benefits from liberalised trade. A WTO Task Force report in July 2006 was endorsed by the WTO Council in October; it set out policies for the WTO, donors, and recipients to follow in terms of identifying and fulfilling trade-related needs, and monitoring the progress of aid for trade activities. Since the WTO itself does not possess the resources to deliver this aid, it is of course reliant on donors to incorporate the proposals in their development cooperation programmes<sup>402</sup>.

### **International Timber Trade**

The liberalization of trade in forest products is not a separate item on the WTO’s Doha agenda, but is included under the negotiations on non-agricultural market access – which, along with all the other elements of the Doha Round, are currently suspended. Nevertheless, since the Round may ultimately be revived, and since trade in forest products may be liberalized in any case under bilateral agreements, it is worth examining the likely impact of reductions in trade barriers.

## **CHANGING ORIGIN OF FOREST PRODUCTION**

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<sup>399</sup> . ‘Doha Round suspended indefinitely after G-6 talks collapse’ BRIDGES Weekly Trade News Digest Vol. 10, Number 27, 26, July 2006 as cited in Duncan Brack, Action against illegal logging: interaction with international trade agreements, [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp).

<sup>400</sup> . ‘Doha Round “patent” shows “signs of life,” Ag chair says’, BRIDGES Weekly Trade News Digest Vol. 10, Number 42, 14, December 2006 as cited in Duncan Brack, Action against illegal logging: interaction with international trade agreements, [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp).

<sup>401</sup> .Duncan Brack, Action against illegal logging: interaction with international trade agreements, [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp)

<sup>402</sup> Ibid

Forest plantations of high –yielding varieties are providing an increasing share of the supply of industrial round wood. In 2000, planted forests were estimated to supply about 35% of the global industrial round wood, with a further increase to 44% expected by 2002<sup>403</sup>. Much of the wood which is not sourced from the plantations is from semi-natural forests, with the share from round wood from natural forests in international trade becoming increasingly small. Even though in global production the share of tropical round wood has grown from 9 to 8% since 1961. The annual increase of tropical hardwood in the world market has been only slight over the past 10 years<sup>404</sup> and the increase to a certain extent due to maturation of plantations.

## **NON-TARIFFS BARRIERS OF TIMBER TRADE**

Imports tariffs are generally low for logs and do not limit their trade. Tariffs escalations, where higher tariffs are applied to the import of value added products, are higher in developing countries, particularly in Asia, and are used to support domestic industrialisation rather than sustainable forest management. Exports tariff on logs including direct charges such as, export taxes or export levies have been widely used by timber exporting countries to raise revenue and support domestic wood processing industries particularly in Asia where they generally range from 10 to 20% and can be even higher<sup>405</sup>. However policies generally shifting away from export tariffs towards investment incentives supported by export restrictions.

Government export restrictions are among the more frequently applied non-tariff measures in most developing and some developed producer countries. These restrictions include total export bans, export quotas and selective bans based on species; limits on harvest levels which limit the amount available for export and administrative controls such as, permits and licences<sup>406</sup>. While most of the international trade in forest products take place between develop countries and rapidly emerging markets such as China and India, export from developing countries offer much needed opportunities for income. However, forest

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<sup>403</sup>. J. Carle, Vuorinen, P. & del Lunge, A. 2002. Status and trends in global forest plantation development. *Forest Products Journal*, 52(7/8): 12-23.

<sup>404</sup>. FAO, 2004. FAOSTAT forestry data. Available at: [faostat.external.fao.org/faostat/collections?subset=forestry](http://faostat.external.fao.org/faostat/collections?subset=forestry)

<sup>405</sup> Trade and Sustainable Forest Management-Impacts and Interaction, Analytical study of the global project, GCP/INT/775/JPN: Impact Assessment of Forest Products Trade in the Promotion of Sustainable Forest Management, Rome, [www.fao.org/forestry/site/trade](http://www.fao.org/forestry/site/trade).

<sup>406</sup>. A. Rytkonen, Market Access of Forest Goods and Services, Background Paper for Global Project: Impact Assessment of Forest Products Trade in Promotion of Sustainable Forest Management, GCP/INT/775/JPN: Rome, FAO, [www.fao.org/forestry/foris/data/trade/pdf/rytkonen.pdf](http://www.fao.org/forestry/foris/data/trade/pdf/rytkonen.pdf).

production for international market is limited to a relatively small number of developing countries, either those with a important resource base like Indonesia or those with rapidly expanding timber plantations<sup>407</sup>.

Although often criticized, such non-tariff restrictions can contribute to industrial development and prevent the destruction of forest albeit at a substantial cost. They may also contribute to forest destructions by keeping domestic prices artificially low and encouraging wasteful use of timber. As long as they are adapted to local situations and used in combination with other policy instruments aimed at rural or industrial development<sup>408</sup>.

It is difficult to be precise about the impact of trade liberalization. Since the average tariff for forest products is already quite low about 5 per cent in aggregate, and lower in the major trading nations further reductions are only likely to have a marginal effect. Non-tariff measures are common, and vary substantially between countries, complicating the analysis significantly. Nevertheless, the analysis of the forest products sector carried out for the European Commission as part of its series of sustainability impact assessments of the WTO negotiations<sup>409</sup> included the following conclusions:

- Global round wood production would increase a little, by about 0.5 per cent compared to baseline, though trade would increase by more (about 2 per cent).
- Trade in value-added products would increase in importance, and trade in industrial round wood would decline; in countries where log export bans are currently in place, however, their removal would counter this effect, and trade in logs could increase.
- South–South trade would increase proportionally more, as developing countries tend to apply larger tariffs than do developed countries; since many developing-country exports to the EU already enjoy tariff reductions, the impact on their exports to the EU would be limited.
- Those developing countries with the highest concentrations of good-quality forest resources, good transport infrastructure, adequate technological and human resource capacity, ready access to capital and political stability will see their exports expand the most.

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<sup>407</sup> . C. Mersmann Links between Trade and Sustainable Forest Management: An overview, <http://www.fao.org/docrep/008/y5918e/y5918e02.htm>.

<sup>408</sup> .B. M. Hoekman and M.M. Kostecki, The political Economy of the World Trading System: The WTO and Beyond, Oxford University Press (2001).

<sup>409</sup> . Savcor Indufor Oy in association with institution for Development Policy and management, University of Manchester. Sustainability, Impact Assessment of Proposed WTO Negotiations: Final Report for the Forest Sector Study, 19 June 2005; available at [http://trade-info.cec.eu.int/doclib/docs/2005/october/tradoc\\_125566.pdf](http://trade-info.cec.eu.int/doclib/docs/2005/october/tradoc_125566.pdf)

- The removal of log export restrictions would gradually improve the production efficiency of processing industries, particularly sawmills and ply mills, following increased competition for raw material.
- The environmental impact would almost certainly be negative, at least in developing countries, adding to pressures on the remaining natural forests. This would particularly be the case where forest governance is weak, and especially in countries containing unique biodiversity resources (as is generally true of trade, however, trade liberalisation would be a magnifier rather than a cause of these negative impacts).
- The likely rise in some forest product prices, particularly of finished products, would improve incentives for sustainable forest management, though it could also accelerate the current trend towards conversion of natural forest into higher-yield plantations.
- Increased pressure on forests would also cause negative social impacts in many developing countries, including continued erosion of indigenous people's rights, and an inequitable distribution of the economic benefits, with large companies benefiting much more than small and medium-sized enterprises or local communities.

Liberalization in trade in agricultural products, under the agriculture component of the Doha Agenda, could also increase pressure on forests by encouraging increased conversion of forest areas to agricultural land. The main beneficiaries of agricultural liberalization seem likely to be the middle income developing countries with large, but not particularly intensive agricultural sectors, such as Brazil; in these countries in particular, forest conversion would accelerate.

Restrictions of imports of illegally harvested and traded timber is currently under discussion as a new approach for supporting sustainable management through trade<sup>410</sup>. Although consumer countries have so far refrained from developing specific laws in this regard, few countries like China, Japan, Norway, United States and the European Union have begun to negotiate and finalize bilateral agreements with individual timber producer countries. These activities carried out under Forest Law Enforcement and Governance (FLEG) initiatives in Asia and Africa are often coupled with increased bilateral cooperation supported by Overseas Development Assistance (ODA), the private sector and the non-governmental Organisations (NGOs). This approach to increase compliance with national and international laws has an interface of trade, social standards, and environmental standards in forest production<sup>411</sup>.

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<sup>410</sup> . C. Mersmann Links between Trade and Sustainable Forest Management: An overview, <http://www.fao.org/docrep/008/y5918e/y5918e02.htm>

<sup>411</sup> Ibid.

Governments seeking to exclude imports of illegal timber goods have to face two problems:

- Goods produced illegally in one country are not necessarily illegal in another country just because the trees are cut illegally in protected area. In Indonesia placing the illegally cut timber on the market in a foreign country is not illegal. The act of felling is illegal in Indonesia but transaction in a foreign market is legal. Countries like United States<sup>412</sup>, the European Union<sup>413</sup> and Australia<sup>414</sup> have passed legislation to prohibit the placing of illegal timber on their markets notwithstanding where it originates.
- The government seeking to exclude illegal timber find it difficult to distinguish legal timber from illegal timber. The prohibition is not a trade measure applied at the border and companies handling the timber products are not required for providing proof of legality at the point of import or sale. The exporting and importing companies may not be aware that they are handling illegal products. Even when they are aware that the product is illegal, it is not difficult to falsify the documentation<sup>415</sup>.

GATT Article III requires imported and domestic “like products” to be treated identically with respect to internal taxes and regulations which could protect the goods produced from illegally felled timber.

It is in the attempts to establish requirements of evidence of legal origin and processing of timber products imported or placed in the market the possibility of interaction with the WTO trade rules lie. There are four cases under which a requirement for proof of legality for imports could, at least in theory, raise potential issues.

First, the system is designed to discriminate between legal and illegal timber and these could potentially be considered to be “like products”. If this is done, it is a violation of Article I of GATT. The GATT does not define “like product” and in recent years there are much debate on this topic, in particular over whether the ways in such products are manufactured or harvested can be used as a basis for discrimination in trade ( between sustainable and unsustainable timber). Legality is a universal requirement. Any product that is put on sale in a market must be a legal product. There is however no clarity as to how a WTO dispute would handle the issue of legality of product. More important is the issue of trade restriction primarily derived from the requirements placed on all timber imports to show a proof of

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<sup>412</sup> The Lacey Act.

<sup>413</sup> Timber Regulation

<sup>414</sup> Illegal Logging Prohibition Act.

<sup>415</sup> Duncan Brack, Combating Illegal Logging: Interaction with WTO Rules, [www.Chathamhouse.org](http://www.Chathamhouse.org).

legality which is very difficult especially at the border where the product passes on to the final market destination. The difficulties are as follows:

1. If the requirement for proof of legality is imposed on countries with high level of illegal logging and not on others, some WTO members would be treated differently from the others. This is violation of GATT Article I (most favoured nation treatment)<sup>416</sup>.
2. If imports are treated differently from domestic timber products, this would be violation of GATT Article no. III (national treatment)<sup>417</sup>.
3. Since the requirement of trade restriction imposed on the border other than a duty, tax, or other charge, it would be violation of GATT Article XI (elimination of quantitative restrictions)<sup>418</sup>.

If the legality requirement is found to conflict with any of the GATT Articles described above it could be “saved” under GATT Article-XX under which exceptions can be made to other provisions of the agreement and thus be in compliance with WTO rules. Article XX of GATT does not relate to illegal logging directly but Article XX (b) provides that measures are allowable if “necessary to protect human, animal, or plant life or health”. Illegal logging is clearly detrimental to the life and health of the plant. In order to protect the life and health of the plant it is necessary that less trade distorting options are made available. However imposing such increased restriction on the other hand could result in unnecessary disruption of trade raising timber prices, reducing demand for timber and encouraging consumption of timber substitutes and alternative non-trade disrupting option such as improving the enforcement of law in the country of origin of the timber and timber product could be much more preferable<sup>419</sup>. The cost of proving legality varies from country to country and may not very significant. Other measures are adoption of national and international verification schemes particularly in high risk areas makes the question of legality verification much easier. Moreover, the products can now be certified under the Voluntary Certification Scheme (VCS) of the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) bare the cost of proving legality which does not increase the cost of the timber. Many of the timber producing countries insist that they have improved the enforcement of law within their country and deny that revenue from foreign market is earned

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<sup>416</sup> . Ibid.

<sup>417</sup> . Ibid.

<sup>418</sup> . Ibid.

<sup>419</sup> . Ibid.

from selling of illegal logs. Nevertheless, the necessity test is a crucial but difficult one to satisfy<sup>420</sup>.

GATT Article XX (d) covers “measures necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this agreement, including those relating to custom enforcement and the prevention of deceptive practices”. This Article is specifically pointed toward prevention of imports of counterfeit goods. Under this Article one could require that the harvesting process and its source be compatible with the requirements under GATT and illegal timber should not be passed off as legal timber. Under this provision the laws of the exporting country is to be stringently enforced and not that of the importing country<sup>421</sup>.

GATT Article XX (g) provides that measures are allowable if they are “relating to conservation of exhaustible natural resources and is specifically applicable to the issue of illegal logging. This Article probably offers the strongest defense against illegal logging<sup>422</sup>”.

## **TECHNICAL BARRIER TO TRADE**

The WTO Technical Barrier to Trade Agreement (TBT) is designed to ensure that technical regulation and standards which apply to trade may not be distorted. Requirement for proof of legality of timber is a technical requirement. This provision aims at transparency, predictability and encourages the use of international standards. The Forest Certification System (FCS) and Programme for the Endorsement of Forest Certification (PEFC) are international in scope but are not in the same category of the bodies accepted by the WTO system as international standard setters such as ISO for technical standards or Codex Alimentarius for food standards. Similarly standards may be set by various international processes for sustainable forest management. Voluntary Certification Systems (VCS) for timber is relatively wide spread and there is no strong reason for governments to develop their own national or international standards for their own products. Like GATT Article XX the TBT agreement also contains a saving clause in Article 2.2 which recognizes the right to take necessary measures to fulfill a legitimate objective such as prevention of deceptive practices, protection of human health or safety, animal or plant life or health, or the environment. The difficulties that are discussed above in relation to GATT are also relevant

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<sup>420</sup> .Ibid

<sup>421</sup> .Ibid

<sup>422</sup> Ibid.

to TBT agreement and can have the same arguments. Experience of timber trade restriction due to technical barriers of trade has not yet been encountered. Therefore development in this segment is much awaited<sup>423</sup>.

It is still too early to access the practical outcome of the application of the above provisions more documentary evidence and disputes studies are required to ascertain how the WTO rules can control and monitor international trade in timber<sup>424</sup>.

## **TRADE MEASURES IN MULTILATERAL ENVIRONMENTAL AGREEMENTS AND WTO**

The WTO approach recognizes the importance and the strength of a multilateral trading system. However there is a conflict between WTO, Multilateral Environment Agreements (MEA) and Trade Related Environmental Measure (TREM) on jurisdictional issues relating to dispute settlement regarding illegal international trade in environmental products including timber. There is also a need to reconcile the provisions of these instruments with GATT Article XX. The first option provides for GATT Article XX in order to enable measures taken in accordance with Multilateral Environment Agreements to be compatible with WTO<sup>425</sup>. A second option requires WTO Ministerial Conference to give an official interpretation of GATT Article XX<sup>426</sup>. A third option provides for waivers of specific Multilateral Environment Agreements<sup>427</sup> renewable every year. A fourth option is the reversal of burden of proof in GATT Article XX. Currently the party that applies the Trade Related Environmental Measure (TREM) must prove its legitimacy and necessity and the burden would fall on the party affected by the measure. Therefore any conflict between TREMs and the MEAs and the WTO has to be resolved amicably. One of the way to resolve conflict between the three is to explore solution outside their preview. Another way to solve the conflict is the non-compliance procedures and dispute settlement systems of the MEAs must be made stronger and decided in exclusive environmental fora. A last way to solve the conflict is to constitute a Global Environmental Organization (GEO) on the lines of WTO. Since the conflict between TREMs, MEAs and the WTO is that of Jurisdiction, a cooperative

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<sup>423</sup> . Ibid.

<sup>424</sup> .Ibid.

<sup>425</sup> T. J. Schoenbaum, "International Trade and Protection of the Environment: The continuing search for reconciliation", 91.2AJIL (1997) P. 283-312.

<sup>426</sup> . Article IX.2, Marrakech Agreement Establishing the WTO.

<sup>427</sup> Ibid.

approach would be the best approach. It is also submitted that Article 30 of Vienna Convention on the Law of Treaties which rules how to deal with competing treaties can also be made use of for settling the disputes between these organizations.

## **THE DOHA ROUND**

Only two years after the completion of the Uruguay Round in 1994, pressure began to build for a further round of trade talks. Four new issues investment, competition, government procurement and trade facilitation were proposed for negotiations, mainly by developed countries, at the first WTO ministerial conference at Singapore in 1996. From one perspective this reflected a logical process of establishing multilateral rules to govern policies which affected cross-border economic activity. For developing countries, however, more important was the implementation of Uruguay Round commitments, mainly on market access. It was these developing country concerns, much more than the well-publicized NGO and trade union demonstrations that torpedoed the third WTO ministerial, at Seattle in 1999, and prevented the launching of a 'Millennium Round' of negotiations<sup>428</sup>.

The new round finally got off the ground at Doha in 2001. The four 'Singapore issues' were included in the agenda, along with further liberalization of agriculture and services (envisaged in the Uruguay Round agreement), implementation issues from the Uruguay Round, and a new trade and environment agenda. Dubbed the 'Doha Development Round' (with the Doha Development Agenda, DDA) the negotiations were supposed to focus in particular on the needs of developing countries<sup>429</sup>.

However, it became clear at the fifth WTO ministerial, at Cancun in 2003, that developing countries were still not convinced, and this conference too ended in failure. Cancun was notable for the emergence of more organized developing-country negotiating blocs, in particular the G20, a group of middle-income developing countries with significant agricultural exports. Other groups which came into being at Cancun or subsequently include the G33, led by Indonesia and focusing on proposals for special and differential treatment and special products, and the G90, the least developed countries together with other developing countries from Africa, the Caribbean and the Pacific. The creation of these groups helped to highlight how diverse the 'developing world' is in terms of trade interests<sup>430</sup>.

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<sup>428</sup> . Duncan Brack, *The World Trade Organization and sustainable development: A guide to the debate*, Chatham House, December 2005.

<sup>429</sup> Ibid.

<sup>430</sup> . Duncan Brack, *The World Trade Organization and sustainable development: A guide to the debate*, Chatham House, December 2005.

In the wake of the failure at Cancun, many of the more ambitious components of the DDA, including investment, competition and government procurement, were dropped or sidelined. The overriding issue going into the Hong Kong ministerial, in December 2005, is agriculture, the 'last major frontier for trade liberalization', as one observer put it. In contrast to manufactured products, trade distortions in agriculture, including export subsidies, domestic support and limitations on market access, remain extensive. Although agricultural and related activities are not of great economic significance to most developed countries (their priorities lie in further liberalization of services and non-agricultural goods), farmers' organizations and pressure groups still retain considerable political power. The EU, one of the two major negotiators alongside the US, is itself internally split over reform of the Common Agricultural Policy. If significant progress is not made at Hong Kong, then WTO members will be under severe pressure to reach final agreement in 2006, before the expiry in summer 2007 of the US administration's fast-track authority, which enables it to put the agreement through Congress as a single item. The final shape of the deal, which is bound to focus on agriculture and non-agricultural market access (the main priority for developed countries) but may include a disparate range of other issues, is still far from clear<sup>431</sup>.

## **INTERNATIONAL TIMBER AGREEMENT**

The new International Tropical Timber Agreement (ITTA 2006) was agreed in January 2006 to replace the ITTA 1994; it is expected to enter into force in 2008. The new agreement is not significantly different from the old one. Its aim is 'to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests'<sup>432</sup>. A few other references to illegal (or legal) logging and forest governance appear throughout the text, but their inclusion proved controversial during the negotiations.<sup>433</sup> The ITTO's activities on illegal logging are limited to two areas: project funding for national initiatives on analyzing illegal activities and improving forest law enforcement; and the collection, and attempts to improve the reliability of, data on trade in timber and timber products.

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<sup>431</sup> Ibid.

<sup>432</sup> . 'New tropical timber trade agreement created', Bridges Trade BioRes, Vol. 6, No. 2, 3 February 2006 as cited in. Duncan Brack, Action against illegal logging: interaction with international trade agreements, [www.chathamhouse.org.uk/eedp](http://www.chathamhouse.org.uk/eedp)

<sup>433</sup> . Lauren Flezjor, How the ITTO addresses Illegal Logging (Chatham House, July 2005)

In summations free trade in timber must not be a goal in itself and the issue of sustainable development and sustainable forest management lost sight of. Sustainable development has a link with social, economic and environmental policies and obligations to preserve the environment for future generation. WTO and its allied instruments do not address the issue of timber trade exclusively anywhere. However given the state of the world forest we seem to have reached the brink of a precipice and an urgent need to avoid the issue of international trade in timber cannot be put off any longer.

## **CHAPTER 5**

### **ILLEGAL LOGGING IN SOUTH, SOUTH EAST ASIA, AND CHINA: A SKETCH**

#### **THE FRAME**

This article focuses upon the status of timber trading in the countries in the south and South-East Asia and China. The forest cover map of Asia shows that these areas have dense forest and it is understood that timber



**Map No: 1-Map showing the concentration of Forest in ASIA**

trading activities would be concentrated in this region. Moreover there is a trading route for illegal timber that originates in Indonesia and reaches china through Myanmar or borders of Mizoram in some cases. Until 2013, Malaysia was one of the largest exporters of teak logs to India. For this reason in South Asia SAARC countries status of timber trade along with Indonesia, Malaysia and Myanmar is looked into.

In summations free trade in timber must not be a goal in itself and the issue of sustainable development and sustainable forest management lost sight of. Sustainable development has a link with social, economic and environmental policies and obligations to preserve the environment for future generation. WTO and its allied instruments do not address the issue of timber trade exclusively anywhere. However given the state of the world forest we seem to have reached the brink of a precipice and an urgent need to avoid the issue of international trade in timber cannot be put off any longer.

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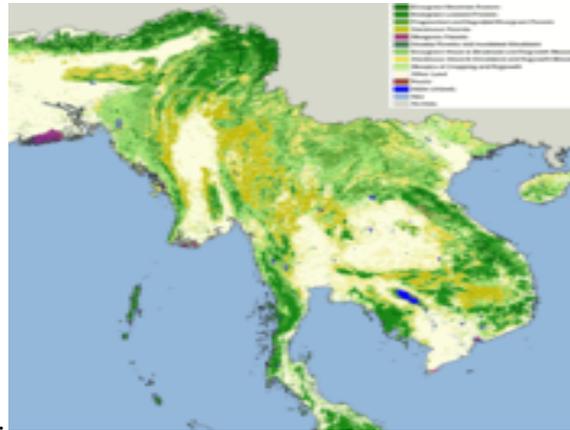
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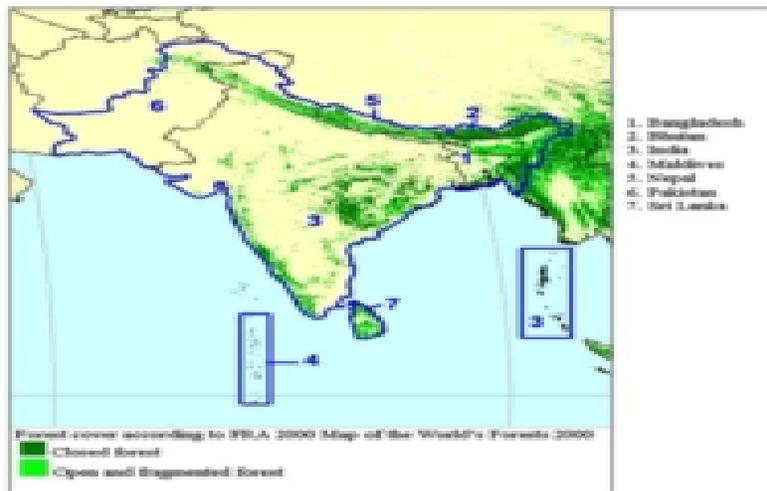
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**Map No: 2-Map showing the concentration of Forest in South East Asia**

In the South East Asia, Indonesia, Malaysia and Myanmar have thick forest Coverage. Among the SAARC countries too there is ample forest coverage.



**Map No: 3-Map showing the concentration of Forest in South Asia**

The SAARC countries comprise of Bangladesh, Bhutan, India, Pakistan, Maldives, Nepal, and Sri Lanka. Another reason behind selecting these countries is that with the exception of China and India, they are within the so called classification of “developing countries”.<sup>434</sup> Though these countries differ in size, they enjoy a canopy of forest. This chapter intends to examine the extent of victimization of illegal logging in these nations.

<sup>434</sup> A nation where the average [income](http://www.oxforddictionaries.com) is much lower than in industrial nations, where the economy relies on a few export crops, and where farming is conducted by primitive methods. In many developing nations, rapid population growth threatens the supply of food.[www.oxforddictionaries.com](http://www.oxforddictionaries.com)

The theoretical framework of this chapter is based upon the issue of equilibrium of economy and sustainability of development. While it is admitted that none of the countries under discussion have economic balance. It is noted that they are struggling under pressure of; population and poverty on one hand and the pressure of globalization and sustainability on the other.

## THE FOCUS

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 resources<sup>435</sup>. 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<sup>436</sup>. 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<sup>437</sup>.

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.

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<sup>435</sup> Mikaela Nilsson Rosander, *Illegal Logging: Current Issues and Opportunities for SIDA/SENSA, Engagement in Southeast Asia*, 2008, Bangkok, Thailand

<sup>436</sup> 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](http://www.jica.go.jp/english/publication/network/1999/net_9907/01.html)>.

<sup>437</sup> Contreras-Hermosilla, *Law Compliance in the Forestry Sector: An Overview* (World Bank Institute, 2002), at 1–6.

Illegals may also occur during transportation, including illegal processing and export, mis-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.

## **OBJECTIVE**

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.

## **ILLEGAL LOGGING**

There is no universal definition of illegal logging<sup>438</sup>. It is not a legal term that has been agreed upon, and its use varies in different contexts. Legality also differs from country to country. Definitions of illegal logging share some common elements. One fundamental aspect is the “Violation of relevant national legislation, including ratified international treaties and

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<sup>438</sup> According to Webster Dictionary:

Timber means- growing trees and their wood suitable for building and carpentry

Wood means - hard fibrous substance basically xylem, stems branches of trees

Log means - Fallen tree, bulky piece or length of unshaped timber

Lumber means- Timber or logs when dressed for use.

In this article the author is concerned with logs but not the naturally fallen ones but those that are cut/felled

conventions”. Generally illegal logging takes place when “timber is harvested in violation of national laws”<sup>439</sup>. Some examples of illegal practices occurring in the forest sector are:

#### **A. Logging<sup>440</sup>**

- Logging timber species protected by national law
- Buying logs from local entrepreneurs that have been harvested outside the concession<sup>441</sup>
- Logging outside concession boundaries<sup>442</sup>
- Contract with local forest owners to harvest on their land but then cutting trees from neighboring Public lands instead
- Logging in protected areas such as Reserved Forests and Eco-sensitive zones
- Logging in prohibited areas such as steep slopes, river banks and catchment areas
- Removing under-/oversized trees
- Extracting more timber than authorized
- Logging without authorization
- Logging in breach of contractual obligations (e.g. pre logging environmental impact statement)
- Obtaining concessions illegally

#### **B. Timber Smuggling<sup>443</sup>:**

- Export/import of tree species banned under national or international law, such as the Convention on International Trade in Endangered Species<sup>444</sup>.
- Export/import of tree species listed under CITES<sup>445</sup> without the appropriate permits.
- Export/import of log, lumber or other timber product in contravention of national bans
- Unauthorized movement of timber across district or national borders
- Movement of illegally logged timber from forest to illegal market
- Exporting volumes of forest products in excess of the documented export quantity

#### **C. Practices Specifically Aimed at Reducing Payment of Taxes and Other Fees<sup>446</sup>:**

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<sup>439</sup> The European Union Action Plan for Forest Law Enforcement, Governance and Trade (EU FLEGT)

<sup>440</sup> Mikaela Nilsson Rosander, Illegal Logging: Current Issues and Opportunities for SIDA/SENSA, Engagement in Southeast Asia, 2008, Bangkok, Thailand, see also Alda Chan, Illegal Logging in Indonesia: the environmental, Economic and social cost, Page 4 [www.BlueGreenAlliance.org](http://www.BlueGreenAlliance.org)

<sup>441</sup> The quantity of or number of logs that are permitted to be taken out under the law or forest notifications.

<sup>442</sup> The area within which logging is permitted by the Forest Authorities

<sup>443</sup> See foot note 6

<sup>444</sup> Convention on International Trade in Endangered Species (CITES)2001

<sup>445</sup> Ibid

- Declaring selling forest products at prices below market prices to reduce declared profits and corporate and income taxes
- Declaring buying inputs at prices above market prices to reduce declared profits and corporate or income taxes
- Manipulation of debt cash flows (transferring money to subsidiaries or a parent company where debt repayment is freer than the export of projects; inflating repayments, allowing untaxed larger repatriation of profits, reducing the level of declared profits, and, therefore, of taxes)
- Overvaluing services received from related companies to reduce declared profits and corporate and income taxes
- Avoiding royalties and duties by under-grading, under-measuring, underreporting, and undervaluing of timber and misclassification of species
- Non-payment of licence fees, royalties, taxes, fines, and other government charges.

### **C. Illegal Timber Processing<sup>447</sup>**

- Processing timber without documentation verifying its legal origin
- operating without a processing licence
- operating without other necessary licenses and approvals (e.g. effluent disposal permits)
- Failing to meet licence provisions, including pollution control standards.

## **SOUTH ASIA**

### **Illegal Logging in Bangladesh:**

Forest law enforcement has long been considered as the most efficient strategy to prevent illegal logging and is broadly practiced across the tropics. Conversely, on the other hand the efficacy and the role of forest law enforcement in preventing illegal logging have very often been questioned, particularly in developing countries, in which a complex socio-political context exists among conditions of unrelieved poverty and high unemployment. International concerns about illegal logging have grown strikingly over the last decades, and nowadays it has considered as one of the major threats to world's forests mainly in the tropics which has

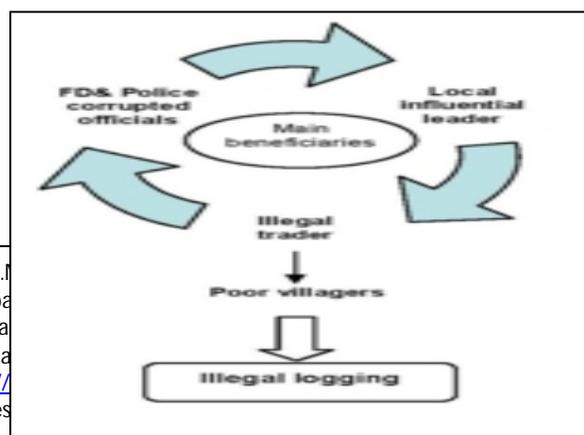
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<sup>446</sup> Mikaela Nilsson Rosander, *Illegal Logging: Current Issues and Opportunities for SIDA/SENSA, Engagement in Southeast Asia*, 2008, Bangkok, Thailand, see also Alda Chan, *Illegal Logging in Indonesia: the environmental, Economic and social cost*, Page 4 [www.BlueGreenAlliance.org](http://www.BlueGreenAlliance.org)

<sup>447</sup> Ibid

long been subjected to rapid deforestation and degradation driven by complex socio-economic and political perspective.

Market demand and the growing needs of timber of the overpopulated country of Bangladesh are the cause contributing to the depletion of forest resources and encouraging illegal loggers to cut down the trees from forests area. *Sal* timber demand has reportedly been increased especially for making doors and windows frames, furniture and ornamentation of households, and even people who have inadequate income want to have wooden furniture like they see on television or in furniture company advertisements. Since wooden furniture is still seen as a symbol of aristocracy in Bangladesh, there is always high demand for good quality timber in the urban market. Again, due to poor infrastructure in areas adjacent to forest areas, the price of timber is comparatively lower than it is in the urban market. This means that there is always a high demand for timber from these areas by urban furniture shops, and this undoubtedly fosters illegal logging in rural forest areas. The presence of sawmills and furniture shops in the vicinity of forests also influences illegal logging to a great extent<sup>448</sup>. On an average 1 m<sup>3</sup> of *Sal* timber (good quality log) was sold at US\$ 300-400, which is one of the highest values in the Bangladesh market, so most of the local traders wanted to buy *Sal* timber and often they gave advanced money to illegal loggers or the syndicate and ultimately enhancing deforestation. Local elites along with some members of Political parties both strongly connected with the local police department are indirectly responsible for the illegal logging in Bangladesh. Corruption in the Forest Department has had a terrible impact on forest conservation. Forest officials have often covered the illegal activities and used to take bribes regularly from the corrupted timber merchants and from sawmill owners.<sup>449</sup> According to Transparency International report, forest officials were engaged in illegal logging worth millions of dollars a year<sup>450</sup>.



<sup>448</sup> Sharif Ahmed Mukul, A.Z.I. enforcement and incentive ba Bangladesh, Tokyo, 28-31 Janua

<sup>449</sup> Kazi Kamrul Islam, Noriko Sa (*Shorea robusta*) forests, <http://>

<sup>450</sup> Corruption killing Banglades September 2013.

n, Efficacy of forest law countries: experience from

esh: the case of the *Sal*

mber 2008, visited on 6<sup>th</sup>

**Fig 1: Channels of illegal logging in Sal forests of Bangladesh. FD indicates local Forest Department of Bangladesh<sup>451</sup>.**

The gang of illegal loggers laugh when three forest officials equipped with sticks challenged them on a canal under Patkosta forest camp deep in the Sundarbans in Bangladesh. The gang of illegal loggers ties up the foresters at gunpoint and they felled trees until their three boats were full of logs. Before leaving, the gang locked the forest officials in the hull of the latter's boat and released the boat on the canal. They floated for five hours until they were rescued by fishermen. 15 of 72 Forest offices are operating without any firearms in Khulna, Satkhira and Bagerhat. The unarmed officials are now “protecting” the forest from 10 major gangs of about 300 robbers equipped with light machineguns, AK-47, sophisticated pistols and revolvers. Some fortunate foresters, who have official arms, confront these gangs with old-fashioned 303 and Chinese rifles and short-range guns. Lengthy judicial process, alleged non-cooperation from police, and a nexus of criminals, dishonest foresters, journalists and law enforcers also add to the despair of the forest officials.

And as a result, they are left with no other choices but living in good terms with robbers and illegal loggers. "We've an understanding with robbers and illegal loggers. If confronted, we show our departmental flag. They won't harm us then. Actually, they respect us in a way," said \_\_\_\_\_ the \_\_\_\_\_ forester”.

In reality, the foresters follow the rules of the criminals. Deep in the Sundarbans (in Bangladesh) it has become a tradition that robbers use forest stations as a resting place while the foresters cook for them<sup>452</sup>

It is therefore important to improve the existing forest law for the prevention of illegal logging. Traditional livelihoods and forest dependence should be kept in mind while implementing the law. Furthermore, as there are lot of limitations with projects and their funding, some sustainable financing schemes based on protecting local resources including promoting eco- sensitive zone could be followed to ensure economic development as well as

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<sup>451</sup> Ibid.

<sup>452</sup> Satkhira, Bangladesh - Illegal loggers tie up forest officials at gunpoint and leave them floating in boat on canal, <http://sysiphus-angrynewsfromaroundtheworld.blogspot.in>, Friday, 17 June 2011, Visited on 6<sup>th</sup> September 2013.

to ensure the sustainability of forest resources. There is also an urgent need to build up the forest department through appointing well-trained and inspired forestry professionals, allocating adequate budget, and developing infrastructures. Local people, if given sufficient powers and state support, can effectively combat illegal logging. Better, safe and sustainable management of forest resources can also be achieved by strengthening of the administrative and protective capabilities of Provincial Forest Department *and* by providing arms, wireless sets and operational vehicles and also by allocating magisterial powers on Forest Officers to take prompt cognizance of forest offences. Finally, the upcoming survival of the forests in Bangladesh depends upon the development and effectual implementation of forest laws and sustainable forest management.

### **Illegal Logging in Bhutan:**

In this segment there is a reconnoiter of Bhutan's trade from 1907 to 2013 and a projection for 2020. Trade flourished in Bhutan during the era of Ugyen Wangchuk (1907) especially with Bengal and Assam in India which included timber and live animals among other things. This indicates that during 1907 to 1926 Bhutan enjoyed abundance of forest produce including timber and nurtured live animals for the purpose of trade. These products occupied a place of prominence during 1916 to 1917<sup>453</sup>.

Bhutan enjoys free trade with India and India absorbs over 90% of Bhutan's export consisting of fruits, electricity, timber, spices and gems stones. About 72% of Bhutan's land mass is under forest cover. Infact Bhutan's has the largest forest cover in proportion to its land mass in Asia. The forest offers vast economic potential through export and wood based industries. Commercial logging is banned in Bhutan since 1979. Environmental legislation requires that 60% of the country remain under forest cover. Bhutan, therefore, gives priority to preservation and sustainability. Bhutan has been awarded the UNEP<sup>454</sup> champion earth award in 2005. Bhutan's environment is at the centre of all its developmental plans. Environment is on its top priority policy and it has an environment conservation trust fund. It is projected that Bhutan is gradually coming under the pressure of urbanization and encroachment upon forest land is increasing at the same the forest on the boarder of china and

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<sup>453</sup> Ratna Sarkar and Indrajit Ray, Trend of Bhutans Trade During 1907-1926: Export, [www.bhutanstudies.org.bt/publicationFiles/JBS/JBS\\_vol26/26-5pdf](http://www.bhutanstudies.org.bt/publicationFiles/JBS/JBS_vol26/26-5pdf).

<sup>454</sup> United Nations environment Programme

Bhutan is gradually succumbing to illegal logging from the Chinese side<sup>455</sup>. Though environment is at the centre of all policy concerns in Bhutan, the road network constructed during the period 2001 and 2004, exploitation of the forest at the boarder of China and growing demands of urbanization has left quite a strong negative impact on Bhutan's forest. In view of this community forest in Bhutan is being boosted in foreseeable future however there is no likelihood of the protected areas decrease. By the year 2020 Bhutan will not be able to meet the demand for timber for construction purposes. Pressure on the forest will be very high, more then what can be produced. Under such circumstance Bhutan may have to import timber. It is foreseen that the demand and supply balance for timber in Bhutan will be disturbed. Technologies in wood based industries in Bhutan have not yet improved. Since the volume of round timber production in Bhutan is very small compared to the number of sawmills and wood based industries it houses, the industries that do not feel comfortable in investing for improving technology will fade away within the next decade. Only those wood based industries which deal very clean straight and bold timber are likely to have difficulty in finding raw materials within the country. Industries that require large logs will face raw material shortage. Therefore, wood based industries in Bhutan will either fade away or survive by importing timber. Only those industries which use low quality and small size wood but produce internationally competitive products alone are expected to survive in the market<sup>456</sup>.

### **Illegal Logging in India:**

The fact that India is losing its forest canopy fast does not require hard research. Everywhere around us trees are felled indiscriminately for infrastructural construction and also for supply to the wood based industry within the country and outside, agriculture, fuel wood, paper mills, mines all have extracted their pound of flesh from the forest. The 2003 Forest Survey estimates record a net minus change of nearly three million hectares of 'dense forests', which means serious and continued deforestation in forests with reduced canopy density of 40 percent and above. Because satellite imageries acting as source of these data are still treated as 'classified' in the country and 'ground-trotting' exercises (if any) are carried on in a similar stealthy manner. One never knows exactly how much forest vanishes each year, and where. From the State of Forests Report, it can be seen that degradation of forests is not

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<sup>455</sup> Bhutan Country Strategy Paper 2007-2013 [www. Eeas.europa.eu/Bhutan/csp/07\\_13\\_en.pdf](http://www.Eeas.europa.eu/Bhutan/csp/07_13_en.pdf).

<sup>456</sup> . Asia Pacific Forestry Sector Outlook Study II Working Paper Series, Working Paper Number APFSOSII/WP/2009/04-Bhutan Forestry Outlook Study by Dhan B.Dhital, Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific, Bangkok, 2009.

confined to any particular province or region, it is happening, almost uniformly, everywhere. For instance, while the province of Uttar Pradesh in the North records a loss of 2969 sq. km of dense forests, Assam in North East, and Andhra Pradesh in the South record 2788 and 1788 sq.kms<sup>457</sup> respectively.

However, logging both legal and illegal exists, and is the most tangible and definite causative factor behind deforestation events in India. It has been so since colonial days, when the British first came and usurped people's forests to log them for railroads, shipyards, and profit. Forest legislation like Indian Forest Acts (1865, 1927) later legitimized what was pure plunder to begin with, and introduction of the so-called scientific forest management in British-held forests, ensured that most of Indian forests would be lost forever. After Independence, contrary to popular belief, plunder of the country's forests not only continued, but continued with even more aggressiveness than before, as urban markets expanded. Independent India was quick to assert the continuity of the colonial structures in forestry. It was believed that the fundamental concepts underlying the colonial policy were sound and these just needed to be reoriented<sup>458</sup>.

In the new policy, 'public good' was replaced by 'national interest'. The reorientation was to accommodate the demands of industry for raw material. Extraction of industrial wood jumped from 4.46 million cubic meter in 1956-57, to 9.28 million cubic meter in 1966-67 and fuel wood [extraction was already significant] to 10.19 million cubic meter in 1956-57. Paper mills had a dramatic increase during 1966-77. The consumption of printing and writing paper increased from 100,000 tons in 1948 to 405,000 tons in 1970, and paper board from 46,000 tons to 158,000 tons<sup>459</sup>. The expanding urban centers also required large quantities of timber and fuel wood. The Forest Department responded to the increasing demands in various ways: acquiring more land through merger of princely states and declaring new areas as reserved forest, by which the area under the Forest Department increased from 71.80 million hectares in 1950-51 to 74.60 in 1979-80, despite a loss of forest canopy of 4.3 million hectares due to reasons like stepping up extraction of forest products.

Due to the above policy the revenue of the Forest Department multiplied 5 times from 1951-52 to 1970-71, creating markets for less commonly known species that were earlier left alone. The revenue generated from forests increased manifold. However, the production of timber

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<sup>457</sup> Forest Survey of India, 2003 State of Forests Report

<sup>458</sup> The Forest Policy Resolution, 1952

<sup>459</sup> Ibid

and firewood reached a plateau after 1966-67. Tree felling since the Second World War had affected the sustainability of the timber reserve in the country due to natural constraints beyond which extraction could not be increased. The plateau signified that the forests could not meet any further growth in demand.

The above matter was ‘officially’ admitted when the new forest policy of 1988 declared a ban on logging of remaining forests. Organised illegal logging has become commonplace in many forest areas, including protected areas. Forest legislations in the country have not been able to make even a dent in the activities of the mafia-political groups-forest staff nexus. Instead, this nexus —the most pressing danger to Indian forests— gets stronger every day<sup>460</sup>. During the last 5-6 years, several major timber scams have been unearthed in various parts of the country. Buxa Tiger Reserve, a demarcated biodiversity hotspot in the extreme North-Eastern corner of West Bengal, lost about 10 sq. km. Of forest covers in 1998-1999 alone as a result of a timber scam. According to Soumitra Ghosh, Protected Area Authorities issued false transit passes for illegally felled trees. Timber coming from the Tiger Reserve was shown as timber from private forests<sup>461</sup>. In another important Protected Area, Jaldapara Wildlife Sanctuary, adjoining Buxa Tiger Reserve, senior forest and police officers were found to be directly involved in illegal trade<sup>462</sup>. In Madhya Pradesh, the forest minister and senior forest officers’ involvement in large- scale illegal timber trade came to light in 1999; when it was found that prime Sal forests were being illegally felled under the guise of pest control. Many important Protected Areas like Rajaji National Park in Uttar Pradesh, Nagarhole National Park in Karnataka, Palamou or Betla Tiger Reserve in Bihar and many other forest areas of the country report similar incidents. In Rajaji National Park, it is on record that the local forest mafia killed about 8 forest Guards between 1996 -1999. What is off the record but common knowledge in the area is that the killings were the result of disputes over share of profits between the mafia and guards<sup>463</sup>.

A recent report by the campaign group Ecologist setting the environmental agenda since 1970 highlighted a growing number of attacks on journalists and activists who investigate industrial pollution or deforestation. It claims that government officials corrupted by money from mining or logging were often behind these threats and attacks. This was backed up by J.

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<sup>460</sup> Soumitra Ghosh , Legal and illegal logging behind deforestation in India , at <http://www.wrm.org.uy> , visited.18.08.2013

<sup>461</sup> Ibid

<sup>462</sup> Ibid

<sup>463</sup> Ibid

P. Dabral, president of the Himalayan Chipko Foundation<sup>464</sup>, an NGO which has exposed illegal logging in the northern regions of India on the picturesque slopes of the Himalayas, the world's highest mountains. Dabral alleges villagers are allowed to cut a small number of trees but that the timber mafias, with the acceptance of local officials, abuse this privilege and take 200-300 trunks. 'Many of the members of the forest department are on the take. The system is well organised and there is a set amount of approximately Rs. 70,000 (around £1,000) given to a forest official for approving a file,' says Dabral, who himself has received many threats. In the event that something should happen to him and to ensure the corruption he has uncovered is not swept under the rug, he keeps video logs at undisclosed locations. When contacted the Forest Department said it was 'not aware of any illegal logging'<sup>465</sup>.

Declining productivity of forests and the lull in forestry activities gradually destroyed livelihoods of millions of economically deprived families living in forest areas and in many cases starving, impoverished people are forced into aiding the very forces that are destroying forests for commercial profits leading to a vicious circle of destruction. Hence the myth that forest people are responsible for deforestation and consequential governmental remedies like harsher and more stringent forest laws that limit people's access to forests. The major argument that the state, environmentalists and the mainstream media use over and over again is that increase in human population, cattle population and so-called 'biotic pressure' is chiefly responsible for destruction of the country's forests and biodiversity. What is forgotten is that forest people have shared a strong cultural and spiritual bond with forests that never allows them to exploit and degrade out of choice. Non-sustainable and commercial use of forests is something that the urban elite and the state force upon the forest people, by denying them basic, subsistence-level access to their traditional resource-base on the one hand, and continuing with intensive commercial exploitation on the other.

Official agencies in charge of environmental information in India seldom use the term 'deforestation', a harsh taboo word. Usually it is 'degradation', a much softer term that hides endless stretches of lost forests, hacked, plundered, looted, mined, built upon, and submerged. Factors that cause deforestation are hidden in layers of vague terms like

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<sup>464</sup> Founded by Sunderlal Bahuguna, Father of Chipko movement in India.

<sup>465</sup> Ecologist setting the environmental agenda since 1970, at [www.theecologist.org](http://www.theecologist.org), date: 17-08-2013. This statement of the forest officials can be corroborated by this author because during the empirical data collection tour all forest officials claimed that there was no illegal logging but contrary evidence was found.

‘anthropogenetic interventions’ and ‘biotic factors’, and ‘illegal logging’ is something for which no coherent, centralized records have ever been kept, as if it does not exist.

### **Illegal Logging in Maldives:**

The Maldives are a chain of islands on the Indian Ocean. Officially there are about 1190 islands having some form of vegetation on them. Of these 199 islands are inhabited. The forest area of Maldives is not known. The Global Forest Resource Assessment of 2005<sup>466</sup> estimated the area to be 1000 hectares and the agricultural development master plan 2006-2020<sup>467</sup> of the Maldives estimate the forest area to be 3716 hectares. The forest comprises of littoral forest along with mangroves, coconut grooves, ponds and lagoons. The littoral and mangrove forest perform multiple functions by acting as shelter belts and wind brakes preventing soil and beach erosion. There are some thick and dense growth of forest with a succession of shrub vegetation and tall trees towards the inner side of the islands. The government land is called Fallabba which is located near the villages on the inhabited islands and is used by the island community to grow valuable tree crops with permission of the island chief. Half of the trees planted becomes the property of the state and the other half is owned by the grower. A lessee collects the produce of the government trees and the individual planters collect the produce of their respective trees. In the Fallabba area each tree planted has a distinguishing mark called ‘Thah’ and the trees planted are divided as follows:

- Trees owned by the government.
- Trees owned by different individual growers.
- Trees owned half by the government and one half by the individual growers.
- Trees naturally grown and owned by the island community, and
- Trees belonging to person responsible for marking of the trees.

The islanders also have access to community forest land where they can grow forest (timber) trees or fruit trees such as mango, bread fruit, coconut etc<sup>468</sup>. There is a high demand for boat building wood particularly in the northern islands. In addition to harvesting wood from

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<sup>466</sup> . Asia Development Outlook 2006, Atoll Editions, Atlas of the Maldives.

<sup>467</sup> . Ravishankar Thupalli, Maldives Forestry Outlook Study, Working Paper Number. APFSOSII/WP/2009/03, Food and Agriculture Organizations of the United Nations, Regional Office for Asia and the Pacific, Bangkok 2009.

<sup>468</sup> . Global Forest Resources Assessment 2010, Country Report, Maldives, Forestry Department, Food and Agriculture Organizations of the United Nations, FRA,2010/124,Rome, 2010.

locally available trees, wood demand, particularly from ebony and teak is met from imported wood. In Foamullah trees are felt for the purpose of boat building. Forest areas including mangroves and pond areas are encroached upon housing, infrastructure development and agriculture. The mangrove and littoral forest are being eroded due to coral and sand mining for urbanization and house construction.

Wood production occurs both on inhabited and uninhabited islands. It is harvested according to the regulation that for every tree cut to new seedlings should be planted. There is statistical evidence that a large proportion of timber used in Maldives is imported primarily from Indonesia and Malaysia. Sawn wood import statistics for 2000-2005 express annual import quantities in terms of 38170 metric ton using average density of 670kg per m<sup>3</sup>. It is expected that there will be an upward rise in import<sup>469</sup>.

Timber exploitation is not conducted sustainably. There is a common perception that domestic timber is becoming increasingly scarce. Timber cutting licenses are supposed to work as a tool for regulating commercial timber cutting. By law the MoFAMR is authorized to issue permits for cutting trees on uninhabited islands and the island office should have the authority to issue permits for minor timber cutting on inhabited islands. According to the existing mechanism the island office forwards the cutting proposals to the FAMR, which grants the cutting permits. Permits are issued for construction or repair of boats, for production of lime and for house building. The person using the timber cutting permits is obliged to plant two trees for every felled tree. This rule is written in the regulation of the MoFAMR governing uninhabited islands made under law number 20/98 (9), but it applies to inhabited islands as well<sup>470</sup>. Timber cutting is driven by market demand. Applications for timber cutting licenses have as need for particular species and MoFAMR is issuing permits accordingly. One constraint for intensification of tree planting is limited nursery capacity. In the absence of sufficient domestic seedling production the individuals and institutions concerned with tree planting have few options:

- To establish their own nurseries
- To search for transplantable seedlings on the island or

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<sup>469</sup> Ravishankar Thupalli, Maldives Forestry Outlook Study, Working Paper Number. APFSOSII/WP/2009/03, Food and Agriculture Organizations of the United Nations, Regional Office for Asia and the Pacific, Bangkok 2009.

<sup>470</sup> Ibid.

- To import seedlings.

Nursery establishment requires suitable site, capital and skill<sup>471</sup>.

### **Illegal Logging in Nepal:**

Illegal logging had serious effects to increase the rate of deforestation and forest degradation in Nepal. Whether, logging was legal or illegal, it influenced the corrupted staff (security forces and forestry organization) to involve indirectly in smuggling of timber. Indeed such types of effects were also common in all collaborative forests however level of effects was differed.<sup>472</sup> Illegal logging is having a devastating impact on the world's forests. Its effects include forest degradation, deforestation, the loss of biodiversity and fuelling climate change. Ancient forests have evolved over thousands of years into unique and vital habitats for millions of plant and animal species. They are also home to millions of people who depend on them for their livelihoods and survival. It is estimated that some 1.6 billion people worldwide depend on forests for their livelihood and 60 million indigenous peoples depend on forests for their subsistence. The annual rate of deforestation in Nepal is 1.3 percent. This indicates the change in forest cover only. Lots of trees are felled illegally from the forest. There is no more study data on that how many trees have been felled and how much wood volume is lost by illegal logging in Nepal. Over 8% of the high-value Terai southern plains forests are being lost each year due to illegal cutting and forest clearance. Small farmers to high level organized groups are involved in this activity. Illegal logging undermines the trade in legal and well-managed timber by responsible companies by under cutting its price and making it less competitive. Money from Illegal logging is used for funding crime and distorting markets<sup>473</sup>. Mostly cycle is used for transfer of wood in many cases and four wheel vehicles are also used in some case. Now in days motorcycle is increasingly used. This is most typical for logging of large-sized especially valuable wood. This type of felling is generally done in night time. High price of wood and its continuous increment leads attraction of jobless youth people towards this activity. Due to high price there is more income without any investment, most of the crime minded people attracted towards this business. These people are fulfilled with high technical weapons. Instead the current forest

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<sup>471</sup> Ibid.

<sup>472</sup> Ram Asheshwar MANDAL, Ishwar Chandra DUTTA, Pramod Kumar JHA, Sidhibir KARMACHARYA, Kamallesh YADAV, Bechu YADAV, Utsav THAPA, Samsul HAQUE, EFFECTS OF DEFORESTATION AND FOREST DEGRADATION ON FOREST CARBON STOCKS IN COLLABORATIVE FORESTS, NEPAL, INTERNATIONAL JOURNAL OF CONSERVATION SCIENCE, Volume 3, Issue 4, October-December 2012, [www.ijcs.uaic.ro](http://www.ijcs.uaic.ro), visited on 15.09.13.

<sup>473</sup> Shiva Wagle, Problem of illegal felling/logging in Nepal, published on 11/26/2011 <http://www.forestrynepal.org>, visited on 15.09.13.

people unable to fight with them, because forest people do not have high technique weapons as well as that type of trainings. Timber is often felled to clear areas for the construction of infrastructure facilities (buildings, hospitals, schools, transmission line, road etc.), without issuing required permits, or with no authorization whatsoever. In most case felling has been done in the name of squatters settlement lead by local social and political workers. In the majority of cases, the culprits are not penalized. Such practices are common across the nation<sup>474</sup>.

Loggers have been bribing office-holders of Community Forest User Groups in Saptari district in Nepal to help them access timber in the national forests of the region. The loggers agree to leave the community forests alone, but pay commissions to post-holders of the user groups. Illegally logged timber from national forests is smuggled to the Indian market with the connivance of said post-holders. Although the district boasts 218 community forests, only 12 are operating lawfully, according to the District Forest Administration<sup>475</sup>. Around 75 percent of the forest area in the Chure region of Saptari ( in Nepal) have vanished over the past few years due to rapid illegal logging while the remaining forest is also at risk with timber smugglers active in the area, according to a report submitted by the *Federation of Community Forestry Users Nepal* (FECOFUN). These forests have become a common smuggling ground for both conservation authorities and timber smugglers. The illegal felling of trees is happening every day but surprisingly the Saptari District Forest Office (DFO) and the officials of *Federation of Community Forestry Users Nepal* (FECOFUN) have taken no action. This clearly shows their involvement in the smuggling. Acknowledging the situation, Chief of DFO also admitted that trees have been felled in large numbers in recent years. “The greenery has vanished drastically and efforts to grow new trees are being done on a regular basis but curbing illegal logging has been the biggest challenge. On the other side DFO officials said that they are not directly responsible for conserving the forest. It is the community forestry groups who are primarily responsible for conservation, because out of 340.96 sq km of total forest cover in Saptari 17,817 hectares is occupied by 128 community forests. But, the community forestry groups including the FECOFUN pass the blame toward the DFO. “*We can't fully deny our involvement in illegal logging but the DFO officials are even more involved, Whenever we inform the DFO staffs about illegal logging incidents, they*

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<sup>474</sup> Ibid.

<sup>475</sup> Bhopal Paswan, Illegal logging, Naya Patrika -September 2009, <http://nepalitimes.com>, visited on 15.09.2013.

*first inform the timber smugglers and then go out on patrol,”* said Sectary of FECOFUN (*Federation of Community Forestry Users Nepal*)<sup>476</sup>.

Illegal logging activities in Nepal, both commercial and poverty-driven, are related to the extreme poverty of rural areas close to forests, with the deficit of energy and the weakness on law enforcement. Forest Administration is not able to control and to enforce the law because the main part of illegal activities is poverty-driven illegal logging where people’s basic needs are at stake. Enforcement staff has limited rights to enforce the law and in addition their salaries are very low.

Illegal logging and other criminal activities in the forest has many complicated causes embedded deeply in the social, economic, cultural and political structures of our society. There is a need to work collectively to address the problem simultaneously and build stronger and clearer political assurance to strengthening forest law enforcement. But we must also seek solutions through inventive policies and initiative, mainly policies and initiatives which give forest fringe communities secure and recognised rights to forest resources, in exchange for clear and fair responsibilities for protecting that forest against unsustainable exploitation and outside encroachment. Policies best suited to persuade this must be flexible and capable of reflecting local needs and diversity.

### **Illegal Logging in Pakistan:**

Pakistan is having the world’s second highest rate of deforestation. Pakistan’s timberlands are in urgent need of protection and conservation by the concerned authorities, in order to discourage de-forestation and illegal chopping of trees for timber and other uses. The major threat to Pakistan’s forests is uncontrolled and indiscriminate cutting of trees for living purposes and timber products. The principal cause of deforestation in Pakistan is the consumption of fuel wood and timber (primarily for house hold firewood). This consumption was expected to increase in line with the growth of population, illegal logging, unsustainable use of natural resources and the minimal participation in reforestation programmes<sup>477</sup>. Deforestation globally is now taking a noticeable turn in Pakistan. With approximately 1/5 of Pakistan affected by flooding and for that reason illegal lumber<sup>478</sup> harvests that have taken

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<sup>476</sup> JITENDRA KUMAR JHA, Rapid illegal logging devouring Chure forests, published on 28.04. 2013, <http://www.myrepublica.com>, visited on 15.09.2013

<sup>477</sup> Pakistan has second highest rate of deforestation, Posted by: Saving Water SA (Cape Town, South Africa) - partnered with Water Rhapsody conservation systems – 10 July 2010, <http://www.savingwater.co.za>, visited on 12/09/2013

<sup>478</sup> Id at p.3

place for decades. Locals say that in Dir, Swat and Nowshera (in Pakistan) the floods swept away large amounts of lumber and that at one point the rivers contained so much of wood that the surface appeared to be black. Much of this timber had been stored in ravines by the country's powerful timber mafia, which engages in illegal logging, while it was awaiting transportation to the south. Dislodged by the floods and swept away by the water, the timber destroyed almost all of the bridges in its path and filled the Turbela Dam Reservoir<sup>479</sup>.

The Taliban have been active in protecting the illegal lumbering. Pakistan's forests have always come under immense strain, but *Sarhad Awami Forestry Ittehad (SAFI)*, a local organization that works to protect them, says that in parts of Malakand more than 70 per cent of forests were illegally cut down between 2007 and 2009 when the Pakistani Taliban controlled the region. Forests were cut ruthlessly by the timber mafia under the protection of the militants, says *Riaz Ahmad Khan*, the president of SAFI. The organization says the Taliban made large sums of money working in collaboration with the timber mafia. "At the moment more than two million feet of timber is flowing in Turbela Dam only. Thousands of trees were uprooted by the flash flood, which further damaged the existing forest cover<sup>480</sup>. Continuous tree cutting has lent a unproductive look to the banks of canals and forests alongside the River Indus, destroying the area's ecological environment as well as depriving the livestock and wildlife of their feed. Reports received from the banks of Rahri canal in northern districts of Sindh, shows that trees are being chopped down on a massive scale. Local villagers allege that the relatives of influential political figures are involved in the tree-cutting campaign<sup>481</sup>. The Sindh Irrigation Department's official records reveal that the three barrages built on the River Indus are *Sukkur Barrage, Guddu Barrage and Kotri Barrage*, each with a dozen canals. On the right bank of Sukkur barrage, the three main canals are Main Khair Thar canal, Dadu Canal and Rice Canal while on the left, the four main canals includes *Nara Canal, Rohari Canal, Khairpur East Canal and Khairpur West Canal*. On the right side of Kotri Canal, Kalri Baghar is located and on left side three main canals

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<sup>479</sup> Pakistan Illegal Lumber Harvest Extended Flood Damage Posted on August 17, 2010, <http://samandimp.wordpress.com>, visited on 12.08.2013

<sup>480</sup> Ibid

<sup>481</sup> Pakistan: Illegal logging of last trees along canals & riverine forests in Sindh, published in January 15th, 2009, <http://forestpolicyresearch.com>, visited on 12/09.2013

exists including *Phuleli*, *Pinjari* and *Akram Wah*. These canals are spread all over the province and due to seepage they have resulted in thick forest growth, turning the area into a huge forest range. The Sindh Forest Department's records show that some of the important tree varieties include *Babool* (*acacica nilotica*), *Sheesham* or *Talhi* (*dalkagia sisoo*), *Neem* (*azatrteha indica*), *Jar* (*salvudora oleoides*), *Sufedo* (*Eucalyptus*) and *Sareenh* (*Albizia*). These trees not only strengthen the canal embankments but also provide fodder for the livestock and wildlife as well as maintaining the ecology balance in the province<sup>482</sup>. Irrigation Department officials says that a large number of securities were posted to look after the banks and the trees in the past but at present, the securities are not working properly. As there is no check and balance to keep the previous system functional and the situation has worsened massively because of the timber mafia. In the past month, thousands of trees were chopped down along the banks of Nara Canal in district Khairpur and now the timber mafia has moved to Rohari canal in the Sanghar district. A resident of Shahdadpur, *Abdul Satar Khoso*, said that dozens of trucks, donkey-carts and trailers loaded with tree trunks were seen passing through his town<sup>483</sup>.

Pakistan is among those countries that have very high deforestation rates as stated above. For the country's economy and livelihoods the forests in Pakistan is of significant importance. But poor and unsustainable management of the forests, lack of law enforcement, poor institutional capacity of government departments, poor living conditions and lack of services for locals, unplanned development and other such reasons as underlying causes for the forest degradation in the country. On the other side there exists a large scale of illegal commercial exploitation of forests by the timber mafias<sup>484</sup>. In view of this there is an urgent need to eradicate these problems by enforcing strong legislative policies in Pakistan forest laws and there must be a strong penal procedure upon those policies.

### **Illegal Logging in Sri Lanka:**

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<sup>482</sup> Ibid

<sup>483</sup> Ibid.

<sup>484</sup> Timber mafia means and includes, a group of people e.g. local timber smugglers, local timber-traders, sawmill owners, owners of private forest land, forestry staff and local politicians engaged in illegal timber harvesting for commercial purposes.

Sri Lanka's development efforts since independence (1948) concentrated on harnessing its natural resources. However, since 1980 the relative share of natural resources in GDP has been pitifully low. The country's poor population is directly dependent on the natural resources especially the forest. Sri Lanka's industrialization suffers from directionlessness and is not able to contribute much towards poverty alleviation and rising unemployment. Decades of internal strife has caused havoc in Sri Lanka's economy and Sri Lanka now faces the daunting challenge of sustainable development and inclusive social progress which will enable it to participate in the globalization process<sup>485</sup>.

The forests in Sri Lanka have been removed to make way for agricultural land and plantations and to provide fuel and timber. The sale of timber is a part of the economic drive to raise cash flow. The country is a major producer of timber and the land required for tea plantations is substantial. Population pressure is also a significant factor as is the removal of forested areas to make way for irrigation networks which was a major process in the 1980s. In a predominantly agricultural country like Sri Lanka there is a strong link between growth and deforestation. In addition to demand for food, demand for fuel wood, construction wood and other wood based products are also increasing with population growth. The resource base that the supply of the forest products from various forest sources also declining remarkably. The remaining natural forests are faced with increasing pressures with increasing population<sup>486</sup>.

Aside from the environmental implications deforestation in Sri Lanka has caused much flooding, landslides and soil erosion from exposure of the deforested areas, it is also the primary threat to the survival of Sri Lanka's biodiversity. Sri Lanka contributes to the global wealth of genetic materials and biodiversity harboring important tropical rain forest. However, these have resulted in fragmentation of Sri Lanka's forests into patches. Sri Lanka has 751 known species of amphibians, birds, mammals and reptiles of which 21.7% are endemic, and over 3314 species of vascular plants, of which 26.9% are endemic<sup>487</sup>.

Before the 1970s the total requirement of timber was obtained from natural forests. Excessive harvesting of timber and clearing of forest for agricultural expansion has left a small portion of natural high canopy forest and even that in a dilapidated condition. Some of the forests are designated as protected forest and harvesting of timber from both protected and unprotected

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<sup>485</sup> . International Cooperation To Accelerate Sustainable development in Developing Countries and Related Domestic Policies, CP2002-SRI LANKA, [www.un.org/esa/agenda21/natlinfo/wssd/srilanka.pdf](http://www.un.org/esa/agenda21/natlinfo/wssd/srilanka.pdf).

<sup>486</sup> . Jeevaka Weerhewa and H. M. Gunatilake, Timber Market Liberalization in Sri Lanka: Implication of Forest Conservation, [www. Slageconr.net/sjae08101.pdf](http://www.Slageconr.net/sjae08101.pdf).

<sup>487</sup> Ibid.

forest has been banned in Sri Lanka. However, this ban resulted in substituting high quality timber with inferior quality home grown timber. Private lands are supplying timber requirement under very restrictive regulatory frame work. Such restrictions create an artificial climate of scarcity and shoots up the prices. Due to hassles in obtaining permits to sell timber private sector investment in timber tree cultivation has become minimal. Thus higher prices of timber and little supply of timber has encouraged illegal logging<sup>488</sup>.

One of the main threats to the sustainability of Sri Lanka's forests is government development policies in relation to the demand for timber and fuel and also the need to create plantations to raise revenue. Government policies are focused primarily on timber production and tree plantations. The Sri Lankan governments working in conjunction with multi-national institutions have seen a major change in timber harvesting in Sri Lanka for the cause of sustainable development. Commercial plantations have gradually been brought under management system in Sri Lanka to produce wood in an economically efficient and sustainable way. The harvesting, processing and the sale of wood products from state forests is conducted by the State Timber Corporation, which the Sri Lankan government owns.

In the 1980s the development progressed significantly with the Asian Development Bank (ADB) funding the Community Forestry Project (CFP) which concentrated on the development of fuel wood plantations and agro forestry in 5 of the 25 districts of Sri Lanka<sup>489</sup>.

While illegal logging is taking place, the heavy regulatory measures have led to emergent's of a privileged and an influential group of timber traders. Timber traders and government officers who are involved in issuing timber permits formed a cooperative cartel to get the advantage of the situation. Under this arrangement the traders who are in the cartel easily obtain timber permits while others find it extremely difficult to obtain timber permits. In return for the support given to the timber traders government officials get a share of the timber value for each permit issued. This system put the timber traders on a very strong bargaining platform for negotiating the price with the tree owners. Thus the existing heavy regulations operate as a disincentive to grow timber trees one hand and pushes up timber prices. The high price of timber coupled with its short supply works as an incentives illegal logging. Timbers available in privately owned forest lands fail to meet the market demand

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<sup>488</sup> Ibid.

<sup>489</sup> Ibid

and the strict regulation attached to its selling de-motivates the growers. Thus the heavy regulations have not been able to change the situation in Sri Lanka<sup>490</sup>.

Therefore by analyzing the above information we can conclude that in Sri Lanka illegal logging is very common in nature, where with the timber trader's involvement of forest officials is also indulging in illegal timber trade. Sri Lanka's environmental problem is linked to poverty and population. Regulations are required to be framed in a manner that gives incentives to sustainable development and ushers in inclusive growth.

## **SOUTH EAST ASIA**

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 resources.

Southeast Asia, a region containing some of the richest forests in the world, has experienced a trend of net loss of forest. Although it contains only 5% of the world's forests, the region has accounted for nearly 25% of the global forest loss over the past decade. Illegal logging is substantial in Southeast Asia, particularly in areas with high-value timber.

Although illegal logging is difficult to measure, estimates indicate that, for example, as much as 60–80% of the wood from Indonesia and up to 90% in Cambodia could be harvested illegally.

### **Illegal Logging in Indonesia:**

Illegal logging is an extensive, systematic problem in Indonesia. Approximately 73 to 88 percent of timber logged in Indonesia is illegally sourced<sup>491</sup>. Even forests with protected status, such as national parks, are in danger - according to the central government of Indonesia. Timber is illegally harvested from 37 of the 41 National parks<sup>492</sup> in the nation. In Indonesia illegal logging is a massive problem that has resulted in undermining the rule of

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<sup>490</sup> J. Senaviratne and H.M. Gunatilake, Can Regulation of Timber Trade Protect our Forest? An Unpublished Report, Department of National Planning, Colombo, Sri Lanka, 2001.

<sup>491</sup> Christian Nellman, The Last Stand of the Orang-utan – State of Emergency: Illegal Logging, Fire and Palm Oil in Indonesia's National Parks, Pages 16-20, <http://www.grida.no/files/publications/orangutan-full.pdf> on 23 August, 2013

<sup>492</sup> ILLEGAL LOGGING IN INDONESIA, The Environmental, Economic And Social Costs, p-3.

law and substantial revenues to the state. It encourages forest crimes, and has serious economic and social implications to the poor and disadvantaged. The threat to ecosystems and biodiversity is enormous with very little long-term advantages for anyone other than those who are responsible for the plunder and smuggling of timber from one country to the next<sup>493</sup>.

The illegal harvest and trade of timber involves a vast and unholy nexus between industry, global supply chains, and imperfectly regulated trade practices. Washington Post investigation in 2007 revealed that illegally felled wood from the forests of Indonesia, Burma, Russia, the Congo, and the Amazon are finding their way into homes and offices of unsuspecting U.S. and European consumers, thanks to the irresponsible practices of wood-processing plants in manufacturing countries like China. Both supply and demand-side companies contribute to unlawful, inequitable and destructive illegal logging practices. Consumer appetite for pulp, paper and furniture in developed nations like the United States, the European Union and Japan, coupled with growing demand in countries like China and India, have fuelled further exploitation of already depleted forests. Current models of globalization have encouraged the flourish of trade of products made in countries with poorly enforced labour and environmental standards. The true costs of production, including grave environmental repercussions, have not been accounted for. These market patterns are creating an unlevel playing field, resulting in economic losses and job dislocation in North America, where workers and companies are not able to compete.<sup>494</sup>

A report by EIA and Indonesian partners Telapak in Jakarta called The Final Cut, exposing the commercial logging of Tanjung Putting National Park in Central Kalimantan, Indonesia. Here it is found that the main timber species being exploited in the park for global markets is ramin (*Gonystylus* spp.) a tropical hardwood that grows in peat swamp and the lowland fresh water swamp forests in Borneo, Sumatra and Peninsula Malaysia. It is traded internationally

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<sup>493</sup> Faith Doherty, Illegal Logging in Indonesia, Environmental Investigation Agency, at [http://www.abc.net.au/4corners/content/2002/timber\\_mafia/viewpoints/viewpoints\\_doherty.htm](http://www.abc.net.au/4corners/content/2002/timber_mafia/viewpoints/viewpoints_doherty.htm), visited on date:21/08/13

<sup>494</sup> Aida Chan, ILLEGAL LOGGING IN INDONESIA, The Environmental, Economic and Social Costs, p-4-5, BlueGreen Alliance, April 2010 [www.bluegreenalliance.org/news/.../BGA-IndonesiaLogRpt-p7-Wells.pdf](http://www.bluegreenalliance.org/news/.../BGA-IndonesiaLogRpt-p7-Wells.pdf)...

for a range of products including interior mouldings, furniture components, picture frames, and dowels<sup>495</sup>.

The Final Cut and the EIA/Telapak campaign exposed names, gave evidence with footage and stills, and to this date continue to investigate and monitor not just the commercial logging of Tanjung Putting, but the illegal trade which allows this timber to be sold into international markets. By focusing on a single commercial tree species and the workings of the illegal logging and trade in this area has been revealed. From the gangs of illegal loggers controlled by middle men, to the politicians and military who profit directly from illegal activities, Tanjung Putting National Park has become a test case for the Government of Indonesia in how it is willing to combat illegal logging, and the trafficking of illegal timber for international consuming markets. Indonesia's timber that is stolen from the country's forests finds its way on to the international market either directly or through neighbouring states, especially Malaysia and Singapore where the timber is successfully laundered and sent onto the US, Europe, Japan, Taiwan and Mainland China marketplace.

After two years of further investigations by EIA/Telapak and local partner NGOs and a revealing insight into how these crimes were being committed, the Government of Indonesia acted and finally showed some political will to deal with the situation. In April 2001, a ministerial decree was issued to place a temporary moratorium on the cutting and trading of this threatened species. Following the decree the secretariat of the Convention on International Trade in Endangered Species (CITES) 2001 was notified that Indonesia was placing its ramin on Appendix III of CITES<sup>496</sup> with a zero quota. By doing this the GOI is asking for international support and is now placing some of the responsibility for ramin timber theft on importing countries. Consuming countries are now bound by their national CITES legislation to prevent imports of Indonesian ramin with the exception of Diamond Raya Timber, a company controversially certified in 2001. This is the only international legally binding instrument that the government of Indonesia could use to help start to protect its forest in Tanjung Putting. There are no other laws that exist that address the trade in illegally sourced timber and its consumption to this date.

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<sup>495</sup> Environmental Investigation Agency and Indonesian partners Telapak, Jakarta 1999, at. [http://www.abc.net.au/4corners/content/2002/timber\\_mafia/viewpoints/viewpoints\\_doherty.htm](http://www.abc.net.au/4corners/content/2002/timber_mafia/viewpoints/viewpoints_doherty.htm), visited on 22/08/13

<sup>496</sup> Of the Convention's three species lists, Appendix III is by far the least known, least used and most poorly understood. Appendix III, invites Parties that support the national efforts of countries that wish to prevent or restrict the exploitation of specific species occurring within their territory but that do not necessarily merit inclusion in the other Appendices.

In August 17th, 2001 the Malaysian CITES management authority notified the secretariat that they would be taking an exemption on the ramin listing for its parts and products. By doing this Malaysia is acting against the spirit of the treaty and undermining Indonesia's call for help to protect ramin. Malaysia does not need to make a reservation in order to continue to export ramin - as long as it has been legally cut within the country. In spite of this, the listing does not prevent Malaysia from exporting its ramin parts and products. Until this time there had been no real steps made in actively pursuing the timber barons both in Indonesia and neighboring countries who are involved in the running and supply of timber for syndicates with businesses that feed the consuming markets overseas. Although ramin had been placed on Appendix three the issue of enforcement and accountability within Indonesia was still being avoided<sup>497</sup>.

In the Forest Law Enforcement and Governance (FLEG), East Asia Ministerial Conference, September 2001, 150 participants from 20 countries were involved representing government, NGOs, and the private sector. Singapore and Malaysia did not attend. The result was an unprecedented commitment from Government ministers from around the East Asian region to take action in combating "Forest Crimes" that include illegal logging, the trafficking of illegal timber, parts and products, and the trade in illegal imports<sup>498</sup>.

Other consuming countries also attended including the USA, UK, Japan and China and agreed to the declaration. It was acknowledged and openly discussed that at the centre of this problem was corruption, which existed not just within governments but within the industry as well. Two months after FLEG, Indonesian forest law enforcers and the Indonesian Navy seized three cargo ships allegedly transporting illegal timber to international markets from Central Kalimantan in Indonesia to China. The ships were detained together with Captain and crew to the navy depot in Jakarta and were interned. While investigations continue it is estimated that the shipping companies are losing approximately US\$10,000 a day. The broker involved in providing the illegal timber has lost his commodity and the importer its goods. A

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<sup>497</sup> Faith Doherty, Illegal Logging in Indonesia, Environmental Investigation Agency, Page1  
[http://www.abc.net.au/4corners/content/2002/timber\\_mafia/viewpoints/viewpoints\\_doherty.htm](http://www.abc.net.au/4corners/content/2002/timber_mafia/viewpoints/viewpoints_doherty.htm), visited on  
date:21/08/13

<sup>498</sup> The Forest Law Enforcement and Governance (FLEG), East Asia Ministerial Conference, September 2001, Bali, Indonesia, at [http://www.abc.net.au/4corners/content/2002/timber\\_mafia/viewpoints/viewpoints\\_doherty.htm](http://www.abc.net.au/4corners/content/2002/timber_mafia/viewpoints/viewpoints_doherty.htm), visited on date:  
21/08/13

small but significant signal is being sent to shipping companies that Indonesia is now prepared to seize and hold timber that is being traded illegally<sup>499</sup>.

### **Illegal Logging in Malaysia:**

Malaysia has a land area of 329,800 km<sup>2</sup> divided into 3 regions; Peninsular Malaysia comprising of 11 States, and the States of Sabah and Sarawak on the island of Borneo. However, significant deforestation has occurred over the last century. Even so, by 2002, the total area of forests was estimated at 19.54 million hectares or 59.5% of the total land area. Of these, only 0.27 million hectares was plantation forest and the rest, 19.27 million hectares is natural forests. The forests are rich in species that are used in traditional medicine and as a source of pharmaceutical drugs, for ornamental purposes (orchids and palms), fruit trees, traditional technology (rattan and bamboo) and other minor forest produce<sup>500</sup>. Deforestation and forest degradation are the most significant factors impacting on the survival of species. Deforestation poses the most direct threat to biodiversity. This imposes a tremendous challenge to ensure that adequate distribution and types of habitat and biodiversity are given some form of protection from conversion, or are given the highest level of protection by designating areas as totally protected areas<sup>501</sup>.

Malaysia is among the most important remaining natural forests in the world and the world's largest supplier of tropical saw-logs, sawn-wood and veneer and the second largest supplier after Indonesia for tropical plywood<sup>502</sup>. Timber industry is the fourth largest income to Malaysia economy and has a contribution of 8% to total GDP. In this regards, Malaysia is fully committed to manage its natural forests sustainably in the overall context of sustainable development.

Even then uncontrolled illegal logging in Peninsular Malaysia became a concern in the early 1990s due to increasing demand for timber and timber products that are produced legally and from sustainably managed sources by the international market especially from environmentally sensitive markets such as European Union (EU) and the United States. Illegal logging in Peninsular Malaysia is not new problems and had repeatedly been occurring during the last few decades. The amount lost to illegal logging and corruption

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<sup>499</sup> Ibid

<sup>500</sup> Progress Report on the Study on: FOREST LAW ENFORCEMENT AND GOVERNANCE IN MALAYSIA IN THE CONTEXT OF SUSTAINABLE FOREST MANAGEMENT Prepared by: TRAFFIC INTERNATIONAL for the Government of Malaysia THIRTY-SIXTH SESSION 20-23 July 2004 Interlaken, Switzerland Distr. GENERAL30 June 2004 Original: ENGLISH

<sup>501</sup> Ibid

<sup>502</sup> Annual Report 1999, The International Tropical Timber Organisation (ITTO), TOP<Publications> SFM Tropics 2011> [www.itto.int/sfm\\_detail/id=3121](http://www.itto.int/sfm_detail/id=3121)

annually is about 5% of Malaysia total timber export. NGOs also claimed that forest practices in some parts of Malaysia are unsustainable and suffer from over-cutting timber harvesting and reported that Malaysia has 35% of illegal logging rate and 40% of Malaysia's consumption and export of timber was estimated to have been acquired illegally<sup>503</sup>. The Malaysian Government confirmed statement that level of illegal logging is less than 5% of all logging activities and most of the illegal logging occurred in the remote areas where low risk of detection by the forestry enforcement and at places where logs can quickly be converted to lumber<sup>504</sup>. Malaysian Government is confident that illegal logging in Malaysia is not as rampant as it is commonly perceived to be and all the procedures and measures are in place to combat illegal logging in Malaysia<sup>505</sup>. The declining of the cases is due to the strategies and counter measures that have been made by the Forestry Department Peninsular Malaysia. The Malaysian Government is very serious in combating illegal logging. In 1993, the National Forestry Act 1984 (NFA) was amended to introduce higher penalties and increased length of imprisonment for the forest offenders. Malaysia has outlined strategies to further strengthen procedures and measures to combat illegal logging such as strengthen forest law enforcement and monitoring, allocate more resources to undertake effective forest law enforcement and educating public and forest communities, and equipped with relevant and adequate knowledge and skills.<sup>506</sup>

Forest policy and legislation in Peninsular Malaysia is under the Article 74(2) of the Malaysian Constitution, land and forestry come under the jurisdiction of the respective State Governments. As such, each state is empowered to enact laws on forestry and to formulate forestry policy independently. The management of lands and forests are also defined by the constitution as state matters and forests are managed by the state forestry department. The federal government only provides technical advice and assistance on forest management, training, the conduct of research and in maintenance of experimental and demonstration stations. Total forested land in Malaysia is 5,807,383.53 hectare and the timber productions from 2005 to 2010 are 24,457,638 m<sup>3</sup> while total illegal timber productions within the same periods are 27,572 m<sup>3</sup>. On the other hand, the detection of illegal logging in the Permanent

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<sup>503</sup> Iqtie Qamar Laila Mohd Gani, Current Situation of illegal logging in Peninsular Malaysia, Greenpeace/WWF, 2004; EIA/Telapak, 2004)

<sup>504</sup> Nature Of Illegal Logging and Trade-Ministry of Primary Industries, [maxa.maf.govt.nz/.../2-nature-of-illegal-logging](http://maxa.maf.govt.nz/.../2-nature-of-illegal-logging)

<sup>505</sup> Iqtie Qamar Laila Mohd Gani, Current Situation of illegal logging in Peninsular Malaysia International Journal of Sciences <http://www.ijSciences.com>

<sup>506</sup> Progress Report on the Study on: FOREST LAW ENFORCEMENT AND GOVERNANCE IN MALAYSIA IN THE CONTEXT OF SUSTAINABLE FOREST MANAGEMENT Prepared by: TRAFFIC INTERNATIONAL for the Government of Malaysia THIRTY-SIXTH SESSION 20-23 July 2004 Interlaken, Switzerland Distr. GENERAL 30 June 2004 Original: ENGLISH

Reserved Forests (PRFs) and the government land from 2006 until 2011 are 222 cases. This value can be considered as the current illegal logging cases in Peninsular Malaysia<sup>507</sup>. Permanent reserved forests (PRF) are very exposed for illegal logging with 158 cases as compare to government lands. This is because lands that were established as PRF are more than government land and the forest areas licensed for harvesting are more on PRF than government land. The most important policy related legislation in terms of forest law and enforcement is the National Forest Policy, 1978 (NFP). NFP was formulated and implemented by all states in Peninsula Malaysia and has remained the basis for forestry practices. The NFP forms the basis for the classification of roles and hence the use and management of the forest although only the states in Peninsular Malaysia subscribe to the NFP. The critical concept in the NFP is the constitution of a Permanent Reserved Forest (PRF) which must be determined by the states and its security assured. Under the forestry laws, the PRF is classified into categories depending on the degree of protection and use<sup>508</sup>. These forests are under jurisdiction of the Forest Departments, while other protected areas such as national parks and wildlife sanctuaries are managed by other agencies such as Wildlife Department and National Parks Department at either state or federal levels. The protection forests within the PRF under the jurisdiction of the Forestry Departments, which are given protection status and where commercial logging is prohibited and are also part of the protected areas of the country<sup>509</sup>

Under forestry laws, the PRF is classified into categories depending on the degree of protection and use<sup>510</sup>. These forests are under jurisdiction of the Forest Departments, while other protected areas such as national parks and wildlife sanctuaries are managed by other agencies such as Wildlife Department and National Parks Department at either state or federal levels. The protection forests within the PRF under the jurisdiction of the Forestry Departments, which are given protection status and where commercial logging is prohibited and are also part of the protected areas of the country<sup>511</sup>.

In terms of implementation, the National Forestry Act (NFA) 1984 was formulated and endorsed to further uniform and strengthened in areas of forest management planning and operations as well as strengthen the provisions for safeguarding and protecting forest resources from encroachment and illegal logging. The NFA 1984 then was amended in 1993

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<sup>507</sup> Ibid

<sup>508</sup> (NFP, 1992)

<sup>509</sup> Ibid

<sup>510</sup> Ibid

<sup>511</sup> Ibid

to provide stiffer penalties for forest offenders. The amended act gave huge impact to the forestry sector in Peninsular Malaysia especially in the issue of illegal logging<sup>512</sup>. All these acts are also supplemented by the Wood-Based Industries Act 1984 which regulates to ensure the rational development of wood-based industries in the country. The other related regulation that affects forestry for Peninsular Malaysia include the Land Conservation Act 1960, National Parks Act 1980, Protection of Wildlife Act 1972, Aboriginal Peoples Act 1954, Forest Rules 1985, Environmental Quality Act 1974, National Land Code 1965 and Occupational Safety and Health Act 1994. These acts are currently being adopted by all states in Peninsular Malaysia<sup>513</sup>.

Illegal logging is a crime that is almost impossible to stop or eliminate it. The illegal log productions came from 222 cases of illegal logging from 2005 to 2010. Therefore, it can be concluded that currently, the situation of illegal logging in Peninsular Malaysia is under control but some effective long-term strategies should be prepared to curb this problem as the trends are increasing.

Under the current situation of illegal logging in Peninsular Malaysia and the department should consider this study as a preliminary to prepare for better action in controlling illegal logging. The strategies that have been implemented include allocating more forest resources to undertake effective forest law enforcement, amended NFA 1984 to introduce higher penalty and imprisonment, increased capacity building and human resources in the enforcement division and equipped them with modern detecting technology such as GPS, remote sensing, hyper spectral imaging and electronic tracking are expected to yield result.

In conclusion, illegal logging should be treated from its root as it involves a large amount of money that drives the forest offenders to commit to this crime. Furthermore, the problem also caused the government loss in revenue and income in forestry sector that will restrict other development. The most important strategies in dealing with illegal logging are, the department should give more attention to strengthen the forest policy and enforcement division. The enforcement should carry frequent monitoring, detecting and checking for the illegal logs and logging. They also should be given some credits as recognition and appreciation that showed outstanding performance, values and moral. Indirectly, it will prevent corruptions among the enforcers especially who dealing with the loggers instead of

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<sup>512</sup> <sup>512</sup> Progress Report on the Study on: FOREST LAW ENFORCEMENT AND GOVERNANCE IN MALAYSIA IN THE CONTEXT OF SUSTAINABLE FOREST MANAGEMENT Prepared by: TRAFFIC INTERNATIONAL for the Government of Malaysia THIRTY-SIXTH SESSION 20-23 July 2004 Interlaken, Switzerland Distr. GENERAL30 June 2004 Original: ENGLISH

<sup>513</sup> Ibid

improve systems and procedures for better transparency. More studies should be done with regard to illegal logging and corruption in Malaysia and the role of stakeholders in preventing illegal logging if necessary.

### **Illegal Logging in Myanmar:**

A news report by Jeffry York in a newspaper reads “Myanmar mired in a deforestation crisis”<sup>514</sup> reads that the border crossing between China and Myanmar tells the story of illegal timber trade. On the Chinese side there were rolling hills of green forest and on the Myanmar side denuded hills where the forest is crudely cut. The border town of Pangsang is crowded with big Chinese trucks load with piles of pine logs and rough hewn lumber from Myanmar. The trucks are headed north to china where the booming economy has created a voracious appetite for the virgin forest of the neighboring countries. As the extraordinary economic boom gains momentum, China is now the world’s fastest growing market for tropical timber. Its forest products imports sawed by 75% in 2003 reaching 112 billion US dollars and its wood based industries has expanded by 40% in 2003. In an effort to protect its endangered forest, China imposes a nationwide ban on logging since the year 1998. But the fact is that China has merely transported this problem on the shoulder of its neighboring countries. In south and south East Asia the Chinese demand has created a search in excessive illegal logging leading to the destruction of swathes of pristine old growth forest. Myanmar suffers the heaviest damage to its old growth forest, those forests which covered 60% of the country as recently as 1960, now covers less than 30% and the percentage is falling fast. Until recently, Myanmar was one of the most thickly forested countries in the world. Its vast ancient forests were among the richest and most diverse in the world. It still contains more than 80% of the worlds teak trees along with many other rare hardwoods.

But when economic sanctions were imposed on Myanmar’s military dictatorship in the 1990s, the regime responded with a dramatic increase in logging concessions and timber exports to bolster its revenue and maintain its power. Today Myanmar has world’s highest rate of deforestation<sup>515</sup>.

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<sup>514</sup> Today's Paper International, Thursday, May 13, 2004, p. A 16, [http://www.globeandmail.com/serblet/ArticleNews/TPStory/LAC/20040513/MYANMAR13/international/idx\(1of3\)](http://www.globeandmail.com/serblet/ArticleNews/TPStory/LAC/20040513/MYANMAR13/international/idx(1of3)).

<sup>515</sup> Ibid.

More than 9% of Myanmar's legal foreign income comes from logging. But the actual amount of timber revenue is believed to be twice the official figure with huge amount of logging<sup>516</sup> trade being illegal or unrecorded.

Western analysts in Myanmar say the timber trade is continuing to expand. Satellite photo shows that one of the last old growth forests in North-Eastern Myanmar is swarming with illegal loggers. In the Wa region of the North-Eastern Myanmar, authorities concede that more than 80% of forest are clear cut by Chinese loggers. Wa officials claim that they imposed a ban on timber sales. Yet a visit to Wa towns such as Pangsang and Mongpawk reveals the trade is still booming, with big piles of lumber, many sawmills, and dozens of Chinese logging trucks on the streets. The trucks are driven by Chinese migrant laborers who say that the business is so strong. At the time of publishing the present report more than 20,000 Chinese labors were working in these regions<sup>517</sup>. According Myanmar Forestry Ministry logging concessions to the Wa and other regional authorities was still being given in spite of imposition of ban on logging. The problem is compounded by heavy involvement of Myanmar's drug lords and military authorities in the timber business. Drug traffickers have often invested in logging companies as a means of laundering their money and the military regime has awarded valuable logging concessions to logging business in exchange for support from business and political community<sup>518</sup>.

Myanmar's timber can be generally categorized as coming from five possible sources, each with their own associated with geography and actors. To date the sourcing of Myanmar timber – particularly the world famous Burmese teak- has focused on just one source. The government managed teak forests is located in the central planes. Myanmar's ministry of Environmental Conservation and forestry and the state backed Myanmar Timber Merchant Association have been reaching out to western governments and the timber companies that this timber is or could be with relatively small implementation improvements legal and backed by satisfactory due diligence process.

Different actors are involved in timber trade flow with their political financial backing:

- Myanmar's Timber Merchants Association (MTMA)

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<sup>516</sup> . In this research the words timber, logging, lumber, etc are used to mean the same thing. The word wood is used in a wider meaning which includes all of these and also the finished products and the incidental products.

<sup>517</sup> Today's Paper International, Thursday, May 13, 2004, p. A 16, [http://www.globeandmail.com/serblet/ArticleNews/TPStory/LAC/20040513/MYANMAR13/international/idx\(1of3\)](http://www.globeandmail.com/serblet/ArticleNews/TPStory/LAC/20040513/MYANMAR13/international/idx(1of3)).

<sup>518</sup> Ibid

- A state backed Private Timber Business Association
- Large influential domestic conglomerates.
- Global Timbers Exporting via Yangon typically based in Asian financial hubs.
- Cross Border Timber Traders, from Myanmar, China and Thailand.
- Yangon based domestic timber traders and processors.

All wood is considered legal if it has the stamp of the state own Myanmar timber enterprise under the Ministry of Environmental Conservation and forests and its exported Yangon sea ports. In recent years the government has made significant attempt to prevent the timber revenue from reaching the non ethnic armed groups in border regions but timber is still being smuggled across the Chinese and Thai borders especially from logging concessions in natural forests and ethnic areas which is illegal both in Myanmar, Thailand<sup>519</sup> and China<sup>520</sup> who have made respective declarations against over land wood trade from Myanmar<sup>521</sup>.

Legality of Myanmar forest products is not correlated to sustainability or environmental impact. Community forests which have the highest potential to be a sustainable forest cannot yet legally export timber and very little timber from tree plantations is on the market yet. The highest volumes of timber are being sourced from the least sustainable harvesting practices. This raises serious concern for the exclusive use of legality as a measure of good forest governance and timber regulation. It is a well known fact that the military and government allocate logging concessions to Burmese influential and friendly companies in the disappearing frontiers of the forest in the country.

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<sup>519</sup>. Under current Thai Regulations relating to the import and domestic transport of timber, In order for Thailand to legally import Myanmar Timber, Wood must be shift by sea via Yangon with proper Myanmar government permits. The Thai government can apparently give special exemptions for Myanmar log imports across the shared land border, but this has occurred in frequently in the last decade. Processed wood, especially teak furniture, can be legally imported across the Thailand border with the correct paper work to verify that it has been sourced and processed in Myanmar. In practice however smaller quantities of unprocessed logs cross over land without Thai government's approval. Kevin Wood, developing disparity: Regional investment in Burma's border land, Kevin Wood and K. Canby, base land study for Myanmar: Overview of Forest Law Enforcement, Governance and trade, Forest Trends and European Forestry Institute (EFI).

<sup>520</sup>. Interim Measures to Manage Timber and Mineral Cooperation between Myanmar and Yunnan Province, Issued by Office of Yunnan Provincial Peoples Government on 11<sup>th</sup> May 2006. Policy reference number, Policy office, Yunnan [2006] 91.

<sup>521</sup> Kevin Woods, Timber trade flows and actors in Myanmar: The Political Economy of Myanmar's Timber Trade, November 2013, Forest Trends, UK aids.

According to official trade statistics from recipient countries, India now represents the largest market for Myanmar timber by volume and value. The International Tropical Timber Organization (ITTO) Monthly Information Services reports<sup>522</sup> that 80% of all teak and hard wood ocean shipments from Myanmar go to India. Thailand and especially China now import declining volumes of Myanmar timber by sea according to official statistics. This does not taking to account, however, unofficial timber trade across Myanmar's National Border with China, Thailand, and India<sup>523</sup>.

Although the official trade data does not show any significant exports of Myanmar timber to Malaysia, numerous interviews with Myanmar and Thai traders as well as ex-officials report that Malaysia serves as a major hub of trade of Myanmar timber<sup>524</sup>. A substantial amount of Myanmar natural timber, especially teak, is being imported by Thailand and perhaps other countries, particularly via Malaysia and may even be relabeled as Malaysian timber. The Myanmar Malaysian timber trade has not been studied in any detail and remains a large gap in understanding regional timber trade<sup>525</sup>.

### **Illegal Logging in China:**

Illegal timber harvesting is unsustainable and takes place around the world and in virtually every country that engages in forest harvesting. However, while the extent of these activities may be quite limited or negligible in some countries, in others they can lead to significant forest depletion, and subsequent biological and economic losses.

China's wood products industry has become reliant on imports of logs to fuel its growth. Its rise as the predominant wood manufacturing centre in the world raises an interesting question regarding the role of illegal logging has had in developing the sector in China and how policies that might limit the level of illegal logging activity may affect its future development<sup>526</sup>. A new report from Greenpeace, "Sharing the blame", reveals the role of China in "laundering" illegally logged timber, particularly from the "Protected/reserved Forests" of south-eastern Asia, Indonesia, and New Guinea. "The Greenpeace report highlights an extremely important challenge for the region. While estimates of the magnitude

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<sup>522</sup>. International Tropical Timber Organization (ITTO), Tropical Timber Market Report, Market Information Service, vol.16, No.14, July 16 to 31, 2011.

<sup>523</sup>. Ibid.

<sup>524</sup> Kachin Network Group (KNG), "Maj-Gen ohn Myint bans gold mining, Logging in Kachin, 17 July 2007.

<sup>525</sup>. Kevin Wood and K. Canby, base land study for Myanmar: Overview of Forest Law Enforcement, Governance and trade, Forest Trends and European Forestry Institute (EFI).

<sup>526</sup>. Alicia S.T. Robbins and John Perez-Garcia, Impacts of Illegal Logging Restrictions on China's Forest Products Trade, School of Environmental and Forest Sciences, University of Washington

of the illegal logging trade may vary, for some countries it may exceed that of legally harvested timber<sup>527</sup>.

China plays a special role in importing the world's timber, with an estimated one out of every two tropical trees exported globally destined for China", But China is not alone, many of its imported wood is re-exported to Europe and North America, in the form of processed merchandise<sup>528</sup>. Chinese timber traders in collusion with local forest officials are increasing their illicit activities taking advantage of the unsettled political situation in Northern Myanmar; the locals living in Myanmar-China border area said that: *"We have witnessed the unpleasant scene of several piles of logs prevalent in Shweli (Ruili in China). There seems no more space left there for more woods. We wonder if there is any more wood left in Myanmar. About 270 to 300 trucks carrying illegal woods [from Myanmar] are arriving there. The trucks are usually with 12 wheels to 22 wheels. Myanmar should speak out by now, I feel they are cutting away our flesh"*<sup>529</sup>

Chinese illegal logging became worse since June 2011, when a war has occurred between the government's army and ethnic armed group Kachin Independence Army in Kachin State in China and on that situation of war Chinese timber traffickers exploit the situation well in which all the attentions of both Myanmar authorities and ethnic rebels are absorbed in the warfare. They make use of the situation where there is lacking rule of law. They bribe the local officials and tend to gain more privileges than the citizens. They cut the trees with their own machines and load the logs into the trucks. They first started illegal logging in Momeik area of Kachin [in northern Myanmar] then they reached Mandalay and Sagaing Divisions [in central Myanmar]. They do these illegal things in broad daylight. The logs were as big as their 22-wheeled trucks can carry 6 of them only. Every day the trucks carrying logs along the road towards Shweli in China-Myanmar border. China strictly regulates illegal logging in their country, but it does not control wood<sup>530</sup> smuggling from Myanmar. The Chinese Customs charge 1200Yuan for each tonne of wood to the smugglers, but the amount does not affect their profits as they do not need to pay at Myanmar side<sup>531</sup>.

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<sup>527</sup> Kathryn Senior, China in trouble over illegal timber, *Frontiers in Ecology and the Environment*, Vol. 4,(May, 2006), p. 176, Ecological Society of America, <http://www.jstor.org>.

<sup>528</sup> . Ibid

<sup>529</sup> Chinese illegal logging, smuggling worsen in Myanmar, <http://www.asianewsnet.net>, Publication Date: 03-05-2013, visited on 27 August 2013.

<sup>530</sup> Refer Footnote No.5

<sup>531</sup> Chinese illegal logging, smuggling worsen in Myanmar, <http://www.asianewsnet.net>, Publication Date: 03-05-2013, visited on 27 August 2013.

According to a new report by the Environmental Investigation Agency (EIA), China has become the number one importer of illegal wood products from around the world. Illegal logging which threatens biodiversity, emits carbon, pauperizes local communities, and is often coupled with other crimes has come under heavy pressure in recent years from the U.S., the EU, and Australia. Each of these has implemented, or will soon implement, new laws that make importing and selling illegal wood products domestic crimes. However, China's unwillingness to tackle its vast appetite for illegal timber means the trade continues to decimate forests worldwide. China is now the biggest importer, exporter, and consumer of illegal timber in the world. EIA (Environmental Investigation Agency) report estimates that in 2011 China imported at least 18.5 million cubic meters of illegal logs and sawn timber, worth around \$3.7 billion. Taken together, this amount would fill nearly a million standard 20-foot shipping containers. Even this does not tell the full story, as the new report did not analyze other wood products imports, which make up 55 percent of China's total trade in wood<sup>532</sup>.

More than half of China's current supplies of raw timber material are sourced from countries with a high risk of illegal logging and poor forest governance, the Environmental Investigation Agency report warns, noting that once China exhausts forests in one country, it moves onto another. Ironically, even as China has increasingly depended on raw logs and timber from abroad, it has undertaken staggering efforts to grow and protect forests at home. In the last two decades, China's forest cover has grown by 30 percent, while forest cover worldwide continues to fall. Since the late 1990s the country has taken strong measures to protect and grow its own forests at the same time it has built a vast wood based industry. In the past the bulk of illegal logs entering in China would be fashioned into products and shipped abroad, but today the illicit trade has moved more and more toward meeting increased domestic demand for woods. The vast construction effort in China, coupled with increasing wealth, is creating a surge in domestic demand for timber products," states the report. A glowing example is the fashion for reproduction of furniture made from rare rosewoods, which has created an increase in illegal logging from the Mekong region to Madagascar. Loggers targeted the highly-valuable rosewood, despite a ban on cutting the increasingly rare species. EIA investigations found that 95% of the rosewood was at the behest of Chinese traders. Despite such high-profile devastation, the report finds that the Chinese government "has done virtually nothing to curb illegal imports," and has largely

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<sup>532</sup> Jeremy Hance, Exporting deforestation: China is the kingpin of illegal logging, publish on November 29, 2012, <http://news.mongabay.com>.

encouraged it by "putting in place policies to ensure supply from some of the worst illegal logging hotspots in the world. Illegal logging, which is often run by large international mafias, occurs in tandem with other crimes, such as drugs and human trafficking. In some countries, activists and journalists who speak out against illegal logging are met with threats, violence, and even murder. IN 2009 a forest activist, Chut Wutty, was killed while investigating illegal logging in Cambodia; months later a journalist covering illegal logging, also in Cambodia, was found dead in the trunk of his car likely due to axe wound to the head<sup>533</sup>.

In this chapter it clearly emerges that countries of the South-Asia and South-East Asia are, in various degrees, victims of illegal logging. There is an illegal logging rout that runs from Indonesia through Thailand, Malaysia, and Myanmar, borders of India and Bhutan reaches China. In China the timber is laundered of its illegality and sent to various developed countries for their consumption. This rout is known to all, yet administrative and executive measures have failed to control and contain illegal logging and trading.

It is hard to believe that the issue of illegality has not been openly addressed until now. With the commitments made by the governments of the South-Asia and South-East Asia region the timber industry must also participate in ensuring the resources they are involved in buying and selling, come from legal sources. There is an urgent need for imposing international sanction against countries who fail to ban trade in illegal timber trading and prohibiting the import and sale of illegally sourced timber and products by making necessary laws in this regard. The International Instruments which express concern for environmental degradation and advocate sustainability in environment do not address the issue of illegal timber trade; they also do not speak of imposing sanction against the countries that fail to control illegal timber trade. Illegal timber trades also do not figure as a nontariff barrier to international trade. The laundering of illegal timber is in itself a massive commerce benefiting only those who control the syndicates and cartels. The criminal elements within the trade must be confronted. Governments need to develop new procurement policies that demonstrate timber and wood products have come from legal sources. Industry needs to adopt transparent chain of custody processes which allows timber tracking from source to market. Producing countries need to formalize a system of cross border cooperation between national

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<sup>533</sup> Ibid

enforcement authorities, and to enact legislation allowing the confiscation of illegal timber and those dealing in it outside the country of origin.

The World Bank estimates that up to 10 billion US dollars per annum of the global market in timber is lost through illegal trade.<sup>534</sup> The European Union is one of the major consumers of illegally sourced timber and wood products and is estimated to be responsible for about a loss of 3 billion euro's per annum of revenue<sup>535</sup>. This crime costs the developing countries a loss of 10.7 billion euro's per annum. Illegal logging funds armed conflicts and helps to fuel violence against those dependent on the forest. It creates conflict within the communities and is a tool by which those who seek power obtain great wealth. Undermining the rule of law, corruption and the ruin of any possible sustainable development are also symptoms of illegal logging<sup>536</sup>.

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<sup>534</sup> . [www.worldbank.org:Forest](http://www.worldbank.org:Forest) and Forestry.

<sup>535</sup> . Failing the Forests, Europes Illegal Timber Trade Report, 6bis7bis8WWF.

<sup>536</sup> . Faith Doherty, Illegal Logging and The Illegal Trade In Timber and Wood Products-Fueling Conflict, [eeas.eurpoa.eu/ifs/publications/articles/bookto/book%20vol2\\_part3\\_chapter](http://eeas.eurpoa.eu/ifs/publications/articles/bookto/book%20vol2_part3_chapter)

**CHAPTER: 6**

**EMPIRICAL STUDY RELATED TO TIMBER TRADE IN  
KERALA, WEST- BENGAL, ASSAM, MIZORAM AND  
TRIPURA**

**THE FRAME**

This chapter is based on empirical work. Although the focus of the theses is on the State of Tripura, but in order to draw a comparison and to understand the modalities of implementation of laws relating to timber trade in respective States, the researcher has done a comparative field study in States of Kerala, West-Bengal, Assam, and Mizoram also. It must be recalled that in addition to the central legislation, under the Constitution each State can formulate their own laws with respect to forest maintenance and management. This comparative study of the modalities of forest management and maintenance actually helped the researcher to understand the situation in the State of Tripura. The five States were chosen as they shared a similar forest type called the Tropical Moist Deciduous Forest and enjoyed cultural similarity.

**THE FOCUS**

This chapter focuses on the implementation of the laws relating to timber trade at the ground level in five states of India.

## **THE OBJECTIVE**

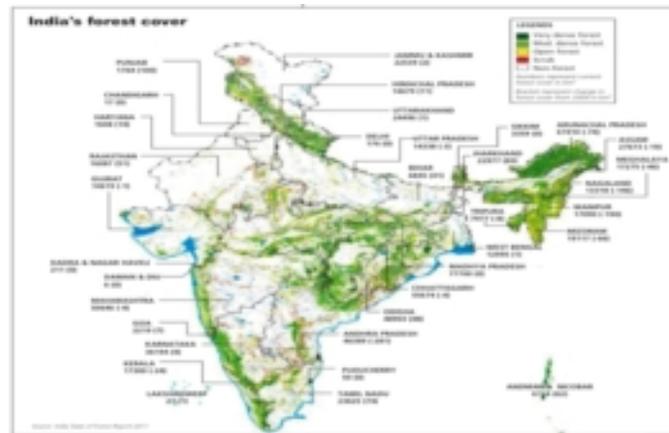
The objective of this chapter is to study the implementation of laws in the above mentioned states in addition to the central laws. It may be recalled that matters relating to forest and forest produce figures in item no.17A, 33(a) in List III [Concurrent List] & Item 18, 27, 45 of List II [State List] 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 apprehended a certain degree of fear and resistance from the respondents. This apprehension proved to be true at the operational level. In order to reassure them each respondent had been given 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 the public under any circumstances. The researcher further gave a copy of the filled in questioner to the respondents 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 he approached the respondents to obtain authentic responses free from fear etc.

## **INDIA'S FOREST COVER: GENERAL OBSERVATIONS**

India was once covered by dense forest but now the state of India's forest is fast declining. As of 2002, the Food and Agriculture Organization of the United Nations estimates shows India's forest cover to be about 64 million hectares, or 19.5% of the country's total geographic area should desirably be at least 33%. In terms of availability of forest land per person in India, the rate is one of the lowest in the world at 0.08 hectares, against an average of 0.5 hectares for developing countries and 0.64 hectares for the world. Forest degradation is

a matter of serious concern. India's wood-based and wood processing industries consumed about 30 million cubic meters of industrial wood in 2002<sup>537</sup>. An additional 270 million cubic meters of small timber and fuel-wood was consumed in India during the same period. An important cause for excessive wood use is its relatively low price because of subsidies on wood raw materials and free fuel-wood supply. India produces a range of processed forest (wood and non-wood) products ranging from wood panel products and wood pulp to make bronze, and resin. India's paper industry produces over 3,000 metric tons of paper annually from more than 400 mills<sup>538</sup>. The furniture and craft industry is another consumer of wood. A 1999 publication claimed that protected forest areas in several parts of India, such as Jammu and Kashmir, Himachal Pradesh, Karnataka and Jharkhand, were vulnerable to illegal logging by timber mafias like Veerappan that have co-opted or intimidated forestry officials, local politicians, businesses and citizenry. Clear-cutting is sometimes covered-up by conniving officials who report fictitious forest fires.<sup>539</sup>



Map No. 1. Showing forest cover of India

## FOREST TYPES IN INDIA

The forest type chosen for the field work was **Tropical Moist Deciduous** Forest. The five States chosen for study were selected due to this reason and the fact that they enjoyed a cultural similarity and also because these five States were accessible to the researcher.

<sup>537</sup> "Forests and the forestry sector: India", Food and Agriculture Organisation of the United Nations, 2002

<sup>538</sup> Ibid

<sup>539</sup> Ajay Singh Rawat, "Forest Management in Kumaon Himalaya: Struggle of the Marginalised People", Indus Publishing, 1999, [ISBN 81-7387-101-9](#). ... *within 5 years in the Western Circle, 13 forest officials have been murdered and 39 fatally wounded in their bid to prevent illicit timber trade ... Politicians are wary of getting on the wrong side of the timber mafia, who have proved to be extremely generous during election time ...* see also H.C. Upadhyay, "Status of Scheduled Tribes in India", Anmol Publications Private Limited, 2004, [ISBN 81-261-0367-1](#). ... *The timber mafia in collusion with concerned forest officials are reported to resort to the so-called accidental forest fire to hide their illegal plundering ...*

S.NO.	FOREST TYPE	AREA IN Sq.Km	%	OCCURRENCE
1	Tropical Wet Evergreen Forest	51,249	8.0	Arunachal Pradesh, Assam, Karnataka, Kerala, Manipur, Nagaland, Tamil-Nadu, Andaman & Nicobar Islands, and Goa
2	Tropical West Semi-Evergreen Forest	26,424	4.1	Assam, Karnataka, Kerala, Nagaland, Tamil- Nadu, Orissa, Gujarat, Maharashtra, Andaman & Nicobar Islands, and Goa
3	Tropical Moist Deciduous Forest	236,794	37.0	<b>Assam</b> , Andhra Pradesh, <b>Mizoram, Tripura</b> , Meghalaya, Madhya Pradesh, Karnataka, <b>Kerala</b> , Nagaland, Tamil-Nadu, Orissa, Gujarat, Maharashtra, <b>West Bengal</b> , Bihar, Uttar Pradesh, Andaman & Nicobar Islands, Goa, and Dadra and Nagar Haveli
4	Littoral & Swamp Forest	4,046	0.6	Andhra Pradesh, Gujarat, Maharashtra, Tamil- Nadu, Orissa, West Bengal and Andaman & Nicobar Islands
5	Tropical Dry Deciduous Forest	186,620	28.6	Andhra Pradesh, Gujarat, Maharashtra, Bihar, Himachal Pradesh, Haryana, Rajasthan, Jammu

				& Kashmir, Punjab, Tamil-Nadu, Orissa, West Bengal, Kerala, Uttar Pradesh, Karnataka, Madhya Pradesh
<b>6</b>	Tropical Thorn Forest	16,491	2.6	Andhra Pradesh, Gujarat, Maharashtra, Himachal Pradesh, Haryana, Uttar Pradesh, Tamil Nadu, Rajasthan, Madhya Pradesh, Karnataka, and Punjab
<b>7</b>	Tropical Dry Evergreen Forest	1,404	0.2	Andhra Pradesh & Tamil Nadu
<b>8</b>	Sub-Tropical Broad Leaved Forest	2,781	0.4	Tamil Nadu, Assam, Meghalaya, West Bengal, Maharashtra and Kerala
<b>9</b>	Sub-Tropical Pine Forest	42,377	6.6	Arunachal Pradesh, Sikkim, Nagaland, Meghalaya, Uttar Pradesh, Jammu & Kashmir, Manipur and Himachal Pradesh
<b>10</b>	Sub-Tropical Dry Evergreen Forest	12,538	2.5	Himachal Pradesh, Jammu & Kashmir, Mizoram
<b>11</b>	Montane Wet Temperate Forest	23,365	3.6	Arunachal Pradesh, Karnataka, Manipur, Nagaland, Tamil- Nadu, Sikkim
<b>12</b>	Himalayan Moist Temperate Forest	22,012	3.4	Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh
<b>13</b>	Himalayan Dry Temperate Forest	312		Jammu & Kashmir, Himachal Pradesh,
<b>14</b>	Sub-Alpine and Alpine	18,628	2.9	Jammu & Kashmir, Uttar

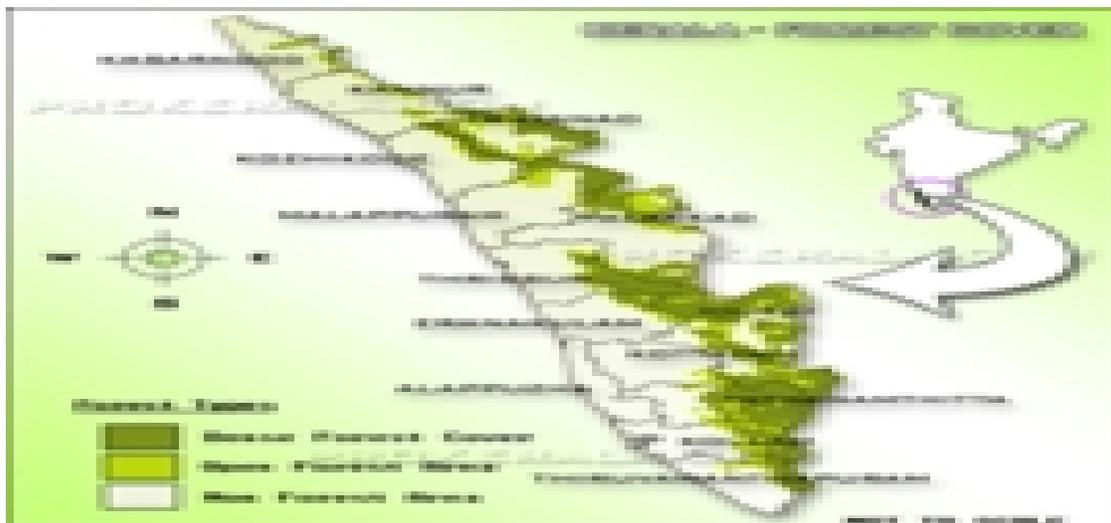
	Forest			Pradesh, Sikkim, Nagaland and Arunachal Pradesh
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**Table No. 1: Showing the forest types and area in India**

## **REPORT OF THE FIELD SURVEY**

### **❖ KERALA STATE**

The researcher visited Kerala in January 2013 and visited the Districts namely, Palakkad, Thrissur, and kottayam and Thiruvananthapuram. The reason for choosing Kerala for the purpose of study was that Kerala enjoys the similar climate and vegetation like that of Tripura and only Kerala and Karnataka in the Western Ghats has the similarity with Tripura. In order to get a similar ambiance with that of Tripura the state of Kerala was chosen for the purpose of the study where the researcher for the field survey took the interview of some forest officials and some of the timber traders. Besides the forest officials and the timber traders in Kerala, Senior Advocate A. P. Chandrasekharan, an expert on Forest Laws and Counsel In Godavarman Tirumulkpad Case and Dr. Easa who is a Senior Scientist of Kerala Forest Research Institute in Peechi, Thrissur have also been interviewed in this regard.



**Map No. 2. Showing location of Kerala (Inset) & forest distribution in Kerala**

Kerala is a small state which represents just 1.18 percent of the land mass (38863 Km<sup>2</sup>) of India and is called “Gods own country” and “spice garden of India”. It is a very beautiful state with excellent landscape, sparkling oceans, lovely beaches, thick jungles, plantations, hills and enthralling rivers and lakes. Kerala has a dual characteristic of being agriculturally and industrially advanced. This provides a better quality of life to the people. Kerala because of its uniqueness attracts both National and International attention.

Kerala has roughly 30% (29.81) of its land mass under forest canopy. There are 41 west flowing rivers and 3 east flowing rivers in this small state. The highest mountain pick is called Anamudi is about 2694 meters high. The forest in Kerala is graded as reserve forest (9107.2066 Km<sup>2</sup>), Proposed Reserve Forest (364.4731 Km<sup>2</sup>), Vested Forest and Ecologically Fragile Lands (1837.7957 Km<sup>2</sup>). There are five National Parks, seventeen Wild Life sanctuaries, two Biosphere Reserves and one Community Reserve. Idukki district has the highest reserved forest area and Alappuzha has no reserve forest.

The empirical study in Kerala was undertaken in four parts as mentioned below:

- A. Interview with the forest officials in Kerala.
- B. Interview with the timber traders in Kerala.
- C. Interview with Advocate A.P. Chandrasekharan an expert on Forest Laws and Counsel in Godavarman Tirumulkpad Case in Kerala.
- D. Interview with Dr. Easa a senior Scientist of Kerala Forest Research Institute in Peechi, Thrissur (Kerala).

The researcher interviewed Chief Conservator of Forest (CCF) & Custodian of Vested Forest of Eastern Circle Olavakkode in Dist- Palakkad, Chief Conservator of Forest (CCF) of Central Circle Thrissur and Deputy Conservator of Forest in the Central Circle of Thrissur in Kerala.

There are five forest circles in the state. Each circle has minimum of one and half districts and a maximum of four and half districts. The circles are divided into North, South, Central, East and High Range. The distributions of districts are as follows:

North	South	Central	East	High Range
Kannur	Alapuzha	Ernakulam (part)	Kozhikode (part)	Ernakulam (part)
Kasargod	Kollam	Thrissur	Palakkad	Idukki
Kozhikode (part)	Pathanamthitta			Kottayam
Wayanad	Tiruvananthapuram			

**Table No.2. Showing the circle wise distribution of districts**

The researcher found that Kerala meticulously adheres to the working plan that comes from the centre for thinning management and is highly systematic in executing the thinning plan. The corruption level is very low here and the transparency level is very high. There are separate wings for working plan and research and 24 working plan divisions are there. All the management plans in Kerala are under this wing. Illegal felling in Kerala is almost nonexistent. Keralites do not find illegal felling to be profitable. A high risk factor is associated with illegal felling. The reason behind this that the youth in Kerala are highly ambitious and they do not want to jeopardize their career ambitions. Moreover the minimum wage rates in Kerala are very high compared to other States is about Rs. 500/- per day for unskilled workers, the minimum wage for the skilled workers is still higher. There is a high rate of land holding in the State. The climate remains almost the same throughout the State so the expenditure on climate suitable clothes, food and illness is also less. The level of environment consciousness is very high in Kerala. Under these conducive circumstances there is little inclination towards illegal felling.

Adafic soil and altitude conditions etc. affect forest growth beneficially. The mountain height on the average is 0ft - 2000 ft, so it is a steep recline. This recline is beneficial for forest growth. Average breadth of the State is 50 km. Average length of the State is 600 km. There is a forest code which enumerates the responsibilities of forest officers.

#### **A. Interview With The Forest Officials In Kerala**

- i. Interview of the Chief Conservator of Forest and Custodian of Vested Forest at Palakkad (Eastern Circle):

The researcher had to follow up for appointment several times. After several calls the researcher was told to mail the questionnaire and it would be returned after it was duly filled up. When repeated requests and persuasions did not work the researcher approached Dr. Easa of KFRI to convince the PCCF to meet the researcher.

The following is the text of the responses.

There are six divisions in the Eastern Circle comprising of a forest area of 1737.5937 sq.km.

The six divisions are:

Territorial	Working plan and Research
Vigilance	Wild life
Social Forestry	Timber Sale.

**Table No. 3. Showing six divisions in the eastern circle (Kerala)**

The Eastern Circle has only reserve forest under it comprising of Mannaarkkad, Palakkad, Nemmara, Nilamboor North and Nilamboor South<sup>540</sup>. The CCF stated that in the last decade there has not been any depletion of forest. Approved timber felling in the area under him were as follows:

Palakkad	3817.11 m <sup>3</sup> per year
Nilamboor North	2167.657 m <sup>3</sup> per year
Nilamboor South	5165.369 m <sup>3</sup> per year

**Table No. 4. Showing the permitted level of timber felling per year under Eastern Sector (Kerala)**

<sup>540</sup> The famous Godavarman case originated in Nilamboor.

The CCF stated that illicit timber felling in Kerala is almost nonexistent. However he gave the researcher an estimate of possible illegal felling in Eastern Circle.

Palakkad	6.06 m <sup>3</sup>	0.16% of legal felling
Nilamboor North	14.279 m <sup>3</sup>	0.68% of legal felling
Nilamboor South	3.53 m <sup>3</sup>	0.068% of legal felling
Mannarkkad	10.567 m <sup>3</sup>	Statistics for legal felling were not made available
Nemmara	19.0983 m <sup>3</sup>	Statistics for legal felling were not made available

**Table No.5 showing the estimated & possible illicit timber felling in Eastern Circle (Kerala)**

Thus the volume of illegal felling in percentage in Palakkad, Nilamboor north and Nilamboor south is about 1% [0.908%] only.

The researcher asked the CCF whether there were timber mafias in the state. The CCF stated that as such there are no timber mafias in Kerala but some criminals indulging in criminal activities in forest and forest produce may be there in the Attappady region. When asked what were the reasons behind near nonexistent illegal timber trade in Kerala the CCF stated that Kerala has a high standard of living and almost all keralites have some property. The young generation aspires to go abroad. Any court case or trouble with the law will destroy their chances of going abroad. The lure of the gulf money and the American dollar is higher than the temptation for illegality. The young generation understands that in the long run illegality will not pay. More over in Kerala the public opinion about these things are very high and the people are sensitive about environment.

The CCF was further questioned whether timber trade affects the forest adversely he answered that in Kerala no timber is taken from the natural forest. The forest department specially cultivates timber producing trees that are felled according to a pre planned felling programme. This activity is undertaken under the Kerala Promotion of Tree Growth in Non Forest Areas Act 2005 and the trading is monitored under the Kerala Forest Produce, Timber Transit Rules 1975. A VAT of 13.55% has to be paid on the bid amount. The Forest

Development Tax (FDT) is 5% of the bid amount and 2.5% of the bid amount is Income Tax. The CCF maintained that the Transit Rules and marking of the timber are strictly done but such strict implementation does not wipe off illegal trading in timber completely. The CCF was asked whether the forest regenerates itself in the same rate as it is denuded, in other words is there sustainability? After the coming into force of Conservation of Forest Act, 1980, from 1984 onwards in Kerala trees are not felled from natural forest or reserved forest. A separate timber cultivation takes place for the purpose of trading. So much so that even the wind felled trees are not removed and the carcass of the dead animals are not removed in the interest of preserving the biodiversity. If the wind felled trees are to be removed, roads etc will have to be made so the transportation becomes too expensive and the forest becomes accessible to the miscreants. Moreover the biodiversity will be adversely affected. So after 1984, timber cultivation is done separately so that the forest is not disturbed. In that sense forest sustainability is maintained.

But in case of timber plantation the story of sustainability is quite different. A teak wood tree takes at least sixty years to reach its optimal maturity. Thereafter the older the tree the more matured it is. However under the thinning management programme, the thinning cycles are 5 Years, 10 Years, 15 Years, and 20 Years. The total time allotted for maturity of a Teak timber tree is therefore reduced to 50 years instead of the required 60 years. In this fifty years cycle financial viability is looked at and not sustainability. This is a source of revenue generation for the forest department and the State of Kerala.

The only menace regarding the sustainability of the teak plantation is the wild undergrowth. Earlier there was the menace of Eupatorium and lantana. That was overcome. Now the threat is from the Mimosa Invasia and the Michenia which are climber parasites. They overtake the teak plant and prevent a sustainable growth. Rs 10/- lakhs per annum is allocated for regeneration of decayed forest and Rs 126/- lakhs per annum is allocated for regeneration of teak forest and Rs 10/- lakhs per annum is allocated for proposed reserved forest.

The CCF felt that the laws were fairly good. He gave the researcher the additional information that there were three auction depots under his circle where auction takes place every month. Nearing year ending sometimes two auctions a month is also held. These auctions generate revenue for the forest department. However, no timber is sold interstate or inter-country. People from neighboring states like Karnataka, Tamilnadu, come for the bidding as Kerala teak is one of the best teak, in the world, it gains a golden hue on polish

and hence known as golden teak. The CCF was also asked whether sawn timber is to be accounted for and the stocks maintained. It was informed to the researcher that there are about 1400 wood work industries and sawmills in the eastern circle. They are required to maintain stock register, conversion register and disposal register. They also have to submit monthly returns to the department. The forest department undertakes random checking of these sawmills and wood based industries. When questioned about forest land reclamation and forest regeneration the CCF narrated the Nilamboor and Nellimpathy cases.

**Nellimpathy:** The British had taken some land from the king of Kochi for cultivation of cardamom and coffee which can be grown as an under crop and did not require the forest to be felled. The king gave the land on condition that only cardamom and coffee would be grown and the forest land would not be alienated. The British adhered to this directive but when they left they gave the land to Indian Christians. The Indian Christians felled the trees and started cultivating rubber. The lease was for a minimum period of 90 years. As the lease got completed it was found that over the years, the land was partitioned, willed, sold, mortgaged and fragmented in many ways. Some had obtained bank loan. The Bank had given loan knowing full well that the land was a leased forest land. The loanee deliberately did not repay the loan and in some cases the Bank sold the land. Some land has been pledged and the pledge was not honoured. The matter went up before the court and the court ordered that the land be sold again knowing that the forest land cannot be sold. Many heavy weights are involved like advocates, judges, and nationalized banks like State Bank of India, state Bank of Baroda, land Reforms officials, Tehsildars, Ministers so and so forth. The list is unending. Now the matter may be handed over to the CBI. Some criminal cases are also pending against these people.

**Nilamboor Case:** This case involves 30,000 acres of forest land. These are dense impenetrable forest. Kerala land reforms allow 15 acres of land holding per family unit as ceiling area. There are 113 family units who are the owners of the kovilagam and claim that they are cultivating the land. The forest department wanted to reclaim this land. The kovilagam people did not object. But there are some timber mafias in this area they instigated the owners to seek restoration of 1695 acres of land as ceiling land and financed the litigation also. The Kerala High court upheld the claim of the owners and directed the forest department to return the land to the owners. The matter went up to the Supreme Court and the Supreme Court also upheld the claim of the owners. But for reasons known only to them [apparently there was some family dispute] the owners failed to take over the land and the

disputed 1695 acres of land lay just like that. In the mean time the Kerala Forest Management of Eco-Fragile Land Act, 2005 was passed under which the entire area including the 1695 acres was declared an eco-fragile land. Kerala Forest Management of Eco-Fragile Land Act, 2005 is based on the principles of Public Trust Doctrine and Eminent domain. In the mean time this 1695 acres of land was pledged to some Tamil Nadu concern but the pledge money was not paid. So the concern filed a suit before the Kerala High Court and the kerala High Court ordered that the land be sold. The sale advertisement said that “forest” land under dispute was to be sold. Kerala has a high literacy rate and public opinion is very strong. There was a State wide hue and cry against this. Forest Department also took cognisance of the matter; some public spirited citizens filed a PIL. There is a demand to prosecute the judge because he has written “forest” land in his order knowing full well that “forest” land cannot be sold. The hearing is coming up next week.

Unfortunately our judges are not very sensitised and very often do not know the ground reality. For instance these 1695 acres of land is dense forest and no cultivation is there. It is actually a hillock having timber but no one has seen or verified. Despite requests so far there has not been any inspection by the court.

**ii. Interview of the Chief Conservator of Forest and Dy. Chief Conservator of Forest at Thrissur (Central Circle):**

The researcher interviewed the above two forest personnel in the central circle. Central sector comprises of 1609.4764 km<sup>2</sup> of forest area. Under this circle there are 4 divisions comprising of 2 districts. The various gradations of forest in this circle are:

Reserve Forest	9107.2066 km <sup>2</sup>
Proposed Reserve Forest	364.4731 km <sup>2</sup>
Vested Forest and Ecologically Fragile Land [protected Forest]	1837.7957 km <sup>2</sup>
Others	274.5220 km <sup>2</sup>
Groves	Privately owned
Community Forest	Community forest- There are no formal gradation called community forest, but the forest area contiguous to the village is taken care of by Vana Samrakshana Samity (VSS), i.e. the joint forest

	management. This may be an equivalent of community forest- There are no VSS maintained forest under this circle
Total	11583.9974 km <sup>2</sup>

**Table No. 6. Showing the various gradations of forest in Central Circle (Kerala)**

On the issue of growth or depletion of forest in the last decade, hereto, it was stated that statuesque is being maintained. According to the Forest Survey of India the forest canopy has increased during the year 2011-2012<sup>541</sup>. The reason why the survey shows increase in forest coverage is due to the reason that the survey is made during different seasons of the year and covers all kinds of foliage. The researcher was informed that official timber felling takes place in areas where timber is cultivated for training. There is a definite pattern and programme for such timber felling which is known as ‘thinning’. The ‘thinning’ programme is approved by the Central Government’s Ministry of Environment and Forest (MoEF). The volume of timber that is felled in one year is as under.

Chalakydy	4630m <sup>3</sup>
Vazhachal <sup>542</sup>	1431m <sup>3</sup>

**Table No .7: Showing the volume of timber felled in one year in Central Circle (Kerala)**

The CCF informed the researcher that there is official timber felling by them in areas that are cultivated for timber by the forest department. This is called ‘Thinning’ programme. This programme has to be approved by the central government ministry of Environment and Forest [MoEF]. No timber felling takes place in the reserved forest or protected forest. The interesting fact is the CCF in the central circle stated there were no timber mafias in the state and there was no illegal timber felling. According to him the reason for this is Kerala has a high standard of living and almost all keralites have some property. Even the unskilled migrant worker earns a daily minimum wage of Rs. 500/- per day and the rate goes up for the

<sup>541</sup> This interview was being taken in January 2012.

<sup>542</sup> Vazhachal is also declared as eco-sensitive zone. The researcher visited Vazhachal and found that the area was completely protected from excessive noise. Veichele were not allows to use horn, visitors were not allowed to talk loudly, no music was allowed, no taking of food or throwing of plastic was allowed. And all these were followed very strictly. To reach Vazhachal point one was required to walk a considerably long distance.

skilled workers. As against this the legal complications and punitive process of law is very high, risky and painful. It is much safer and comfortable to obey the law. Therefore corruption illegal trades etc. are bad investment and non-profitable business. Moreover there is a high degree of religious influence regarding sin and benevolence and honesty. This social climate operates against illegal timber trade and corruption in Kerala. According to him timber trade in Kerala does not affect the forest in Kerala adversely because there is a judicious management through thinning programme and moreover there is a separate cultivation for timber that does not affect the forest. He stated that in Kerala, Kerala Promotion of Tree Growth in Non Forest Areas Act, 2005, Kerala Forest (Establishment and Regulation of Sawmills and Wood Based Industrial Units) Rules 2012, vesting and Assignment Act 1970 and Fragile Ecological Land Act 2002 were very strictly implemented. Moreover, Kerala Forest Produce Transit Rules 1975, Kerala Forest Regulation of Timber Transit (by Water Ways) Rules 1965 were implemented strictly to control and regulate timber trade<sup>1</sup>. When asked whether there were difficulties in implementing the laws or whether there was inter enactment conflicts the CCF stated that there are no major conflicts or difficulties except for some small operational anomalies.

There are some encroachments of forest land. The trees grown on that forest land belongs to the Forest Department as immovable property but not the land on which it is grown. This affects forest regeneration and social forestry. This is governed by:

1. The Kerala Forest (Preservation, Production and Disposal of Trees and Timber Belonging to Government but Grown on Land in the Occupation of Private Persons) Rules 1975
2. Kerala Forest (Prohibition of felling of Trees Standing on Land Temporarily or Permanently Assigned) Rules 1995.
3. Kerala Preservation of Trees Act, 1986

Earlier lease was allowed for construction of dams and to the Kerala State Electricity Board for their projects on condition or restoration of forest. Now that too is almost stopped except under very special circumstances. The researcher also enquired whether there were customary laws and practices that regulate timber trade and it were informed that there were some religious practices in the state and a strong Vana Samrakshana Samity (VSS) which help to protect the forest. The researcher also enquired whether the forest regenerated itself at the same rate as it was felt and he was told that a teak wood tree takes at least sixty years to reach

its optimal maturity. Thereafter the older the tree the more matured it is. However under the thinning management programme, the thinning cycles are 5 Years, 10 Years, 15 Years, and 20 Years. The total time allotted for maturity of a teak timber tree is therefore reduced to 50 years instead of the required 60 years. This affects sustainability. The forest land reclamation takes place in following manner.

1. There is timber wood cultivation by the forest Department on forest land as a regeneration method thinning management is resorted to.
2. There are lands that were leased to common people about 100-150 years ago. On the expiry of such lease, the Forest Department wants to reclaim the forest land back. The tribal are now demanding that the land belongs to them and they are the rightful owners of the land. So there is a conflict as the lessee wants to renew the lease, Forest Department wants to reclaim the land and the Tribal people want to own the land. So there are litigations and mediations. Nelliampathy is a typical example.

#### **B. Interview With The Timber Traders In Kerala**

Timber traders were interviewed belonging to four districts of Kerala. The details of which are as follows:

<b>Circle</b>	<b>District</b>	<b>Name</b>	<b>Duration of business</b>	<b>Annual Volume of timber dealt cubic metre.</b>
Central Circle	Thrissur	St. Antony's Timber Depot	13 years	3000m <sup>3</sup> (80% imported+20% local)
High Range	Kottayam	Timberland	10 years	200m <sup>3</sup> (100% local)
High Range	Kottayam	P.J.Timber and Sawmill	5 years	300m <sup>3</sup> (90% imported+10% local)
High Range	Kottayam	Alif Timber and Sawmill	45 years	300m <sup>3</sup> (100% imported)
East Circle	Palakkad	Uma Timber	22 years	200m <sup>3</sup> (100% imported)

**Table No. 8. Showing the timber traders interviewed in Kerala**

The data collected from all the five timber traders are more or less uniform. All of them imported timber from Malaysia<sup>543</sup>. Only a minor percentage of timber supply is from local forest. All of them stated that the control of timber trade through license, transit rules etc, are very strict. All of them did sawing for timber grown on private land. The tariff and tags stated by the forest officials tallied with those stated by the traders. All of them complain that forest auctions were few and far between and there was a vacuum vis-vis local timber. They complained that those timbers that were auctioned after thinning were immature and were not in much demand in local markets. But a full grown timber especially teak were in high demand. Timber procured from the forest has a hammer mark and timber from private property or imported sale purchase had a different and separate property mark. All of them agreed that the forest laws were very stringently implemented in Kerala but they stated that so long as imported timber continued to pour in they were able to meet the market demand. St. Antony's timber depot expressed a concern that there was a talk that Malaysia and Burma would stop exporting round timber. If that were to be the case timber market in Kerala would suffer a major setback.

Almost all the traders stated that they faced the following difficulties

1. Under the law round timber must fit the length of the lorry. Any length in excess of the length of the lorry has to be sawn off but they must pay for the excess length.
2. The custom creates problem. According to the traders 50cft makes 1ton but the custom people do not accept this. They insist that every time the length cum tonnage has to be reconciled.
3. There are certain minimum floor rates. Even when the quantity of timber is less they have to pay the minimum floor rate fix.
4. They were not allowed to export timber but they could export finished products under special permission of the government.

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<sup>543</sup> At the time of writing this thesis it has been reported that Malaysia has stopped exporting timber. However the researcher could not verify the authenticity of this report .

All the traders felt that their trade did not affect the forest adversely because there was plenty of imported timber available so they could remain within the framework of law where local forest produce was concern. All of them said that they had to maintain the stock and the paper work strictly and regularly.

In Uma Timber the researcher received startling information. He was told that in Warangal Andhra Pradesh, in the midst of the forest there are sawmills of the Maoists. They hook the machine from the 440 Volt overhead electric lines and convert it into 220 volts and saw timber and/or fell trees. When we procure sawn timber from them they accompany us to the Tamil Nadu Border where legitimate permit for the timber is obtained making it legal. Exchange of money takes place at the Tamil Nadu border through mutually trusted agents. The Timber is then brought in to Kerala.

In West Bengal illegally felled timber is driven across the border to Assam where it is sawn and sized. At the Assam Bengal border permit is given. The timber becomes legal and is brought into the State.

### **C. Interview With Advocate A.P. Chandrashekharan - An Expert On Forest Laws And Counsel In Godavarman Tirumulkpad Case In Kerala.**

Nalliampathy has a total of 150 acres of cardamom plantation in the land area that is under reclamation by the forest department. Under Kerala Private Forest (Vesting and Assignment) Act, 1971, the government nationalised all private forest in Kerala within its purview. On 10 May, 1971, all private forests in Kerala vested in the Kerala State Government except those forests that were within the ceiling area allowable/applicable to the owners.

Nilamboor Kovil, the disputed land in the Godavarman Tirumulkpad case (Godavarman Tirumulkpad is the government receiver), out of 30,000 acres of forest in Kerala belonging to the kovilagam, the Supreme Court has held that 1160 acres of those forest, are within the ceiling area of the 112 owners of the kovilagam and hence not vested. But in 2005, under the Kerala Fragile land Act, under Section 3 (1), all the aforesaid unvested forests have been vested in government.

This is a fraud on legislation. Under Article 31 A proviso 2 of the Constitution of India, lands within the ceiling area permissible to the owners cannot be taken by the State Government without paying compensation. According to him there are illegal timber trade in Kerala in a very insignificant magnitude.

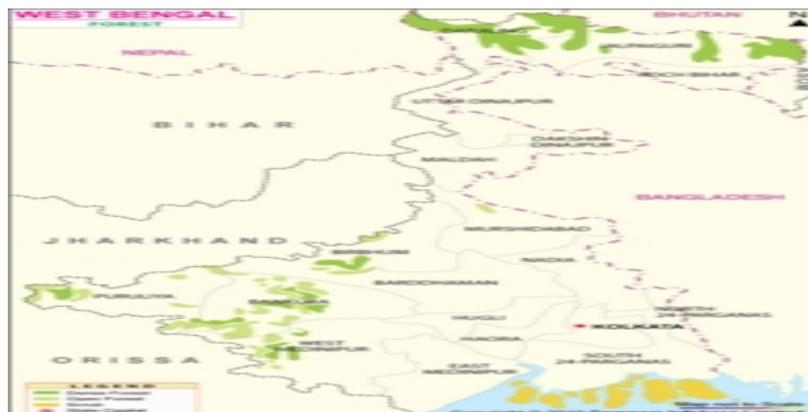
#### **D. Interview with Dr. Easa a Scientist of Kerala Forest Research Institute in Peechi, Thrissur (Kerala).**

He gave eight researched report on teak/ timber development, sources and pricing along with its future. According to him the people of Kerala are highly sensitive to environmental issues and there have been instances when the regular thinning has been stayed by the public spirited people because the land was contiguous to reserve forest and as such fragile in nature. Once a person gets involved in any kind of irregularity, there is a lot at stake. The Press makes a field day of it, neighbors and friends shun you, and job opportunities are lost so there is minimal corruption in any form in Kerala.

The land prices are very high in Kerala and commercialization and urbanisation is so much that now there are no villages in Kerala. There was a policy decision that all land encroached up to 1977 was to be reclaimed. This has been a failure because on those encroached land cultivation has taken place and people are still Encroaching forest land knowing full well that it is a forest land and they cannot occupy it and they will have to return the land to the forest. There is no way to prove that the land was initially a forest land. Since nothing can be done forest land encroachment still goes on. It would have been better if the government had written off the land encroached prior to 1977 and made clear boundaries and had prevented fresh encroachment.

He also informed us that a couple of decades ago, teak logs would be floated on sea and guided to Burma. The Chinese would pick up these logs from Burma and put their mark on it making the timber legitimately theirs and then export it to India.

#### **❖ STATE OF WEST BENGAL**



### **Map No. 3: showing forest cover in West Bengal**

The researcher visited West Bengal in August 2013 and visited in the Districts namely, Darjeeling, Dakshin Dinajpur and Jalpaiguri. The experience of the researcher with the forest officials in West Bengal was not pleasant. After visiting the office for weeks together, making innumerable phone calls and sending a number of emails also the forest officials did not meet the researcher even after giving appointment. Only in Dakshin Dinajpur and in Siliguri the researcher could meet only two officials of the forest department. In these districts of West Bengal has the vegetation like the state of Tripura. In these districts of West Bengal researcher for the field survey took the interview of two forest officials and some of the timber traders. Moreover, the researcher took the interview of some local people in those districts of West Bengal to understand the factual situation related to timber trade.

#### **1. Interview of forest officials in West Bengal**

The researcher met one Mr. Abdur Razak, Ranger of Raiganj Division at Balurghat in West Bengal. He informed the researcher that the classification of forest in West Bengal is slightly different from other States. One sub-division of forest comprises of 4 blocks. One block comprises of 10 to 15 compartments. Each compartment consists of one or more mouza. A number of blocks comprise a sub-division and one or more sub-division makes a range and one or more range make a division. The four blocks that were under the ranger comprised of 20 mouza namely Saupara, Gogacchi, Kashiya, Danga, Bado Kashipuri, Aisuo, Shoolpanipur, Gofanagar, Maheshpur, Gorahar, Shibpur, Abhirampur, Tarajpur, Gurail, Arenda, Dubahar, Ghatul, Neempur, Chokh, Gangaprasad West Bengal also has the general classification of protected forest and reserved forest. According to the ranger wild life sanctuaries and reserved forests were controlled by the British Government and was incorporated under Indian forest Act, 1927.

Protected forests were under the Zamindars. After the abolition of Zamindari system and passing of the Land Acquisition Act, 1956 all such forests were declared protected forest.

The researcher was further informed that there was Forest Protection Committee for protected forests and un-classed forests. Un-classed forests (UCF) are land acquired by administration from various sources and given to the forest department for cultivation of forest. The Government is yet to classified or categories it. Eco-development committee's are constituted

for wild life sanctuary and protection. The Joint Forest Management Committee (JFM) which was a collaborative committee with forest fringe dwellers did not exist in Balurghat. They were only available in Midnapore and Sunderbans etc. In those regions 25% of the sale proceeds from fuel wood and timber wood sale are given to the villagers. Tube wells are provided in those areas where the villagers can use the water for themselves and also for watering the cultivated trees. Free grazing of cattle is aloud in certain specific areas of the forest. Poultry and piggery is facilitated. Houses and community halls are built for them. In addition to this there is a root developing committee which does the pruning and nurturing of trees.

The researcher was informed that in the past decade the core forest area such as reserved forest, protected forest, or wild life sanctuary has not increased. Cultivation of timber and felling of timber is being done in the un-classed forest. The reason for non-growth status is because the growth of the tree and felling of the timber are not synchronized. On one hand there are trees falling due to natural reasons like death, storm, landslide etc, which alone are auctioned and on the other side there is an excessive demand from the wood based industries. The forest department does not fell trees. Timber felling takes place in forest grown on private land or on the un-classed forest. In both cases permission is required for felling trees which is given after ascertaining the necessity. This process is regulated by the West Bengal Trees Preservation and Conservation in Non-Forest Area Act, 2006. There is negligible amount of timber felling in Dakshin Dinajpur. Timber is largely felled in Terai and Dooars areas. Generally the growth cycles for thinning are, 3, 7 or 25 to 30 years. This is not sufficient for maturity of trees.

Since the forest departments has completely stopped the felling of trees and auctions only naturally fallen timber, there is a crises generated in the market for timber supply. Since this demand cannot be met legally, incidents of illegal timber felling occur. However, in Dakshin Dinajpur illegal felling does take place. It mostly occurs in Terai and Dooars region. Most of the fringe dwellers are aware of the utility of the forest. Economic condition of the people here are better. One of the main illegal activities of this area is to push cattle across the border. When due to strict vigil that activity is restricted illegal felling takes place. However that is very low in percentage. Illegal felling is there in Midnapore, Jhargram, Siliguri have the problem of illegal felling not Dakshin Dinajpur.

License for timber trade is given under the West Bengal Forest produce transit pass rules 1959. Sawmills are being issued secondary license now. This means they can install only table sawing machine but cannot install trolley sawing machine. The latter is under Primary license. The Secondary license holders are not allowed to saw round timber. They can only re saw after the primary sawing is done by the primary license holder.

Under the law there should be night and day patrolling. But there are hardly any staffs and there are no vehicles. A person who sells or buys timber must apply under West Bengal Trees Preservation and Conservation in Non Forest Area Act, 2006 for transit pass showing the need or necessity for cutting the tree. If the timber ultimate destination is some other place then a transit pass is issued for carrying the timber till the saw mill and an in lieu transit pass is issued for the carriage between the Sawmill and the final destination. When questioned whether the transit rules are followed very strictly, the researcher was informed that they were followed not very strictly because there were only 15 staffs in 4 Blocks and there were no vehicles.

The other forest official interviewed by the researcher was the officer in charge of Government Sawmill at Siliguri, Mr. T.T. Bhutia which will be discussed at an appropriate place.

## 2. Interview with the timber traders in West Bengal

The saw mills visited across the districts in West Bengal are discussed in a cluster in the following paragraphs. The details of the saw mills are described below:

<b>District</b>	<b>Name</b>	<b>Duration of business</b>	<b>Annual Volume of timber dealt cubic metre.</b>
Dakshin Dinajpur	Amin Brothers Sawmill	29 years	500-700 cft
	Azad Sawmill	35 years	Does not procure. Only saws for others
	Dey Sawmill	2 years	Does not procure. Only saws for others
	RadhaKrishna	15 Years	Does not procure. Only saws

	sawmill		for others
	Rahaman Brothers Sawmill	20 Years	Does not procure. Only saws for others
Darjeeling	Government Sawmill	87 Years	Found it difficult to say
	Mahamaya Saw Industries	20 years	Cannot say, it varies
	Santosh Wood Industry	22 years	80 to 100 cm <sup>3</sup>
Jalpaiguri	Krishna Dutta Roy	42 years	Does not procure. Only saws for others
	S. K. Pattadar	30 years	Does not procure. Only saws for others

**Table No.9: Showing Cluster of saw mills visited in West Bengal**

The researcher interviewed about five saw mills owner in the district Dakshin Dinajpur. Only in one saw mill namely Amin Brothers, timber was purchased in auction from the forest department. The other four saw mills reported that they only sawed timbers which were received from local customers and private land (forest) owners. There is no interstate or inter country business. Imported timber did not reach Balurghat except in one saw mill namely Ramakrishna Saw Mill. The researcher could not interview the owner of the saw mill, Sri. Harbola Saha, as he had just expired. Other than this saw mill no other sawmill was dealing in imported timber or undertake interstate business. The researcher further came to know that in North Bengal there is no notified timber loading station and therefore timber movement took place by road. It was informed to the researcher that primary license which involves trolley sawing has been stopped, secondary license which involves table sawing and permits only re-sawing was being given between 2008-2010' and is likely to commence again in the near future.

For renewal of license one has to submit an application accompanied with valid papers of land, No objection from Panchayat, Panchayat Samity, Zilla Parishad, Neighbors, and Pollution control Board. Verification takes place. Only after satisfaction the license is issued.

Meticulous records have to be maintained with respect to the timber that passes through the saw mill for sawing. Even though forest timber auctions are few and far between the shortage of timber is made up from local private sources. Fortunately the people of Dakshin Dinajpur in general and Mohipal in particular are very enthusiastic about planting trees for business purposes as asset. People plant timber on privately owned land. So there is a good supply of local timber here. There is increased competition, secondary license holders are indulging in round timber sawing. Nature of market has changed. There is more emphasis on glass and aluminum.

The inspection process is not so regular or strict. Although the saw mills like to keep their transaction records up to date. The forest department is supposed to have a mobile team who have to conduct but the forest department in four blocks under Balurghat range has only 15 staff and no vehicle. In many cases timber comes to the market bypassing the forest department. In such cases the transit passes are either forged or the transit pass rules are ignored.

Most of the timber traders complain that the timber received from the forest or private suppliers are not matured. There can be many reasons:

1. Immature trees may fall due to natural reasons of storm, landslide etc.
2. A tree may be cut immaturity for emergent personal reason such as weeding, health care, hose building etc.

The researcher did not see any notified industrial area wherein all the saw mills are to be located. This appears to be in gross violation of the Supreme Court directive in Godavarman case.

The saw mill owners pointed out that some difficulties in law which are as follows:

- a. Where secondary licence is given, the licence holder is not supposed to saw round timber. They are supposed to re-saw the timber that is already sawn by the primary licence holder. But that is not happening. The secondary licence holders are also sawing round timber. But since they are not supposed to saw round timber they do not have to maintain stock. So the round timber they saw are out of the control and regulation of the Forest Department and hence illegal. There is no monitoring of this by the Forest Department even after they have been informed, they look the other way.

- b. Law requires that a private owner if he wants to cut a timber grown and owned privately by him he should take permission from the Forest Department. But to obtain such permission he must show necessity such as daughter's marriage, health or construction of one's own house. The forest harass him so much that to avoid such harassment the owner clandestinely cuts the tree and circumvents the law, thus indulging in illegal timber trade.
- c. Shortage of staff has led to multi-tasking by them. There is no bit officer in Kushumandi-I. No range officer in Buniadpur. The Asst. Range Officer looks after Kushumandi I bit, works as range officer for Buniadpur and also works in Raiganj Division office. A person who needs to cut a tree in Mohipal does not find him in office. He then he goes to Raiganj or Buniadpur to meet him, the officer asks the person to meet him in Mohipal. By the time the person in emergency gets permission he loses a lot of money trying to get permission and by the time he gets permission it becomes futile. So people evade the law and indulge in illegal trading. They indulge in bribery.
- d. A huge quantity of illegal trade is there due to the indiscriminate issue of secondary licence and non regulation and control of this secondary licence holder. When a merchant buys timber or standing trees from government auction he pays some money for enabling cultivation of new trees in that area. Neither receipt is issued for it, nor is there any evidence of new tree being planted in that area.  
When timber is auctioned the contractors purchase them and sell it to the furniture merchants who get it sawn by the secondary license holding saw mills. So this is an illegality encouraged by the law.
- e. There were 50 secondary licenses given in 2011. If one can count the number of licenses given in 2011 and the number of sawmills that came up during and after 2011, a clear picture of the number of illegal sawmills in operation will emerge. The Forest Department can easily take step but they do not.

According to the sawmill owners of Dakshin Dinajpur there are some unlicensed saw mills in kaliaganj, in Kushumandi area. Some of the sawmill owners in Dakshin Dinajpur are now cultivating their own private forest.

Mr. Abul Kalam Azad of Azad Sawmill told the researcher that:

- i. Illegal trading takes place because of vote politics. The high court directives were implemented for few days and then ignored with the help of officials.
- ii. For every carnival or mela the permission should only be given subject to condition that the organizers plant at least 25 trees on the government vest land or on the road side and the local police station should monitor it. Forest department need to get involved only if the timber is moving outside its jurisdiction.
- iii. For every burial at least ten trees should be planted. Since the women cannot enter and clean the Muslim graveyard, tamarind tree can be planted.
- iv. Trees planted by the local people should be exclusively managed by women's group. They will maintain the trees and sell matured trees and plant new trees. This will increase eco-feminism.
- v. Kadam trees, Shimul trees and Mango trees do not last long and decays fast. Now the government cuts, carries and keeps at its own cost and the wood gets decayed. This is a total exchequer loss for the government. If the government calls tender then the saw mill owners will cut the trees at their own cost, carry on their own cost and then sell the wood to recover cost. This will benefit the government. Crores of rupees are lost in this manner.

Sri Manoranjan Chaki of Rahaman Sawmill stated that there is no sale of saw dust and there is no permission from Pollution Control Board regarding its disposal. Hammer mark is put only on expensive timbers otherwise the local timber that is brought for sawing are unmarked. In case of renewal of license forest department is not honest.

Santosh Wood Industry in district Darjeeling does not have license yet during checking this fact is ignored and they are allowed to run the saw-mill without license. They say that they are in queue and will get the license soon. As they have already applied for renewal and their papers are in order, they are allowed to carry on the business.

According to Kali Gopal Ghosh the supply of timber is less because we depend on the local community for sawing. The demand for timber in the market is very high but the supply is less. Moreover due to indiscriminate felling the length of the logs is reduced because of this their marketability is also reduced. The timbers cut by the forest are not mature at all. Actually immature trees are felled by timber smugglers. The main part of the tree and other

secondary parts are smuggled away. The remaining part of seized goods is auctioned by the forest department. There is a high demand for timber in the market. Earlier there used to be Clear Felling Cycles (CFC). It was easy to respond to market demands in terms of quality and size. Legally procured and processed timber is very expensive. So illegal felling occurs. The smugglers reach the timber to the houses at half the price and without any harassment of proceedings. Even where thinning takes place the trees are not allowed to reach its full growth. So we don't get mature timber. The loophole is not in the law but with the people. The rules of implementation have made the laws cumbersome. The Government doesn't have the staff and the means. Legally processed wood is so very expensive so people look for cheap wood and not legally procure wood. There are about three to four sawmills in Matigara, Baikunthapore Division, that are being run illegally. The authorities aware of this fact but no action are being taken. The researcher visited these sawmills but was turned away from the gate itself. In one sawmill they even threatened to hand over the researcher to the police.

More than changes in the law there is a need to strengthen the infrastructure. Baikunthapore Division of the forest lacks staff and vehicles. In Taaipu Division there is one Ranger, one Bit Officer and two forest guards. What should they do? Handle the elephant problem? Or tackle the smugglers?

This part of the interview was given off the record under assurance that the person will not be harmed in anyway and this information will not be revealed to the mafias.

- i. There are timber mafias but who can talk about them? We will either be killed or lose our business if we even talk about it. There is a nexus between smugglers, leaders, officials and ministers. The system is that in a given forest range illegal felling is allowed say for five years. Everybody gets a share. At the end of five years a person is arrested for committing a bail able forest offence. The accused is rarely convicted for want of evidence etc. The punishment under the forest laws is minimal. The Ministers and the officers get a credit for catching a smuggler, the officer gets promoted and the illegal business flourishes as before and the flow of money never stops. Who can interfere and talk about this powerful arrangement? You have chosen a risky topic for your research. If you delve deeply in this you might even be killed.
- ii. The officers themselves are corrupt. If you bribe them they will look the other way when you disregard the law. For every small thing we have to bribe the officials.

In Jalpaiguri district, the researcher visited two sawmills. He was informed by Sri Krishna Dutta Roy there are no trees in the forest. Whatever was there has been, they felled and smuggled. There are some trees at the fringe but inside it is all clear. The clear felling cycle is stopped. What is auctioned is the third rate left over of the thieves and smugglers and a few naturally fallen trees. Private timber is also very few and restricted<sup>544</sup>. Earlier after purchase of timber in forest auction, one did not have to apply for permission to saw the timber and no money was to be paid. Now one has to apply for permission to saw within three days with requisite fees. This is the first point of corruption. If the purchased timber cannot be sawn then how can one do business? One is forced to pay the money.

Earlier transit passes were issued from the range office. One has to apply for transit pass at the range office now, the application is then forwarded to the D. F. O. office, after necessary action it is again sent back to the Range Office and the pass is issued. At every point there is some illegal monetary demands. If there is a further need for in lieu Transit Pass then the money game begins all over again. Since this is business, these are added costs to the timber pricing and the price of legal timber shoots up. This is the reason for flourishing illegal timber trade.

Day after day the trees are felled illegally. The trees at the fringes are shown as forest, inside there are no trees. In deep forest the trees are cut with hand saws then they are made into suitable pieces, loaded on rickshaw vans and brought out. One may not get exact size of timber but the illegal traders reach the timber to the doorstep of the customer at a much lesser price. What more does the consumer want? The consumer naturally opts for this and the legal timber business suffers. So we are reduced to sawing the mango, jack timbers in small scale and illegal timber is flourishing.

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<sup>544</sup> ফরেস্ট থেকে মাল কিনলে আগে কেনার পর মাল কাটার জন্য কোনো অনুমতি লাগত না , এখন তিন দিন এর মধ্যে মাল কাটার অনুমতি চেয়ে দরখাস্ত করতে হয় , এখানেই প্রথম অসত ভাবে টাকা খাওয়ার বেবসা I যদি মাল কেনার পরে কাটার অনুমতি না দেয় বা দিতে দেয় তাহলে তো বেবসা হয় না তাই বাধ্য হয়ে টাকা দিতে হয় I আগে ট্রানসিট পাস শুধু রেঞ্জ অফিস থেকে দিয়ে দিত I এখন রেঞ্জ অফিস এ দরখাস্ত করতে হয় সেটা ডি .এফ . ও . অফিস এ যায় সেখান থেকে আবার রেঞ্জ অফিস এ আসে I দেবির সাথে সাথে প্রত্যেক জায়গায় টাকা দিতে হয় I তার ওপর আবার যদি ইন লিউ টি . পি . লাগে তার জন্যে আবার ভেরিফিকেশন দরকার হয় আবার পৈসা খাওয়াতে হয় I এই সব কারণে বৈধ কার্টের দাম বেড়ে যায় আর অবৈধ কার্ট বেবসা রমরমিয়ে ওঠে I

দিনের পর দিন কত কার্ট চুরি হচ্ছে , বাইরে থেকে গাছ দেখিয়ে বলে জঙ্গল আছে ভেতরে সব ফাঁকা I গভীর জঙ্গলে গিয়ে প্রথমে হাথ করাতে দিয়ে গাছ কাটা হয় তার পর সুবিধা মতন টুকরো করে রিক্সা বা ভ্যান এ করে তা বাইরে আনা হয় I এতে মাপ মতন কার্ট পাওয়া যায় না আর অবৈধ বেবসা বাড়ে I ফলে সম্ভব কার্ট বাড়ি পর্যন্ত পৌঁছে দেয় I মানুষ তো এই সুবিধাই চায় ফলে বৈধ বেবসা মার খায় I এতে সবাই জড়িত , ওপর থেকে নিচ পর্যন্ত টাকার খেলা চলে তাহলে বৈধ বেবসা হবে কি করে? আমরা ইন্দিরা বিকাশ যোজনা তে গরিব মানুষ আম কার্টাল ইত্যাদি যে কার্ট আনে বেশির ভাগ তাই কার্ট তাতেই লাভ , বৈধ কার্টের বেবসায় এখন আর লাভ নেই I

**Interview of Sri Gourdas Chakraborty, Assistant Secretary, Timber Merchant's Association, Alipore Dooars, District Jalpaiguri:**

The researcher met with Sri Gourdas Chakraborty Asst. Secretary, Timber Merchant's Association at Alipore Duar and interviewed him. According to him the earlier system of clear felling cycle was a better practice. In that system one could seize the timber according to one's need but now that the forest auction and the system of clear felling system are stopped, illegal timber trade flourishes. In illegal timber trade there is no option for cutting the timber to the required size. Moreover there is no re-cultivation happening even though the Forest Department charges fees for re-cultivation on every transaction. A major difficulty is that the Forest Department is very under staffed. They are not able perform their regular duties of monitoring, inspecting and implementing. Moreover, the consumer has to suffer a lot of harassment in their hands. In an emergence there is bribery, lack of paper movement and red tapism. Now there is a system of open tender through email which the timber merchants are not happy about because they feel that impartiality and transparency will not be maintained. Issue of secondary license is another point of corruption. There are timber mafias in the State who have connections at the high echelon of the Government.

**❖ STATE OF ASSAM**



**Map no.4 showing forest cover of Assam**

**The forest in Assam is categorized as follows:**

Unit in Numbers	Territorial	Wildlife	Social Forestry	Research, Education and Working Plan	Total
Circle	7	2	3	1	13
Division	31	8	14	6	59
Range	150	18	53	11	232
Beat	264	20	54	2	340

**Table no. 10 showing Administrative Units under Forest Department**

**The forest division in the State is as follows:**

DIVISION				
Territorial		Wild Life	Research, Education & Working Plan	Social Forestry Division
Kamrup East	Jorhat	Tinsukia	Genetic	Gauhati
Kamrup West	Sivsagar	Eastern	Silviculture	Silchar
Kamrup North	Dibrugarh	Western	Forest Scholl	Karimganj
Goalpara	Dhoomdooma	Mangaldoi	TT& Seasoning Plant	Nalbari
Cachar	Digboi	Nagaon	WPO UAC Jorhat	Nagaon
Hailakandi	Kochgaon	State Zoo	WPO UAC Guwahati	Sivsagar
Karimganj	Haltu Gaon	Gauhati	WPO Kokrajhar	Biswanath
Dhubri	Chirang	Manas	FRS Division	Golaghat

Aie Valley	Parbatjhora	Kokrajhar	Silviculture, Hills	Dibrugarh
Sonitpur West	Dhansiri		FRS Hill Division	Lakhimpur
Sonitpur East	Baska			
Lakhimpur	N. C, Hills			
Dhemaji	Karbi Anglon East			
Nagaon	Karbi Anglon West			
Nagaon South	Hamren			
Golaghat				

**Table No.11 Showing Forest Divisions in Assam**

### **A. Interview of Forest Officials in Assam**

The researcher had visited the forest officers in Assam with structured questionnaire but they were comfortable speaking extempore. All questions were asked and answered, but not in accordance with the questionnaire.

#### **1. Interview with A. C. F. Mr. M. Barua, Assam Forest Department**

The Godavarman case banned logging throughout the North East and once the blanket ban was implemented; there is tremendous market demand for timber. This has encouraged illegal timber felling especially in Assam. The forest department which has a limited number of staff, they could not control illegal logging. Earlier Assam suffered from insurgency problem, illegal emigrants from Bangladesh, ethnic problems and the insurgents have vandalized the forest and the wild life and the Forest Department was not able to meet the challenge due to lack of infrastructure. So Assam forest is a victim of rampant abuse. The Baripara Reserved Forest was one of the most beautiful reserved forest is now like a paddy field due to illegal felling and encroachment. The forest Department made a sincere effort at re-cultivation and aforestation but the pressure is so high that it is hardly successful. That is why Assam is a lot different from Arunachal Pradesh, Meghalaya etc.

The other problem is the Forest Dwellers Act. In States like Assam, Mizoram, Arunachal Pradesh, Manipur, Nagaland most of the people dwell in and around forest. Without going through the ground realities in these States the law has been enacted and almost overnight they lost their right over the forest land on which their livelihood depended. Forest officers have a little role to play. There is the politics of vote bank here and the district authorities and the village authorities certify that these people are legitimate forest dwellers. As a result people who, basically, are not forest dwellers have also entered the forest and encroached upon the forest land. Once they are inside they go on encroaching. The forest officials are helpless spectators. This has led to further depletion of forest in Assam. If you tally the forest map of the relevant period and investigate the location of these people during this period, you can see that they were not forest dwellers at all but this deception goes on.

The map of the Forest Survey of India is also very deceptive. It shows an increase in forest cover but actually it takes into account all plantations, privately owned forest, vineyards and orchards. It is not an accurate representation of India's forest cover even though it is done scientifically.

After the Godavarman case all sawmills are required to be located in notified industrial estates and Assam too has such notified areas. Unfortunately most of the saw mills are now closed due to non supply of raw materials.

The post Godavarman scene is encouraging in the sense that since the felling of trees are fully stopped; the regeneration of trees and afforestation is taking place profusely. Now we hope to maintain the forest area to get a good quality forest. But if you are not allowed to thin the forest some saplings will not survive. After all it is the survival of the fittest. For this we need to have a good and viable thinning plan approved by the Ministry of Environment and Forest. Forest regeneration has helped the wild life also though we still have a huge challenge of poaching. But there are contradictions of human survival or animal survival. There is also the challenge of sustainability.

## **2. Interview with A. C. F. Mr. Ranjit Konwar, Assam Forest Department**

Mr. Ranjit Konwar explained the classification of forest in Assam and the hierarchy of officers. He said that the nomenclature is changed they were the Forest Force similar to Police Force. There were two territorial zones in Assam, the Upper Assam Zone and the Lower Assam Zone and three district council viz. karbi Anglong, Boroland and Dimahansao.

“Territorial” wing dealt with forest and timber matters. The territorial wing of the forest works closely with social forestry and the Research, Education and Plan wing. There are circles, divisions, Rang and Beats.

When asked by the researcher whether illegal timber trading takes place in Assam he did not hesitate in admitting that illegal timber trading takes place in Assam and stated that it was the necessity of the time. There was a blanket ban on felling trees. There is very little timber to auction. The forest department, therefore, could not auction timber. Assam is a very densely populated State and people do not have land to cultivate private forest. That does not stop the market demand which not only becomes pressing day by day but also offers an opportunity for making quick money through illegal timber trade. More over wood is required as fuel, for house building and day to day requirements. So, illegal trade flourishes. The Forest Department does its best to control and regulate the illegal activity but it has its own limitations. The department is much stressed. There may not be timber mafia in Assam but there are well connected timber criminals who have strong connection in the corridors of power.

There is a wood based industries rule and they are very strict about issuing of license, transit pass etc. they are strict about issuing license and periodic surprise checks are also done but there is hardly any raw material. There is no FTL license in Assam. Some timber comes from Meghalaya etc. A lot of wood based industries have closed down.

The Godavarman case is a boon and it is a huge legal support for protection of forest in Assam. There are regulations about timber transport which must be only through railways only and from notified loading stations alone. And the limit of the load is specifically prescribed and the yearly number of wagon that can be loaded from a loading station is also specified. Though timber cannot be transported by road, the land locked States of the North East are allowed to move timber by road to the nearest timber loading railway station. Earlier timber was transported by any means, road, water and it was almost impossible to monitor but now, with the Godavarman regulations and guidelines and the strict monitoring of the High Powered Committee the Forest Department is able to function more efficiently.

The insurgent activities in Assam do not affect the forest these days because of the difficulty of removing the timber and getting caught in the process. Now the insurgents concentrate on poaching because the articles are easier to smuggle and it fetches a lot of money. Moreover bartering for arms takes place with animal carcass.

## B. Interview of Timber Traders In Assam

The distribution of saw mills in Assam is as follows:

<u>Sl</u>	Name of Division	No.	<u>Sl</u>	Name of Division	No.
1	Dhoomdooma	4	17	Aie Valley	1
2	Digboi	11	18	Dhubri	5
3	Dibrugarh	14	19	Cachar	14
4	Sivsagar	2	20	Karimganj	12
5	Golaghat	7	21	Hailakandi	0
6	Dhemaji	5	22	Karbi Anglon East	3
7	Lakhimpur	2	23	Karbi Anglon West	1
8	Sonitpur West	5	24	Hamren	0
9	Sonitpur East	9	25	Dhansiri	6
10	Nagaon	18	26	Baska	2
11	Nagaon South	12	27	Chirang	2
12	Kamrup East	29	28	Haltugaon	1
13	Kamrup West	1	29	Kachulgaon	1
15	Kamrup North	4	30	Parbotijhora	0
16	Goalpara	2	31	North Cachar Hills	16
Total 191					

Table no.12 showing Division wise Sawmills [Wood Based Industries] in Assam

Most of the saw mills in Assam have closed down. The researcher visited Kamrup West Division and interviewed the single timber trader. The researcher was advised not to travel to interiors as there was ethnic violence going on in the interior Assam.

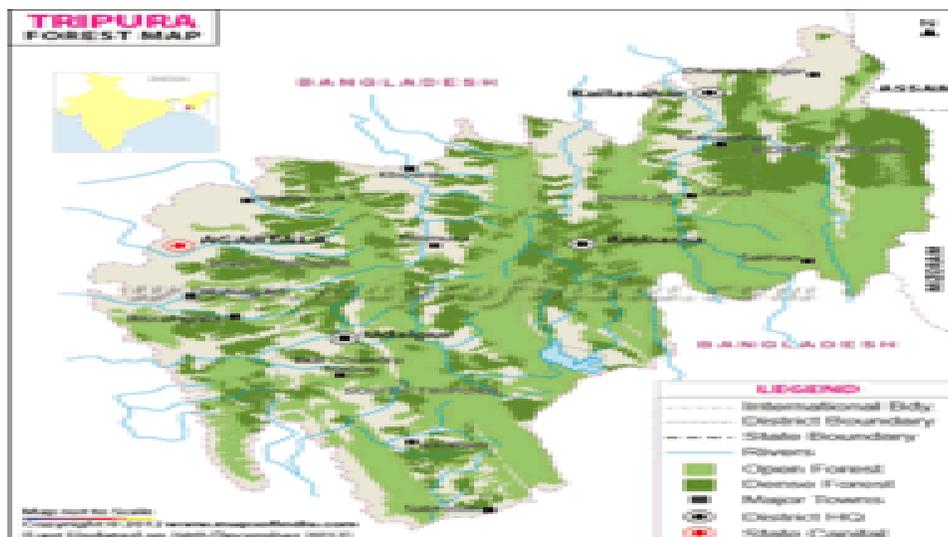
The single sawmill in the Kamrup West is Sanjay Sawmill. The saw mill has been working since 1981 i.e. about 31 years. The proprietor Sri Jugal Kishore Jain informed the researcher that they get negligible amount of timber from forest auction, but after the Godavarman case there is hardly any regular auction so they have to make do with local market supply. Though there is opportunity for interstate business there is hardly any timber left for it after meeting the local market demands and supply coming from Meghalaya and other North Eastern States. Local timber is also very less because private land holding for cultivating forest is very less in Assam. The annual amount of timber that they deal in is about 32 mts<sup>3</sup>. On one hand procuring timber is increasingly becoming a challenge and on the other hand the market is looking at aluminum and ply wood as a substitute for wood so timber business is going downhill.

On timber procured from auction there are proper hammer mark. The transit rule, stock maintenance rules are all very strict.

Mr. Jain said he was aware of only those rules which directly impacted upon his business such as the license rules, transit rules, maintenance of stock rules etc. He was also aware of the Supreme Court judgment that banned logging and thought very poorly of it.

According to him this judgment paved the way for illegal timber trading. There is no future in timber trade in Assam. Forest department charges fees for re-cultivation but hardly cultivates. Where cultivation is done they are not maintained or nurtured. The thinning is also done well so the forest is affected adversely. Legal timber business is becoming extinct and illegal business is flourishing.

#### ❖ STATE OF TRIPURA



Map no. 5 showing the forest cover of Tripura

### Forest Cover of Tripura

Forest and tree cover in the State	8244 km <sup>2</sup> [78.58% of geographical area-10,491.69 Km <sup>2</sup> ]
Recorded forest land	6294 Km <sup>2</sup> [60 of geographical area]
Wide range of biodiversity	<ul style="list-style-type: none"> <li>a. About 13% of plant species of India</li> <li>b. Out of the 31 medicinal plants species of country for the commercial plantation, 15 identified in the State</li> </ul>

Table no. 13 showing the forest cover of Tripura

Tripura is rich in fauna due to its unique bio-geographical location and zoo-geographical position. 90 species and sub-species of mammalian fauna found in the State.

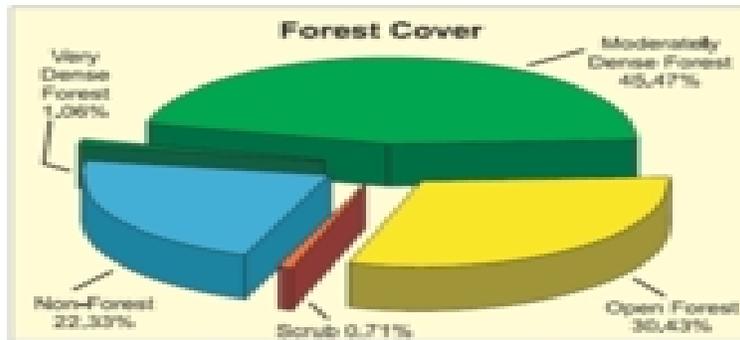


Diagram no.2 showing the classification and percentage of distribution of forest cover in Tripura

### Departmental Profile

District forest offices	4
Territorial Divisions	9
Functional Divisions [Research Training and plan]	4
National Parks	2 a. Clouded leopard national park Sepahijala b. Bison National Park, Trishna
Wild life sanctuaries	4 + 1 Zoo

Table no.14 showing the departmental profile in Tripura

### THRUST AREAS OF ACTIVITIES

The forest Department has decided to focus on yearly plantation of about 20,000 Hectares in degraded areas with special thrust to bamboo plantation and creation of bamboo and other nurseries like Decentralized Peoples Nursery (DPN) to cater the needs of quality planting materials. Construction of water harvesting structure for soil & moisture conservation and income generation is another area of focus.

## AREA OF CONCERN

Moderately Dense Forests and Open Forests are continuously subjected to serious degradation due to Jhuming (shifting cultivation); About 30,000 hardcore jhumias practicing jhuming over 1 ha area per year. Another major concern is the requirement of catchment area stabilization of 7 major Rivers Howrah, Gumti, Manu, Juri etc.



Rejuvenation of degraded areas of Sal & Teak by coppice system and gap planting by bamboo species is another thrust area for the Department.



Participatory Natural Resource Management programme in Tripura is unique and has the following features:

- Sustainable utilization Patta land: first such Project.
- Addressing hardcore *Jhumias* who are about 90% of total beneficiaries.
- Compulsory contributions from the beneficiaries towards development of ownership.
- Empowering village Institutions as project implementing agencies.
- Involvement of democratically elected bodies (3-tier Panchayat System) at the Block, District and State level.
- Convergence of existing State & Central Schemes to ensure holistic development of Project villages for long-term sustainability.
- Effective, transparent and participatory planning for Village Development Plans built upon existing Block Level Plans and departmental Perspective Plans.

### **A. Interview with forest officials in Tripura**

There was the usual and by now the expected weariness about a structured questionnaire. All the officers answered all the questions that were put to them, but extempore. The researcher was treated cordially and each one responded as per their expertise.

Four Forest officials were interviewed in Tripura which is as follows:

**i. Interview of Sri Balbir Singh, CCF, Department of Forest, Tripura**

Indian Forest Act 1927 is the main Act that is followed in Tripura but there are Tripura amendments to the Act to suit the requirement of the State. There are some State amendments relating transit rules and sawmill establishment rule. In 1996 wide 202/1996 the case of T. N. Godavarman case required clusterisation of sawmills in one place. So WBIE [Wood Based Industrial Estate] was created. The felling is of following types;

1. Felling from forest land which is again of two type
  - a. Timber From forest owned land. Timber from forest land is ordinarily not felled. It is felled or removed under two circumstances.
    - i. Trees when they dry up or fall naturally are removed.
    - ii. When developmental work takes place like roadways, railways, Offices Schools/Universities etc. require that trees be felled.
  - b. Timber from government owned non forest land called “Khas” land. Khas land is owned and managed by the Revenue Department. The forest/timber on the khas land is owned by the Forest Department but the title of the land remains with the revenue department.
2. Felling from cultivated forest land. It is done according to what is known as “Working Plan”. First the land has to be identified. Timber has to be identified registered and marked. The working plan has to be approved by the Ministry of Environment and Forest.

Extracted timber from the Forest land or Khas land is always sold through auction. Timber extracted from private land is not auctioned; they are sold to timber merchants.

Laws are very stringently followed in Tripura. In fact enforcement in Tripura is actually top in the country. But that has not stopped illegal felling. Corruption is rampant. There have been cases when rangers were beaten, tortured, kidnapped and killed.

**ii. Interview of Sri Prabir Bhattacharya, CCF, Department of Forest, Tripura**

According to Sri Bhattacharya there are some timber mafias in Tripura and there are some well connected timber criminals. But not like Assam, West Bengal, Karnataka and Andhra

Pradesh. Adducing evidence in an offence is very difficult and mostly the case, after a long drawn process ends in acquittal. In his opinion compounding is essential. Often the offence is not committed intentionally. In those cases leniency can be shown to avoid cost and time. The punishment can be enhanced.

Godavarman case has a positive impact. The forest field functionaries have become more aware of its applicability. It has brought a system and a methodology of forest governance. The laws have acquired teeth. The general public no longer feels that the laws are toothless. The judgment made the government agencies aware of the importance of forest land and forest laws. Disposal of timber is always through auction but for government requirement like construction of educational institutions, railways stations, and other government projects, the wood is sold to them. Final felling is done through working plan. Thinning is done when the forest becomes too thick the immature trees are removed. 30% timber cultivated is of commercial nature.

Staff strength in the last 30 years has not increased significantly to meet the challenge of illegal timber trade. Weapons that are being used by the forest forces vis a vis the weapons used by the smugglers are old fashioned, back dated and obsolete. The forest forces are not adequately equipped to face the offenders. So it is difficult to prevent and resist illegal felling and smuggling. It is important to train and equip the forest force.

Percentage of illegal business is about 30% if not more. Smuggling across the Bangladesh border takes place. It was in peak in the 1970-1980. Now after the fencing on the border of Bangladesh and India smuggling is reduced.

There are 946 Joint Forest Management Committees in Tripura. There is 50% sharing of cost in case of sale of major forest produce like timber. For sale of minor forest produce 100% share of the cost goes to the beneficiaries. Joint Forest Management Committees are dynamic. Joint Forest Management Committees are uniformly distributed across the state. Creation of plantation is on the rise. Schemes of medicinal plant, bee nurturing, lac etc are given to Joint Forest Management Committees.

Joint Forest Management Committees are in Tripura from 1995 onwards. At that time the project area was 100 hectares, and involved one family. Now the number of families involved is 220, Project area is increased to 260210.62 hectares, Afforested area is about 82200.39

hectares, Number of beneficiary families are 95048 out of which S.T. families are 39931, S. C. families 20205, OBC families are 15540, and families in the general category are 19372.

**iii. Interview of Sri Rajat Das, DFO, Department of Forest, Tripura**

According to Sri Das forest canopy is good over Tripura. Satellite imagery report shows 59.8% geographical area of Tripura is covered by forest. This includes rubber estates, tea estates and cultivated timber land.

The Forest Dwellers Rights Act requires that those families who had encroached upon forest land before December 2005 is given forest land up to 10 acre [ceiling] area. As per that requirement 11 lakh 21 thousands families were given beneficiary rights by Forest Department of Tripura (forest dwellers, before 12 December, 2005). Occupancy after 2005 is treated as encroachment. Yet there are huge encroachments. Once inside the forest the encroachment goes on. Many come up with certification from the SDO and other authorities claiming to be forest dweller prior to 12 December, 2005. The Forest Department is reduced to helpless spectator.

Occupancy of forest has reduced in situ animal dwelling into pockets. The corridor for animal movement is blocked. Much difficulty is there for animals due to faulty planning and faulty laws.

This gives opportunity for corrupt and illegal practices.

**iv. Interview of Sri S. Talukdar, CCF, Department of Forest, Tripura**

Sri Talukdar informed the researcher that in Tripura Sal Teak etc. is grown. Each of these trees takes 60 years to mature. So final felling takes place after 60 years. In between, for the purpose of thinning and based on market demand trees are cut. There are transit rules and sawmill owners rules specially designed for Tripura.

There are incidents of illegal felling. If such illegal felling is detected they are booked under the Indian Forest Act. The laws are not adequate and there are many loop holes. There are flaws in Judiciary too. One can easily get away after committing any crime. The main problem is the burden of proof lies with the authorities. The cases rarely lead to conviction. This encourages smuggling and violation of laws. There has been rampant smuggling of timber along Bangladesh border. Along the border there are large number of sawmills but there are no forests there. The question is how they flourish. People's perception and overall

economic condition of the people are very important and relevant factors. Forest around the south Tripura border is almost denuded. There is also rampant corruption to facilitate smuggling.

Godavarman judgment is of no use. It encourages corruption. They have enlarged the list of corruption to include people in Delhi. Unless bribe is paid, no work gets done.

The problem is rise in population and there is rapid urbanization. In addition the ozone layer is also depleting. So there is climate change. This cannot be stopped. Density of forest is less.

JFM does not work well.

### **B. Interview with saw mill owners (timber traders) in Tripura**

There are four districts in Tripura. Maximum number of sawmills are concentrated in Dharmanagar, North Tripura District and Dharmanagar is the only timber loading railway station in Tripura. Due to these reasons the researcher interviewed the sawmill owners in Dharmanagar.

There are eight sawmills in one place at Dewanpasa. In no other place sawmills are there in Dharmanagar district. Approximately 6, 00,000 cubic feet [cft] timber including sawn and round timber is transacted from these eight sawmills cumulatively.

According to Forest Special Investigation Team Rules only 9 cubic meter [cmt] timber can be sawn per day.

- 1) 1 cmt = 35.315 cft, So 9 cmt = 35.315x9=317.835 cft
- 2) If on a given day more timber is sawn, it is adjusted against a day in which less timber is sawn.
- 3) The minimum cost of sawing is fixed by the Timber Merchant's Association @ Rs. 60 per cft. A timber merchant may charge more than this from the customer but cannot charge less.

<b>District</b>	<b>Name</b>	<b>Duration of business</b>	<b>Annual Volume of timber dealt</b>
Dharmanagar North Tripura District	Sreema Sawmill	1979 October onwards	During the year 2012- 2013 86 486 cft round log received and Sawn 82235 cft of timber

			approx.
	Timber Agency and Products	In timber business since 1962-63 onwards. The present sawmill started 1982 onwards.	During the year 2012- 2013 Round Timber 70615.65 cft Sawn Timber 61145.59 cft approx
	Ram Krishna Timber	1990 onwards	During the year 2012- 2013 59329 cft rounded to 59500 cft approx
	Birendra Sawmill	2003 onwards	During the year 2012- 2013 60 to 70 thousand cft. approx
	Dharmanagar Sawmill	22 years. From 2007 in Dharmanagar	During the year 2012- 2013 Round 55952.27 cft Sawn 40767.95 cft approx

**Table no 15. showing the volume of timber dealt in year in Dharmanagar district (Tripura)**

The source of timber for these sawmill owners is the local private estates. The information regarding availability is obtained through middle men. There is no provision for auction in private estate. Auction is only from the Forest Department but that is rare.

Sawn timber from most of the saw mills are supplied to Delhi, Punjab Rajasthan. Round timber is either procured from forest auctions or purchased from the private forest owners. One has to obtain a Forest Trade License [FTL] to be able to deal in forest produce. There after license is given for sawing & sale. License for new sawmill is not being given at the moment in Tripura. In order to get a license application is made to the ranger who forwards to the DFO. DFO process it and then either issues a license or renews it.

According to the mill owners there is sufficient supply of timber in Tripura. Only rarely scarcity occurs. There is no imported timber, but North Eastern States like Mizoram sends log. There is sufficient timber in this place. So it is easily available.

Almost all the sawmill owners reported that these days there are no matured timber available. What is purchased from the timber growers are not fully matured timber. Matured trees have been exhausted in Tripura. Estate owners sell immature timber for quick money.

Timber marking by the Forest Department, according to them is followed very strictly. Even where the logs are from private farm the government marks the logs.

The SIT guideline says that within 90 days of timber registration, permit for cutting & transit pass has to be given. But this never happens due to this delay and harassment illegal felling increases. If more permit is given and within a short span of time without harassment then illegal felling will go down. Department is indifferent to illegal felling. Illegal timbers apprehended by the authorities are destroyed without routing it to the market. If the authorities make the illegal timber available to the market then demand will be satisfied and illegal felling will be reduced.

Departmental Forest supervision is top in Tripura. Record maintenance procedure is very strict in Tripura. Any piece of timber that has to be sent out of State has to be pre scheduled and every piece is to be accounted for to the extent of stating the number of the log and the number of the piece obtained from that log. This rigidity took place from 1996 after the Supreme Court verdict. Earlier there was no restriction and uncontrolled felling took place during that period. Supreme Court took the lead in controlling illegal timber felling and constituted a high power Special Investigation Team for controlling illegal felling. In these parts the Committee is known as SIT. SIT has the same power as that of the Supreme Court. Now we follow the guidelines given by this committee. But there are hindrances in maximum utilisation of resources. We maintain a conversion register where the following is recorded:

1 Tree: say the number is 0218

It may produce 5 pieces, so each log will be 0218/1. 0218/2 till 0218/5

Length = 1.90 mts,

Girth= 0.61 mts

Volume =0.044 mt<sup>3</sup>.

From the above at the saw mill two pieces of the same size logs [as described below] may be procured:

Length = 1.88 mts,

Width= 13 centimetre

Thickness=0.10mts

Volume =0.016/0.017 each

Total sawn volume being 0.033

So the wastage from a log is about 25%. Since the record cannot be changed, the logs cannot be customized as per customer demand and have to be sold. Transit pass is issued as per the record detailed above. Therefore there is no provision for further conversion or customization. The wasted amount can yield a number of pieces which can be utilized as bits, wooden floor and wall tiles after proper processing [as is done in Malaysia] but this is not done in India. At present the waste wood is mostly sold as fire wood which is a major wastage. Even as fire wood the waste wood pieces and saw dust can be processed into bricket having the same calorific value of charcoal but even that is not being done. Behind each wasted piece there is a cost in terms of man days, man power and wages etc. The other wastage is sawdust which is dumped here and there. It causes fire. Even saw dust can be processed into furniture making, curios making, press board making by densification but all that is wasted.

As per the verdict of the Supreme Court in the total North East region there is illegal timber trade in large quantity. Local use comprises more of illegal timber than legal timber. Illegal timber is largely grown in private land due to the practicability of the present SIT rules. The Rules for Guidelines for Extraction of Timber from Non Forest Land requires obtaining of permission for felling of timber from private land. The permission takes ages to come. Sometimes the applicant grows old and even dies but the permission does not come. The reason for such a sorry state of affairs is the delay in official processing and its complication. Local forest authorities should be empowered to process and facilitate issue of license. In illegal sowing the sawing is done manually resulting in very high percentage of wastage. The dilatory process of permit issuance discourages new plantation. The forest department does not cultivate timber for supply. The ceased timber is supplied through auction. Where due to major projects such as road ways, railway tracks, dams etc., forest timber is to be cut; they are given out for cutting after floating tenders for the same.

Even ready furniture is difficult for transportation in Tripura. Even for that detailed history of the wood and relevant transit papers, procurement papers etc. have to be submitted. This makes the transportation almost impossible. So illegality is encouraged. Wooden windows

frames, door frames furniture, etc are transported without papers with the help of high corrupt practices such as, bribery etc.

Heavy tree felling and destruction of forest has led to a noticeable climate change. Tripura is warmer now with less rainfall resulting in drying up of surface water. The sawmill owners do not believe that wood business is detrimental to forest if it is done legally. However excessive strictness in implementation of rules and lack of incentives for trading in other forest produce has led to corruption. The laws should be moderately strict and able to cater to demands of the time and circumstances. For this JFM committees, JFMC, have to be strengthened and forest- people- forest official relationship should be more intimate, complimentary and mutually beneficial.

The researcher also interviewed a private forest owner by name Abdur Jabbar.

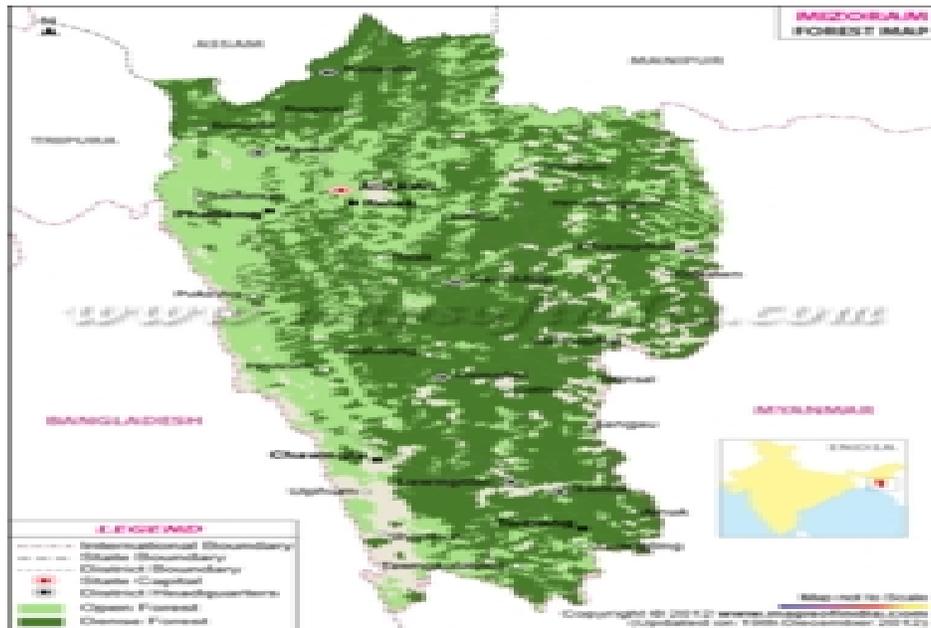
He has his own land and purchases from other people's estate also and supplies timber to the saw mills. He is both owner and a middle man and also a Government enlisted contractor. 13.5% vat has to be paid on round timber sale from the private estates.

There are no plantation rules or Plantation act applicable to timber estates. In order to cut the timber trees from the estate one has to submit land purchase deed to the forest department along with a statement of number of trees on the land have to be submitted to the Range officer. The Range officer sends the papers to the DFO. DFO sends the papers to the SDM for inspection and verification of statement. The SDM inspects the property along with the Tahsildar. For every 2.5 acres of land one day's salary of the SDM has to be deposited as fees. The Inspection report is then sent back to the DFO through the SDM. If the DFO is satisfied he allows felling of thirty trees at a time. If he is not satisfied he issues a working plan and a fresh inspection. The entire process takes a very long time, sometimes the life time of a person. So if everything has to be timely at every stage one has to pay money as bribery. In his case it took three years. He had to pay huge money as bribery and all the three years he remained unemployed yet the illegal and corrupt demands of the forest officials had to be satisfied. Due to the latter reason he incurred heavy debts and went almost bankrupt.

More and more people are now shifting to rubber plantation. It is supervised by the rubber Board and is easy money.

According to him people sitting in A. C. rooms and making laws are alienated from the common man; they are not acquainted by the ground reality. Such laws are useless and non beneficial. This is deliberately done to encourage corruption.

#### ❖ STATE OF MEZORAM



**Map no.6 showing the forest cover of Mizoram**

The researcher was told that it would be better if he went to Mizoram by air as the roads were almost nonexistent, tedious, and took about eight to ten hours. The researcher gave the proposal a considerable thought. He realised that he needed someone who could talk Mizo language and was familiar with the State. So he needed to form a team and travel. That made flying very expensive. The researcher and his team set out on road that ran through very dense forest.

The roads were almost nonexistent and very dangerous. The terrain was mesmerizingly beautiful but the journey was extremely tedious and time consuming. The teams were virtually on a dangerous and alien terra firma. The path way that was an apology for a road traversed through very dense forest punctuated by little hamlet villages concealed within the folds of the forest.

The village houses that the team passed had huge quantity of cut logs stacked in front for being used as fuel wood. Almost all of these were from illegally felled trees. Another

interesting feature of these village houses was that they had no locking system on their doors. Most of the houses were partially wooden structures. Almost all villages had electricity. The team was not allowed to take photographs. The interpreter and guide told that taking photographs may set out violent protest from the village community. It was also observed that logs were stacked at the side of the road. None of the logs had any marking. Not from the forest department and also not from the private estate owners. Almost all the logs were immature and did not have much girth. The researcher was informed that in Mizoram no sawmill license was being given. Only hand sawing was permitted. This meant that not only illegal sawing could take place but there would be much wastage also.

Mamit district of Mizoram is notorious. It is also the largest and the poorest district of Mizoram. Any one venturing from mainstream India is often harassed or kidnapped. The Guide cum interpreter relegated the team with many such kidnap stories. Most of the timber felling was observed in the district. Because of the fear of the local people, very few forest officials were visible and also the roads were left almost nonexistent. Though it was told that crime in Mizoram is nonexistent and the researcher found the accompanying team very fearful and they were recounting many stories of kidnapping etc. The researcher was warned that Mizos were of volatile temperament and if provoked things could go terribly wrong. Bribery, it was informed, was unknown in Mizoram. At the same time the researcher also informed that it would be a different matter if you forced some money on to someone for getting something done or gave some money in appreciation of something that has been done, it would not be considered as bribe in Mizoram. Clearly a definition of “legality” and “illegality” was different in Mizoram; each had a different yardstick here.

The researcher met a person who was the owner a couple of elephants. The researcher was told that his elephants were hired for moving huge logs in deep forest areas. Such logs were not accessible in the open market.

It took almost nine hours to reach Aizawl across a very rough and dangerous terrain running through very dense forest. In Aizawl it was noticed that the cars were left in the parking lots with keys hanging in the ignition. The researcher found the local people were friendly, amicable and easy to mix with.

Though the researcher was told not to take any photograph, he still managed to get some photographs. Each time he took a snap, the guide and interpreter became nervous warning him of serious retaliation. One particular photograph he took was that of people cutting a tree.

The moment they saw the researcher, the people wanted to run away. The interpreter and guide were extremely upset because he felt that those people could have attacked on retaliation. However, he gave the researcher to understand that he was saved because those people thought that he was a forest official.

The researcher witnessed the tail end of a fight between people of two timber merchants over three truck loads of timber. The fight was over the ownership of the truck load of timber. Apparently the violent fight was settled with the exchange of some money. One of the timber merchants interviewed disclosed to the researcher in confidence that he also had a sawing machine which he did not disclose to the forest officials. On being challenged on the illegality of keeping the same he said that there was a mutual understanding with the forest officials that his timber trade was “minor cottage industry”.



©Captured by Ripon Bhattacharjee: Picture showing illegal felling of trees in Mizoram

Despite best efforts, no forest officials were available for interview. Mizoram being very expensive and their being difficulty of boarding and lodging. It was not possible to stay for an indefinite period and pursue the forest officials. In view of this the researcher could not interview any forest officials in Mizoram.

The researcher was able to interview two saw mill owners:

District	Name	Duration of	Annual Volume of timber dealt
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		<b>business</b>	<b>cubic metre.</b>
Lumoi	Zodningthari Mill	29 years	10,000 cft
Khawnmun	Khawnmun Mill	6 years	Round timber: 44000 cft. Sawn Timber: 24000 cft

**Table no. 16 showing the interview of sawmill owners in Mizoram**

Both Zodningthari Mill and Khawnmun Mill dealt with timber procured from North eastern states and local private estates and they did interstate business. There being no timber loading railway station notified in Mizoram the timber had to be moved by road to the nearest timber loading station namely, Dharmanagar in Tripura.

The experience of the empirical study was very educative. More than the interviews the travel and the hands on experience benefitted the researcher more.

Across India there is the problem of illegal timber trade. Kerala appears to have controlled illegal timber trade very effectively due to its educational and economic climate. The majority of the forest personnel and some informed sawmill owners have deeply appreciated the Supreme Court's mandate in the Godavarman case. Corruption too is admitted directly, indirectly and openly. The North Eastern states seem to have benefitted because after 1996, there appears to be more systematic and scientific forest management. This has also helped in implementation of the laws. As in every case even post Godavarman there have been some operational difficulties in most of the States but overall the picture is positive. Tripura is a special point in reference and according to the researcher despite illegal logging, the situation has improved and the laws are stringently implemented.

## **CHAPTER 7**

# **LEGAL FRAMEWORK RELATED TO TIMBER TRADE IN THE STATE OF TRIPURA AND ITS IMPLEMENTATION**

### **THE FRAME**

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 implementational perspective.

### **FOCUS**

The focus of this chapter is on timber trade within the state of Tripura and the mechanism for its implementation.

## **OBJECTIVE**

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.

## **FREEDOM OF TRADE, PROFESSION, OCCUPATION AND THE CONSTITUTION OF INDIA**

The Constitution of India ensures that all citizens shall have the right to freedom of carrying on any profession, occupation, trade or business<sup>545</sup>. However, this right is subject to certain reasonable restrictions<sup>546</sup> that may be imposed by the state in the interest of general public. The state is empowered to make laws for imposing reasonable restrictions on trade.

For the purpose of this chapter the reasonableness of the restriction relating to trading in forest produce is directly linked with the issue of sustainable development. A just balance has to struck between the restriction impose and the social control intended to be achieve. The reasonability of the restriction is to be determined in an objective manner from the stand point of the interest of both the future generation and the general public and not from the point of view of the trading person upon whom the restriction is impose. In *Aramachine and Lakri Vikreta Sangha v State of Rajasthan*<sup>547</sup> the Rajasthan forest produce (establishment and regulation of sawmills) rules 1983 were challenged being violative of Article 19 (1) (g) of the constitution. The court held that an imposition of restriction requiring a person to obtain permission from proper authorities for cutting trees cannot be held to be unreasonable. Such rules are not in contravention of the provision of the constitution. The object behind regulating the saw mills and its activities is to prevent illicit felling of trees on account of which ecological problems and many other problems crop up. Felling of trees is likely to be controlled by regulating the trade on timber by the saw mills owners and the State has the power to prosecute a person who runs the trade without obtaining prior permission. So long

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<sup>545</sup> Article 19 (1) (g) of Constitution of India.

<sup>546</sup> Article 19 (6) of the Constitution of India.

<sup>547</sup> AIR 1992 Raj 8.

as the rules are regulatory and not prohibitive in nature, they cannot be termed as violative of Article (1) (g) of the constitution.

In *Sushila Saw Mill v State of Orissa*<sup>548</sup>, the Supreme Court held that total ban imposed upon saw mills business or sawing operation within prohibited area of reserved or protected forest was not violative of Article 19 (1) (g) read with Article 301 of the constitution. It is a settled principle of law that in public interest under Article 19 (6) may amount to prohibition.

## **AN OVERVIEW OF LAWS RELATING TO TIMBER TRADE IN TRIPURA**

As the in the rest of the country in Tripura also the Indian Forest Act 1927 occupies primary position for regulating activities relating to forest, transit of forest produce and the duty leviable on timber and other forest produce. Section 51 of the 1927 Act was amended in Tripura and a new Section 51 A was inserted to regulate manufacture and preparation of articles based on forest produce as Act NO. 10 of 1984 called the Indian Forest (Tripura Amendment) Act 1984 which empowered the state government to regulate, manufacture and preparation of articles based on forest produce by the use of license, permit or otherwise (and the payment of fees therefore) of saw mills and other units including factories engaged in manufacture of preparation of plywood, veneer, wood panel products, boxes including packing cases out of wood and, such other materials based on forest produce as the state government may, by notification in the official gazette from time to time specify<sup>549</sup>. The Act further provides for the regulation by license, permit or otherwise, of procurement of raw materials for the purpose of the above mentioned articles, the payment and deposit of fees therefor and for due compliance of conditions thereof, the forfeiture of the fees so deposited or any part thereof for contravention of any such condition, and the adjudication of such forfeiture by such authority as the state government may, by notification in the official gazette specify<sup>550</sup>. Any contravention of the above rules calls for imprisonment for a term which may extend to 6 months, or fine which may extend to Rs.500 or both<sup>551</sup>.

The Indian Forest Act 1927 was further amended in Tripura as Tripura Act No. 8 of 1986 with relation to application of the 1927 Act in the State of Tripura and a new Section 52 A was inserted after Section 52 of the Indian Forest Act 1927.

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<sup>548</sup> (1995) 5 SCC 615.

<sup>549</sup> Section 51 A (1) (a) (ii) (iv) (v), The Indian Forest (Tripura Amendment) Act, 1984.

<sup>550</sup> Section 51 A (1) (b) The Indian Forest (Tripura Amendment) Act, 1984.

<sup>551</sup> Section 51 A (2), The Indian Forest (Tripura Amendment) Act, 1984

Section 52 A of the Indian Forest (Tripura Second Amendment) Act 1986 states that where a saw mill is established, maintained or operated without a license or without renewal of license the authorized officer may order confiscation of the stock of wood together with whole or portion of the plants, machinery, implements, tools and equipments of the saw mill<sup>552</sup>. Where the authorized officer seizes any forest produce or any such property is produce before the authorized officer after seizure by any forest officer and the authorized officer is satisfied that an offence has been committed with respect to such property, he may, whether or not a prosecution instituted for the commission of such forest offence, order confiscation of such property so seized and used for the commission of the forest offence<sup>553</sup>.

No order confiscating any property shall be made unless the person from whom the property is seized and in case the owner of such property is known, such person is given<sup>554</sup>:

- a. A notice in writing informing him the grounds on which it is proposed to confiscate such property;
- b. An opportunity of making representation in writing within such reasonable time as may be specified in the notice against the grounds for confiscation; and
- c. A reasonable opportunity of being heard in the matter<sup>555</sup>.

Any forest officer not below the rank of Conservator of Forests empowered by State Government in this behalf by notification, may within 30 days from the date of order of confiscation by authorized officer under sub-section (1) or subsection (2) either suo motu or on application, call for and examine the records of that order and may make such inquiry or cause such inquiry to be made and pass orders as he may think fit. Provided, that no order prejudicial to any person shall be passed without giving him an opportunity of being heard<sup>556</sup>.

Any persons aggrieved by an order under the above circumstances may, within 30 days of passing such order appeal to the district court under which the property is seized, and the District Court after hearing both the parties may pass necessary order. Ordinarily the property so seized vests in the State Government free from all encumbrances. For the purposes of

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<sup>552</sup> Section 52 A (1), The Indian Forest (Tripura Second Amendment) Act, 1986

<sup>553</sup> Section 52 A (2), The Indian Forest (Tripura Second Amendment) Act, 1986

<sup>554</sup> Section 52 A (2), (a), (b), (c), The Indian Forest (Tripura Second Amendment) Act, 1986

<sup>555</sup> Ibid.

<sup>556</sup> Section 52 A (4), The Indian Forest (Tripura Second Amendment) Act, 1986

these provisions the authorized officer should not be below the rank of Assistant Conservator of Forest<sup>557</sup>.

The third amendment to the Indian Forest Act, 1927 took place in 1990<sup>558</sup> amended Section 68 (3) of the Indian Forest Act 1927 and for the words (hundred rupees) and the words (fifty rupees) the words (one thousand five hundred rupees) and (five thousand rupees) respectively was substituted.

A bird's eye view of the above amendments of the Indian Forest Act 1927 indicates that in Tripura the act of trading in wood and wood products have been more fine-tuned and focused in Tripura but the penalty remains the same i.e. six months imprisonment and Rs.500 fine which is very nominal and may have no impact upon trading. The Tripura Second Amendment to section 52 of the Indian Forest Act speaks about confiscation of the property machinery and tools etc. of the saw mill for non-compliance of provisions of license permit etc. is also made much more specific and workable than the principle Act<sup>559</sup> and appears to be quite stringent and deterrent. The third amendment of 68 (3) of the Principle Act appears to be in tune with the contemporary than the principle Act. Therefore it is noted that the primary laws relating to timber trading in Tripura is more specific, workable and deterrent than what is seen in the Indian Forest Act 1927.

### **THE TRIPURA FOREST (ESTABLISHMENT AND REGULATION OF SAW MILLS AND OTHER WOOD BASED INDUSTRIES) RULES 1985**

Under these rules "saw mill" means a mill for sawing timber or logs into logs or beams or scantlings or planks or battens and includes hand saws whether in a fix structure or enclosure or not<sup>560</sup>. "Permit" means a written permission for carrying out any of the acts or operations covered by these rules<sup>561</sup>. A "unit" means a shop or establishment or premises used wholly or impart for manufacturing or processing or repairing for sale of commodities or articles based on forest produce as envisaged in the Indian Forest (Tripura Amendment) Act 1984<sup>562</sup>.

In Tripura circumstances prohibiting establishment of saw mills etc. and grant of license are as follows:

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<sup>557</sup> Section 52 A (5), The Indian Forest (Tripura Second Amendment) Act, 1986

<sup>558</sup> The Indian Forest (Tripura Third Amendment) Act 1990.

<sup>559</sup> Indian Forest Act 1927.

<sup>560</sup> Rule 2 (1)(i), Tripura Forest (Establishment And Regulation Of Saw Mills and Other Wood Based Industries) Rules 1985

<sup>561</sup> Rule 2 (1) (g), Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) Rules 1985.

<sup>562</sup> Rule 2 (1)(k), Tripura Forest (Establishment and Regulation Of Saw Mills and Other Wood Based Industries) Rules 1985.

1. Saw mill or units cannot be established outside industrial estate and without obtaining license.
2. The saw mills, plywood mills, and other wood based industrial units which are on Government land, which have been cleared by the high power committee with or without penalty shall be permitted to establish their saw mills or unit within the industrial estate and license may be granted for the same subject to condition that they are not against public interest<sup>563</sup>.

Applications for license have to be made to the authorized officer in a prescribed form. On receipt of an application the authorized officer shall make necessary enquiries within 30 days from the date of application and submit his report to the chief conservator of forest, Tripura. The authorized officer shall specifically mention in his report whether the required quantity of timber as determined by the approved working plan is available on annual basis. The Principal Conservator of Forest then forwards the application along with the report of the authorized officer and his own recommendation to the state level expert committee for their consideration and recommendation. After considering the recommendation of the state level expert committee the Principal Chief Conservator of forest may direct the concerned authorized officer to grant license in a prescribed form or reject the same. In latter case the reasons for so doing must be recorded in writing. While directing the authorized officer to grant license, the Principal Chief Conservator of Forest shall decide against which notified industrial estate, as notified by the Government of Tripura, the license shall be issued. For the above purposes the authorized officer may enter into any land, survey and demarcate the same, make a map of the premises and call for such document as the officer may deem necessary<sup>564</sup>.

A license is to be renewed in prescribe form within 30 days of the expiry of the same. On receipt of the application for renewal of license the authorized officer make the necessary enquires and may grant or refuse to grant license within 30 days of the receipt of the application. In this process the applicant must be given full opportunity for presenting his case in compliance of the provision of natural justice. An application for renewal of license may be rejected/ declined only on the following grounds:

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<sup>563</sup> Rule 3 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985.

<sup>564</sup> Rule 4 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985.

1. If the application for renewal is made after the expiry of the stipulated period specified therefor.
2. Any statement made by the applicant is found to be incorrect or materially false.
3. The applicant has contravened any of the terms and conditions of the license or provisions of the rules or provisions of the Act.
4. The applicant failed to fulfill the terms and conditions stipulated in the license.

The license is issued or renewed for a period of one financial year, and it is not transferable or assignable. The issuance or renewals are done after the deposit of the prescribed fee by the applicant<sup>565</sup>.

A license can be cancelled by the conservator of forest for reasons recorded by him and after affording the license holder is right of natural justice. A license may be suspended or cancelled under the following circumstances:

1. If there is material misrepresentation or false statement made to procure the license.
2. The license holder has contravened any of the terms and conditions stipulated in the license, rules or the Act<sup>566</sup>.

The maintenance of record by the wood base units and progress report shall be regulated in accordance with the guidelines for the wood based units in North Eastern States issued by the Ministry of Environment and Forest<sup>567</sup>.

The records kept by the wood by the wood based unit can be inspected or verified by the authorized officer or any forest officials not below the rank Head Forest Guard appointed by the Conservator of Forest. Such investigation can be done at any time and without any notice.

The following documents may be so inspected:

1. Guidelines for the wood based units in North Eastern States.
2. Stock of raw materials and
3. Stock of sawn timber or manufactured products or processed products.

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<sup>565</sup> Rule 5 and 6 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985.

<sup>566</sup> Rule 7 and 8 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985

<sup>567</sup> Rule 9 (2) of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985

During such inspections and verification the license holder or his authorized agent, employees and workers are lawfully required to extend all possible assistance and produce all documents and records as may be called for inspection and verification<sup>568</sup>.

All Forest produce entering or leaving a saw mill or other units including factories shall be covered by a transit pass duly issued under the provision of the Tripura Forest (Transit) Rule. An officer not below the rank of Head Forest Guards can be appointed as an inspecting officer of a specified area<sup>569</sup>. The penalties for contravention of any of these provisions is imprisonment which may extend to six months or fine which may extend to Rs.10,000 or both<sup>570</sup>.

In the year 2000 these rules were amended<sup>571</sup> and under these rules, inter alia, a high power committee constituted by the supreme court of India was brought within the preview of the rules<sup>572</sup> and a State level expert committee was constituted by the Government of India in pursuance of Supreme Court order<sup>573</sup>. Under this amended rules any contravention of the directions of the high power committee also shall be a reason for cancellation or suspension of license for setting up saw mills or wood based units.

These rules were again amended in 2002<sup>574</sup> and a new sub-rule was inserted after sub-rule 2 in rule 3 of the principal rule which reads as follows, “No person shall possess or import in the State items like saw mills or any other tree/timber cutting/ or processing equipment without obtaining a license in a prescribed form issued by an authorized officer<sup>575</sup>. Sub rule 2 is also inserted in rule 13: “without prejudice to the power of the forest officers, the State Government may for the purpose of preventing unauthorized import of item enumerated in

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<sup>568</sup> Rule 10 and 11 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985

<sup>569</sup> Rule 13 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules, 1985.

<sup>570</sup> Rule 14 of Tripura Forest (Establishment and Regulation Of Saw Mills And Other Wood Based Industries) Rules 1985.

<sup>571</sup> Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) (Second amendment) Rules 2000.

<sup>572</sup> Rule 2 (L) Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) (Second amendment) Rules 2000.

<sup>573</sup> Rule 2 (O) Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) (Second amendment) Rules 2000.

<sup>574</sup> Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) (Third amendment) Rules 2002.

<sup>575</sup> Sub rule 3 to rule 3, Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) (Third amendment) Rules 2002.

rule (3) entrust any officer of the department of taxes and excise with the additional duties of inspection and checking at entry points<sup>576</sup>.

These rules were again amended in 2006 and after rule 2 (1) (i) and (k) a new sub-rule 2 (1) (i) was inserted which read “ ‘saw mill and other wood based industrial unit’ means saw mill, veneer unit, plywood unit with or without slicer and/or pillar, particle board unit, block board unit, medium density fiber board unit, molding beat unit, sandal wood oil extraction unit, or any other unit which uses any mechanical or electrical device for cutting, converting or shaping timber”. Rule 2 (1) (k) under the 2006 amendment reads: “‘secondary wood based industries or shop’ means agar wood oil extraction unit, furniture making unit, electrical accessories making unit, sports goods manufacturing unit, handicraft manufacturing units having vertical band saw up to 9 inch opening and / or circular saw up to 12 inch in diameter for the purpose of re-sawing of sawn timber originated from the High Powered Committee cleared saw mills located inside notified wood based industrial estate for its own use provided that they are not involved in sale or trade of sawn timber and also provided that they do not use round timber for sawing or re-sawing. A shop means any shop or establishment or premises used wholly or in part for the sale of converted or fashioned timber, furniture, handicrafts, cabinet or other articles made of forest produce”.

The law relating to timber trade is very strictly implemented in Tripura. In 1991 a notice and a memorandum of the forest department required that the performance of the saw mills in the state of Tripura be assessed and action be taken against the unlicensed and illegal saw mill<sup>577</sup> and in action and failure to take action against the unlicensed saw mill as required under law will henceforth be treated as a serious dereliction of duty. Action taken should be promptly reported by the conservator of forest and Divisional Forest Officers to the Principal Chief Conservator and to the State Government.

A file relating to a court case in connection with a saw mill was sent to the law department for their opinion. The L.R. and Secretary Law, Government of Tripura in the said file observed as follows<sup>578</sup>:

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<sup>576</sup> Rule 13 (2), Tripura Forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) (Third amendment) Rules 2002.

<sup>577</sup> Letter no. F.7 (87)/For F.P-86/25543-758 dated 24.5.1991 and Forest Department Memo No. F. 7 (148)/For-90/46455-74 dated 16<sup>th</sup> Oct. 1990, Letter No. F.7 (83)/ For/F.P.-86/28078-89 dt.29.06.91 of PCCF (T).

<sup>578</sup> Ibid.

The saw mill in question appears to have been functioning over a year as per records. The records available in the file do not show what action the forest department has taken up against the owner of the saw mill for running the business of sawing illegally.

It may, therefore, be mentioned that one may be said to have committed the offence of abetment by illegal omission from due discharge of duties<sup>579</sup>.

The inaction and failure to take action against the illegal saw mills by the concern forest officials will constitute commission of offence of abetment by illegal omission from due discharge of duties. In other words, going by the law, if prompt legal action is not taken as per the provision of law the concern DFO will be guilty of commission of the offence of abetment<sup>580</sup>.

The letter further stated that the forests are disappearing very fast. The illicit felling and conversion of illicit timber in the saw mills clandestinely has gone beyond all limits. The licensed saw mills are also not being regularly checked nor submission of the bi-monthly returns which are required to be submitted by the saw mills. No action has also possibly been taken to initiate and conclude the confiscation proceedings. All these speak very ill in the matter of performance of the division pointing the accusing fingers of the public and that of the press to the connivance of the forest officials in the matter of illicit felling and destruction of the forest. Confiscation proceedings are to be drawn against the unlicensed saw mills or any saw mill which is found to accept or convert illegal timbers and those who do not submit the bimonthly reports within the statutory period as required under the rule. Each DFO is required to submit a detailed report of their division with respect of the saw mills within their jurisdiction to the Conservator of Forest who will then act upon it<sup>581</sup>.

The unlicensed saw mill in the State are a major single factor contributing to illicit felling of trees from the forest. The Indian Forest Act was amended in 1984 as “Indian Forest (Tripura Amendment) Act 1984 and the Rules namely, Tripura Forest (Establishment and Regulations of Saw Mills and Other Wood Based Industries) Rules, 1985 were made there under making it compulsory for all the saw mills to obtain license for their establishment and running and also to submit the statutory returns. The Indian Forest Act was further amended in the year

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<sup>579</sup> Ibid.

<sup>580</sup> Ibid.

<sup>581</sup> Ibid.

1986 as “Indian Forest (Tripura Second Amendment) Act 1986” empowering the authorized officers to confiscate the saw mills which are established, maintained or operated without license or without renewal of license. It is observed that although provision of confiscation of the saw mills was made by amending the Indian Forest Act in the year 1986 for its application to the state of Tripura no action is being taken by the DFOs to confiscate any of the unlicensed saw mills for violation of the provisions of Indian Forest Act. On the other hand, in addition to the saw mills this already existed at the time of enforcement of the Tripura Forest (Establishment and Regulations of Saw Mills and Other Wood Based Industries) Rules, 1985 new unlicensed saw mills are coming up in the State. The inaction by the concerned DFO in the matter of taking appropriate legal action towards confiscation of unlicensed saw mills have become a cause for concern<sup>582</sup>.

It is significant to note that such acute and strong concern was expressed in the State of Tripura much before the historic judgment of the Supreme Court in Godavarman case in 1996<sup>583</sup>.

As early as 1950, a notification<sup>584</sup> was there to the effect that now sawyers were allowed to saw a tree within a mile (now two kilometer) or protected forest without having registered his name and obtained a license from forest department. By virtue of the same notification all traders of forest produce were required to register themselves with the department of forest in Tripura.

As per the 2001<sup>585</sup> no forest produce shall be brought to or remove from the Reserved Forest, Proposed Reserved Forest, Protected Forest, Un-classed Open Government Forest or from any other areas in any form of conveyance or contrivance which is not registered by the forest department and which does not bear a registration number.

In Tripura no trader can carry on trade in forest produce or business through any limit which is not defined in Rule 2 of Tripura forest (Establishment and Regulation of Saw Mills and Other Wood Based Industries) Rules 1985 and without obtaining Forest Trade License. Such license is not granted to a non citizen. The DFO decides the maximum number of Forest Trade License that will be given in one financial year subject to the approval of the Principal Chief Conservation of Forest (PCCF) and availability of forest produce which can be

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<sup>582</sup> Ibid.

<sup>583</sup> AIR 1997 SC 1233.

<sup>584</sup> Notification no: 104-J, dated 24 August, 1950 read with Section 76 (d) of the Indian Forest Act, 1927

<sup>585</sup> No. F. 7(8)/For/FP-2001/14,431 dt. August 25<sup>th</sup>, 2001.

scientifically harvested on the basis of sound forest management without causing deterioration and depletion of forest. In order to export to other states from the State of Tripura and import from other states into the State of Tripura it is important for the trader to hold on import/export license.

The Penalty for contravention of the above provisions is punishable with imprisonment which may extend to six months or fine which may extent to Rs.2000 or both<sup>586</sup>.

Under the Tripura Forest (Establishment and Regulation of Depots) Rules 2006, there shall be one or more depot under control of the DFO to which timber, timber logs, fashioned timber, drift wood, sunken, salvaged wood together with seized or confiscated, boats, tools, vehicles etc as defined in the Indian Forest Act 1927 and its amendments shall be taken to and stored at for safe custody, examination, marking, disposal and sale. Record of day to day transaction, transportation has to be maintained mandatory and regular returns are to be filed. The Range Officer has the duty of periodic inspection and report.

Despite such stringency it has been observed that in many cases the Tree Registration Certificates issued on the basis of joint verification by Forest and Revenue Department do not contain accurate information about CS Plot, Owner of plot etc. as well as number of trees standing on the plot. To check illicit felling and other malpractices re-verification of Tree Registration Certificates at random was called for<sup>587</sup> and the verification of Tree Registration Certificates still continues under the said notification.

Under the Tripura Forest (Timber Marking) Rules 1985, marking of trees are to be done by a person not below the rank of forester with departmentally supplied hammer and digits. Trees of which felling is not required need not be marked. Mark must be done on heart wood of the tree and the impression must be very distinct<sup>588</sup>.

A tree can be felled only after stand marking and after realization of royalty in case of tree allowed on permit of necessary security deposit and part of valuations for tree as assessed by the DFO as per terms and conditions of auction/tender/negotiation is paid after the trees are delivered to the party and necessary agreement executed for the lot disposed of by auction/tender/negotiation after the tree is felled, logging must be done on site itself.<sup>589</sup> Log

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<sup>586</sup> Notification no: F 7 (8) / For / FP-2001 /14, 431 dt August 25<sup>th</sup> 2001.

<sup>587</sup> Notification no: 12 (141)/Gen/PD/FOR-10/8748-76 dt. 9<sup>th</sup> July 2010

<sup>588</sup> Rule 2 (1) (2) of the Tripura Forest (Timber Marking), Rules 1985.

<sup>589</sup> Ibid.

marking is to be done on the cut surface of the thinner end of each log. The marking should indicate the serial number of the log starting from the bottom of the log, serial number of the tree and the year of stand marking with at least three impressions of TFD<sup>590</sup> hammer put over the said out surface<sup>591</sup>. The length and mid girth of each log should be measured accurately and recorded in the field log. Marking Book along with the number of trees and transferred to the register maintained for the purpose<sup>592</sup>. After realization of all dues sales marking is to be done on the cut surface of the thicker and expression of the sale hammer must be distinct and spread all over the cut surface of each stem and on the surface of the thinner and this indicate that the tree has been lawfully sold and all dues have been realized. This marking has to be done by a person not below the rank of a Forest Ranger<sup>593</sup>. Ordinarily sawing of logs into pieces is not allowed in the forest but may be done under very special circumstances without causing damage to the existing forest. Each piece has to come under the TFD hammer with distinct marking. Marking hammers are allotted to forest officers by name and are not transferable<sup>594</sup>.

## **TRIPURA FOREST TRANSIT RULES AND AMENDMENTS<sup>595</sup>**

Transit pass is necessary for the movement of any type of forest produce. Timber and fire wood cannot be moved from its origin to any other place beyond the jurisdiction of the Beat without the transit pass (TP). TPs are issued free of cost on a written application to issue the transit pass deem fit and consider necessary and on realization of all dues and after making necessary inquiries.

A TP is valid only for the destination for which it is granted within the territory of the state of Tripura. In case a forest produce is to go to a place outside the jurisdiction of the State of Tripura, then the produce / product is to be surrendered to a forest ranger in charge of that range and a TP from an forest officer in-charge of the boarder through which the material has to pass and then after crossing the border it must again be surrendered to the forest officer in-charge on the other side of the border and a fresh TP have to be issued.

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<sup>590</sup> Tripura Forest Department

<sup>591</sup> Rule 4 of the Tripura Forest (Timber Marking), Rules 1985.

<sup>592</sup> Ibid.

<sup>593</sup> Rule 5 of the Tripura Forest (Timber Marking), Rules 1985

<sup>594</sup> Rule 6 of the Tripura Forest (Timber Marking), Rules 1985

<sup>595</sup> Section 41 and 42 of the Indian Forest Act 1927 read with Notification no: 104J dt 24<sup>th</sup> August 1950.

For reasons to be recorded in writing a transit pass may be issued upon a fresh application made. Fresh transit pass is necessary for the movement of forest produce including timber from point to point.

A transit pass can be issued to the owner only. No TP can be issued on the strength of saw mill or on the basis of any chit of paper issued by the saw mill but can be issued only after physical inspection of the goods and after ensuring that all dues with respect to the goods have been cleared<sup>596</sup>.

In case of importing or exporting of the forest produce the matter shall be presented to the forest officer in-charge of the place of origin or entry of the forest produce for examination or checking and payment of any amount that may have to be paid. Transit pass, ordinarily, may be issued to a license holder for the above purpose, renewable after a stipulated period. The conditions for issuing the license, the route or routes through which the timber has to move and the destination outside the State of Tripura has to be mentioned in the license. The conditions or period of validity varies from categories of timber to timber. Renewal of license has done only after the authorized forest officer is satisfied about the location, availability of raw materials, financial capacity, past records, and the antecedent of the applicant. An officer may reject the application for renewal of license for reasons to be recorded in writing and the same shall be communicated to the applicant. In case of rejection the rules of natural justice shall be strictly followed<sup>597</sup>.

Under these rules a forest officer may stop any vehicle, carts, animals, boats, rafts or person carrying the forest produce at any check post or drop gates for inspection of the documents and the goods and detain any forest produce if the documents relating to it are found to be faulty or if the goods do not match the description or if any amounts remains to be paid with respect to the produce. After the produce has reached the destination the transit pass and the goods must be surrendered to the forest officer nearest to that destination for examination<sup>598</sup>.

Closing or obstructing any river, stream or channel or the bank of any river, stream or channel used for transit of timber or other forest produce is prohibited. The DFO may order

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<sup>596</sup> Rule 2 of the Tripura Forest Transit Rules and Amendments 1952.

<sup>597</sup> Rule 3 of the Tripura Forest Transit Rules and Amendments 1952.

<sup>598</sup> Rules 4-9 of the Tripura Forest Transit Rules and Amendments 1952.

the person causing the obstruction to remove the same within a stipulated period and recover the cost for the same<sup>599</sup>.

In Tripura, presently trees are not felled from the natural forest especially after 1997 when the Supreme Court of India laid down certain stringent guidelines. Trees are now felled from private forest under individual ownership. The transit rules apply to the movement of timber even from those lands and require that

1. As regards reserved species of trees, the rules for marking, payment of royalty, sale marking shall apply mutatis mutandis.
2. In respect of species of trees other than those mentioned above free transit passes may be obtained from the DFO or on payment of forest valuation wherever necessary<sup>600</sup>.

Any person infringing the transit rules shall be punished with imprisonment for a term which may extend to six months or with fine of Rs.500 or with both. Double the penalty will be inflicted if the offence is committed after sun set and before sun rise or with preparation to resist lawful authority or on repeated offence.

## **EXTRACTION OF TIMBER<sup>601</sup>**

In case of extraction of trees from jote land or allotted land joint inspection is carried out for issuing permit for extraction of trees from such land. For this purpose an application is to be made to the DFO personally on which the DFO records his comment and forward the same to the SDO along with the name of the forest officer who will be entrusted with the joint verification/demarcation. The SDO on receipt of the application passes an order entrusting the work of verification to a revenue officer also and indicate there upon the amount to be paid by the allottees / jotedars before any such demarcation for joint inspection is taken up. Only after the said amount is deposited the joint inspection can take place. The joint verification / demarcation report duly signed by the forest department staff and the revenue department staff shall be submitted to the SDO who will forward one copy of the report to the

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<sup>599</sup> Rule 10 of the Tripura Forest Transit Rules and Amendments 1952.

<sup>600</sup> Rule 11 of the Tripura Forest Transit Rules and Amendments 1952

<sup>601</sup> Memorandum No. F.4 (52)-RCC/86, Government of Tripura, Revenue Department (L.R. Cell), dt. Agartala 6<sup>th</sup> Sept.1990

DFO. The issue of permits for extraction would be based on such a report. Appropriate action is initiated against officers who submit motivated reports.

In the case *T.N. Godavarman Thirumulpad v. Union of India*<sup>602</sup>; the Supreme Court guided that guidelines/rules be framed regarding felling of trees from non forest areas including from plantations on non forest areas. The State Government of Tripura, in compliance of the said order of the Supreme Court of India laid down “Guidelines for felling trees from non forest areas”. Under those guidelines forest means:

- Reserved forest or protected forest or any other area legally constituted as forest, and
- Any area recorded as “forest” in the government records maintained by the forest departments or other government departments, and
- Deemed forest areas identified as per the Supreme Court order in Godavarman case dated 12/12/1996.

“Non forest land” for the purpose of these guidelines means, areas which are not forest as described above. Trees plantations raised in non forest areas by an individual or community or institution or Non Government Organization as may be prescribed by the Principal Chief Conservator of forest. Such forest is required to be registered by the legal title holder and the registering authority should ensure that the land is a non forest land. The DFO shall, prepare and make available a certificate of such registration which shall include a location sketch or map with copies to the village level bodies, Deputy Commissioner / collector, Conservator of forest and the Principal Chief Conservator of Forest. Ordinarily this entire process is to be completed within a period of 90 days<sup>603</sup>.

Certain species of trees like Aam (Mango-*Mangifera indica*), Jamun (Black berry- *Syzygium cumini*), and Kathal (Jackfruit- *Artocarpus integrifolia*), all species of bamboo, Leteku, Paniol, Madhuriam etc. do not require felling permission<sup>604</sup>.

Application for felling of trees for non commercial purposes including in respect of registered plantation is to be made to the DFO after marking the trees for proposed felling. Such application is to be accompanied with the marking list, tree wise measurement, copy of registration certificate wherever applicable and any other detail that may prescribe from time

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<sup>602</sup> Writ Petition (Civil) 202/1995, Order (Dated: 12/12/1996) and 12/5/2001.

<sup>603</sup> Guidelines 3.1 to 3.4, No. F. 7 (44)/ For/FP/2001/PT-II/29,042, dated- Jan.7, 2002.

<sup>604</sup> Guidelines 4.1 to 4.2, No. F. 7 (44)/ For/FP/2001/PT-II/29,042, dated- Jan.7, 2002

to time. The DFO, shall, as soon as possible and not later than 30 days from the date of the receipt of the application shall take necessary decision in the matter failing which it shall be deemed that permission has been granted<sup>605</sup>. Permission may be refused only if the applicant does not have rightful title to the non-forest area or the plantation. An un-registered plantation also calls for refusal of permission to fell trees. For those plantations that are registered for more than three years, permission shall be granted within 30 days of the receipt of the application<sup>606</sup>.

Application for felling trees from non-forest area for commercial purposes other than in respect of registered plantation shall be made by the title holder of such trees in prescribed proforma to the DFO along with documents containing species wise details of trees to be felled, along with the map of the non-forest area from which the trees are to be felled, and also documentary proof of ownership of the land. The DFO after making the necessary verifications and physical inspection of the area shall forward the application to CCF with his recommendation and observation regarding the maturity of the trees and other relevant details including the fact that the land is a non-forest land. The CCF having been satisfied that due diligence has been exercised with respect to ownership of the land, number of trees and the species etc. may permit felling of the trees under intimation to the PCCF. After felling of such trees the transportation of timber shall be done under valid transit pass<sup>607</sup>.

Trees felled in violation of the present guidelines shall be deemed to have been confiscated to the state government but the DFO is at liberty to release the timber obtained from such trees to the legal title holders after recovering from them 50% of the royalty payable to the timber. Such released timber shall not be eligible for purchase or use by any wood based industries, traders, or registered timber transport<sup>608</sup>.

## **DISPOSAL OF TIMBER**

Any person can salvage the drift wood, timber and bamboo and take them to the nearest drift wood depot for which a salvage fee will be paid. In relation to that salvage the DFO has the right of collection and disposal at the rates agreed on by the contracting parties, and no salvage fee shall be claimable in addition to any rate paid under the contract. Drift wood depot shall be notified for salvage by the Conservator of Forest of Tripura. In absence of such

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<sup>605</sup> Guidelines 5.1 to 5.3, No. F. 7 (44)/ For/FP/2001/PT-II/29,042, dated- Jan.7, 2002

<sup>606</sup> Ibid.

<sup>607</sup> Guidelines 7.1 to 7.5 and 8.1, No. F. 7 (44)/ For/FP/2001/PT-II/29,042, dated- Jan.7, 2002

<sup>608</sup> Ibid.

notified area or depot the drift wood, timber or bamboo shall be taken to the nearest forest office and on delivery the officer in-charge of that forest office shall furnish a report to the salvager. The salvage rate shall be payable to the salvager by the Tripura Forest Department (TFD) after the sale of all drift timber or wood or bamboo raft by auction. If any claim is filed with respect to any collected drift timber or bamboo raft before auction thereof takes place and the claim is proved to be true, then the said drift wood, timber or bamboo raft may be delivered to the claimant on payment to TFD<sup>609</sup>:

- a. The average cost incurred per log or raft of bamboo in moving or storing the drift timber and bamboo raft.
- b. A fee as fixed by the DFO concerned for taking care of an watching over the property and also
- c. The salvage fee assessed by the DFO concerned in accordance with the principle.

Any person who infringes any of the provisions mentioned above shall be punished with imprisonment which may extend to 6 months or fine which may extend to Rs.500/- or with both<sup>610</sup>.

Sale of timber from departmental depots is in accordance with national and State government policy. Restrictions are imposed on green felling both in the forest and in plantations. Consequently the quantity of timber available in the depot is not sufficient to meet the growing demand. Due to inadequacy of the availability of timber in the departmental depot, it is necessary to follow certain norms so as to avoid implications. It may be reiterated that national policy contractor system in operation of trees have been completely eliminated and a fresh guideline has been laid down<sup>611</sup>.

Ordinarily forest department will not encourage large number of Forest Trade License (FTL) holders in a division. No new trade license would be issued by the DFOs but renewal of the existing FTLs may be done provided there is nothing adverse against the FTL holders. Issuing of FTL by the forest department allows only trading in forest produce but it does not

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<sup>609</sup> Disposal of Timber, Notification No. 5, dated 29.4.1952, Forest Department, Tripura.

<sup>610</sup> Ibid.

<sup>611</sup> Guidelines regarding disposal of timber from the departmental depots, memo no. F.7 (17) / For. FP-87 /Gen/24, 722-25, Dt. 12.6.89 of PCCF (T).

entitled to holder to get supply of timber from the department. The forest department takes no responsibility of supplying timber to any FTL holder<sup>612</sup>.

The forest department has to make an effort to meet the requirement of timber of the local people for bonafide personal use and supply of timber for such purpose is given preference. Similarly, preference must also be given to the requirement of cottage industries and small scale wood based establishments. A register has to be maintained in the office of the DFO recording the petitions received from various local individuals and local wood based establishments and sale order may be issued by DFO on “first come first serve basis” depending upon the availability of timber, after necessary enquiry and verification regarding the genuineness of the requirement and the bonafide use<sup>613</sup>.

The third importance is given to the requirement of various government departments such as the P.W.D, Agriculture, and Rural Development etc. for various developmental works in the state. The requisitions from these departments will have to be recorded in the register specifically maintained for that purpose in the office of the DFO and sale order should be issued on specific recommendations of the B.D.O, Executive Engineer on “first come first serve basis” as per availability of the timber in the stock. For sale of Saal bridge posts the relevant guidelines have to be strictly followed<sup>614</sup>.

As the availability of timber is very limited and there is heavy demand by the traders, no trade license holder may be given sale order for timber exceeding 7 Cum., or one truck load whichever is lower. Application received from the FTL holders should be recorded in the register to be maintained in the office of the DFO. Sale order may be issued by the DFO on “first come first serve basis” as per availability of the timber in the stock<sup>615</sup>.

Seized timber should not be released to the offender while departmentally; compounding the case and all seized timber should be brought into the departmental stock and sold as per the above guidelines. Since there is non-availability of timber in the state the forest department is very vigilant that no timber is allowed to be transported outside the state<sup>616</sup>.

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<sup>612</sup> Id. at Para 1

<sup>613</sup> Id. at Para 2.

<sup>614</sup> Id. at Para 3.

<sup>615</sup> Id. at Para 4.

<sup>616</sup> Id. at Para 5.

The 1998 order of the Supreme Court in Godavarman case<sup>617</sup> required that the state government should lay down procedure, in order of preference, for disposal of inventorised stock of timber from the Department depot. Such are as follows:

1. Out of seized timber the logs found suitable for manufacture of veneer and plywood shall be processed by the State Government within their own factories and by hiring such facilities
2. The remaining timber belonging to the Government and district Council shall be first offered for sale to the Government Departments for their bonafide official use.
3. The rest timber shall be sold in public auction or through sealed tenders after fixing floor price by an expert committee with the representative from the ministry of environment and forest<sup>618</sup>.

Disposal of timber including timber seized subsequently would be strictly in accordance with the order of the Supreme Court. However, if the State Government required any modification to the 1998 order of the Supreme Court, it may approach the Supreme Court for the same. Accordingly the State of Tripura filed an Interlocutory Application (IA)<sup>619</sup> before the Supreme Court seeking relaxation in the above order of the

court to the extent that the State may be allowed to dispose the seized timber lying in the departmental filled depots by direct sale to the local population with in a limit 3m<sup>3</sup> in each case at government notified rates and as recommended by the expert committee to meet their and personal and bonafide domestic requirement. The Supreme Court vide order dated 01.04.2002 in respect to the above mentioned Interlocutory Application has allowed the application of the State Government of Tripura. By virtue of the said order direct sale of the seized illegal timber is now allowed in the State of Tripura<sup>620</sup>.

## **FOREST PROTECTION**

The extent of the natural forest in Tripura is alarmingly low. Many tree species have become scares and are on the verge of extinction. It is necessary to protect and conserve all the natural forest whatever and wherever they exist in the State and to protect the trees species which are

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<sup>617</sup> WP (C) No.202 of 1995.

<sup>618</sup> Notification no. F. 7 (207) / For / FP- 2002/ 2869-82, Dt May 4 2002

<sup>619</sup> Interlocutory Application No. 636

<sup>620</sup> Para 2, Notification no. F. 7 (207) / For / FP- 2002/ 2869-82, Dt May 4 2002

becoming rare and extinct. The State has prepared a list of about 24 trees which should be completely protected from felling. Such trees species wherever they exist including in the annual plantation coupes shall not normally be felled. However, such trees may be felled if the situation imperatively so demands in the interest of protection/sanitation of the forest, only with the permission of the Head of the Department. Such an appeal is also made to the land owners who have such trees on their land<sup>621</sup>.

The above legal frame work of timber trade in the State of Tripura shows that the state has sensitively promulgated Acts, rules and guide lines for effective control and regulation of timber trade in the State. Significantly, as in the Principal Act of 1927 so in the State Amendments the duration of imprisonment and the stipulated fine are not deterrent or prohibitive in nature. Deterrence, however, is reflected in the seizure and confiscation of timber, saw mill machineries, tools and the wood finished products which range up to several lakhs of rupees and can cause real time set back to an individual's timber business. Unlike what was stated in the empirical study by the forest officials and timber traders the forest canopy in Tripura is denuded fast. The forest is not able to meet the market demands for domestic consumption and the problem of illegal timber felling is quite rampant and cause of worry for the Forest Department of Tripura.

The major forest crimes in relation to timber felling and smuggling, it has come to light that not much action can be taken for lack of evidence and man power for intensive patrolling. Some petty cases may be apprehended where in out of court settlement is reached to confiscation or payment of fine.

The infrastructural shortcoming of the department is well known among the traders. Save for confiscation no other punishment is and deterrent enough. So, despite the rules described above the traders can easily circumvent the law.

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<sup>621</sup> Memo no. F.17 (105) / For- Dev/86/52578-928, Dt 28.12.86 of PCCF (T)

## **CHAPTER: 8**

### **WEST BENGAL PANORAMA**

Organised illegal logging has become commonplace in many forest areas, including protected areas also. Forest legislations in the country have not been able to make even an impression in the activities of the mafia-political groups or criminal activities of forest staffs and the most pressing danger to Indian forests gets stronger every day. During the year 2012-13 and the first part of 2014, several major timber scams have been unearthed in various parts of the State of West Bengal and as a result there is a decline in growth of forests and the break in forestry activities gradually destroyed livelihoods of lacks of economically deprived families living in forest areas and in many cases starving, impoverished people are forced into aiding the very forces that are destroying forests for commercial profits.

There are some examples of illegal activities relating to timber trade in various parts of State of west Bengal which are enumerated as under. Most of these information's are available in the public domain in the form of media reporting. For this purpose only those incidents reported in the print media have been made use of. The audio visual media has been excluded from the preview of this thesis.

1. Timber smuggling is not new in northern part of Bengal but the trend is on the rise in the forests of the Dooars. Illegal saw mills which are run by timber mafias and smuggle out precious wood from the core forests are mushrooming in the in the remote villages of Dooars. A clash between forest guards and the timber smugglers at Khuttimari forest of Jalpaiguri exposed the links of interstate rackets, which even have international links and harbour poachers from the north eastern states. Like other forest in north Bengal similar racket is active in Buxa Tiger Reserve (BTR), where a Toll investigation unearthed evidence of rampant felling of precious teak and Saal woods. Interestingly the racket is operating with the help of some local influential persons and the modus operandi does not rule out the involvement of forest officials. People living at villages inside BTR who are dependent on the forest products for their livelihood claimed that the youths mark trees in the day time and late at night they enter in a group of 20 to 30 and manually chop off the marked trees and smuggle those out to Bhutan and Bangladesh at high price. The Times of India reports that the local MLA Wilson Chamapamari who resides close to Buxa, refuse to comment but forest villagers like Durga Adhikari and Pratap Lama said that employing local youths as tourist guides and casual forest guards can restrict this. Forest official said there are 61 forest protection committees with villagers but most of these are defunct due to lack of supervision by the forest officials<sup>622</sup>.
2. Workers of Balurghat Forest Office caught a tractor loaded with some illegal timber (Neem, Mango, Black berry, Eucalyptus) from Sahapukur a place in Kumarganj, Dakshin Dinajpur in West Bengal<sup>623</sup>.

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<sup>622</sup> The Times of India, Kolkata, Tuesday, May 29, 2012

<sup>623</sup> Uttar Banga Sambad, 26<sup>th</sup> November 2013.

3. Timber smuggling is a very common issue in Bengal. There are many laws related to control of timber trade, even though the timber mafias smuggled the timber without any fear and hesitation. From a reliable source the researcher is come to know that timber mafias smuggled the timber with the help of passenger train (Alipurduar to Bamanhat) also<sup>624</sup>.

Coordination is very necessary between railway department and the forest officials otherwise eradication of smuggling of timbers via train is impossible.

4. Timber looters are cutting Saal trees by illegal means from the forest near Bagdogra in Siliguri, District Darjeeling. Earlier the timber mafias usually cut trees at night but now a days the looters are looting specious trees from the forest area near Bagdogra during day time also. According to some forest officials there are very less number of forest guards and as a result protection of forest from the timber smugglers is more or less impossible. Deputy Forest officer of Kersiong also admitted the fact that there are very few number of forest workers. Arun Rana the Secretary of Forest Service Association (Bagdogra Range) also says that several times they wrote application to the higher authority to increase the number of forest officials or workers but the higher authority did not take any serious steps regarding the matter<sup>625</sup>.
5. For the purpose of protecting the forest, in AN ORDER OF THE FOREST DEPARTMENT of West Bengal Government being number EN/871/T-II-4/002/2008 Dated April, 15<sup>th</sup> 2008<sup>626</sup> states that there should not be a hotel or restaurant within one kilometre of the forest boundary. The G.O. further states that for the purpose of putting up any complex for commercial activity it is mandatory to obtain a NOC from the ministry of environment<sup>627</sup>.

Despite the above order, a survey conducted by the news paper Uttar Banga Sambad shows the following:

- I. Trees are being felled in the area continuous and contiguous to the forest boundary, water bodies are filled up and huge hotels and resorts are being

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<sup>624</sup> Ananda Bajar Patrika, Siliguri 11<sup>th</sup> September 2013.

<sup>625</sup> Uttar Banga Sambad, Siliguri, 21 December, 2013.

<sup>626</sup> Government of West Bengal, Ministry of Environment, Writers Building, Kolkata 700001, G.O. No. EN/871/T-II-4/002/2008 Dated April, 15<sup>th</sup> 2008 as cited in Uttar Banga Sambad 14 March, 2013, SLG.

<sup>627</sup> This part of the presentation is based on a special feature of Mr. Joydeb Dey Titled-Forest is Destroyed, Environment Endangered (Aronno Shompod Dhongsho Hochche, Biponno Poribesh), Uttarbangasambad, 14 March 2013, SLG

constructed there upon. Over night the forest is cleared and roads are constructed.

- II. In Buxa Tiger Reserve Forest (BTR) core area the chain of biodiversity is severely disturbed and there is an acute crisis of food for the forest animals as a result the forest animals are venturing into the villages and towns. It is imperative to raise the density of forest and depth of the rivers.

In the district of Jalpaiguri in rivers like Jayanti, Dima, Bala etc. the river bed has risen very high due to siltation as a result of tree felling and there is a problem of flooding even with a slight rain fall.

- III. There is a loss of density in forests like Jaldapara, Garumara, Chilapata, Mendabari, Nimti, Jayanti, Kalchini, Chapramari etc. As a result the forest boundary is shrinking and the temperature is increasing and rainfall is decreasing.
- IV. The North-Indian rivers like Torsha, Teesta, Kaaljani, Jaldhaka, Mujnaai, Mahananda, Korotoa, Atrai, Punarbhava, Meechi and Karala have all diverted there flow and there is a rivers flow into the populated area endangering human life and property.

**Endangered Rasik Bill (Total Area 178 hectares):** Rasik Bill is situated partly in Tufanganj II Block, in district Coochbehar and partly in Alipurdwār Block II in in district Alipurdwār (Formerly District Jalpaiguri). This is a natural lake in the Rampur-Bochamari area under the Protection and care of the department of forest. This lake is an important biodiversity zone with a considerable population of Peacocks, variety of Snakes, Gharial & Deers. The lake is also a home to migrant birds. Over the last decade the area of the lake has reduced considerably. The number of migrant birds is also reduced. The supervision and maintenance of the wildlife has deteriorated as a result of illegal felling of trees. It is now important to increase the number of fruit trees in the area, de-silted the lake and maintain a balance between phytoplankton and zooplankton<sup>628</sup>.

**Endangered Turtle of Baneswar (Mohan):** Tortoise were found in abundance in Baneswar, Kholta, Bokalir Mot, all situated in Coochbehar II Block. These tortoises are also known as

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<sup>628</sup> Ibid

Chittagong Soft Turtle and endearingly called Mohan by the common populace. They inhabit the lakes and ponds which were dug for them by the royal family of Coochbehar. These turtles inhabited the forest as well for laying eggs etc. and added to the biodiversity of the place. Extensive felling of timber has denuded the forest around the lakes and there is intensive urbanization there. As a result these turtles are hunted for their meat and for other purposes which has reduced their number considerably and it is apprehended that they will be extinct soon.

The legal framework of India sense out clear indication for prevention of felling of trees which has been discussed in Chapter 2 specifically and throughout the thesis generally. The role of the Supreme Court Green Bench and specific orders in the Godavarman case also speak for prevention of timber felling<sup>629</sup>.

The Government of West Bengal, in 1999 made a draft bill called the West Bengal Protection of Trees in Non Forest Areas, Bill. In the final version of the draft bill, it is stated that no tree can be felled in the urban area without the permission of the forest department. In case of felling One tree 6 trees have to be planted i.e. in the ratio of 1:6. The Bill also stresses on creating awareness about the importance of trees especially in offices, schools, colleges etc. The Draft Bill further stressed that trees like Saal, Teak, Mahogany, Arjun, Jarul, Neem, Ashwat, etc. have to be planted on either side of the road. The Draft Bill also proposed on building an united resistance against the timber mafia. The Draft Bill has now matured into an Act in the same. Under its aegis forest week is celebrated between 14<sup>th</sup> July and 20<sup>th</sup> July each year. During this period free saplings are distributed. Unfortunately none of the saplings survive due to lack of supervision and care.

In 2007, in the name of starting the Coochbehar airport 300 fully matured trees that were planted by the Coochbehar royal family were felled overnight by the order of local authorities. No effort is seen in planting trees at 1:6 rates. The airport, “which is a parameter of development” did not take off even in 2014. In North 24 Pargana from Kampa in Brrackpore to Mandoli a stretch of 8 Km road was widened in 2004 at the cost of 248 trees. No amount of appeals and protest helped<sup>630</sup>.

The present forest area of West Bengal is only 13.46% of the total land mass of the State which should have been 33%. In the Buxa Tiger Reserve in Jalpaiguri (761 sq km) there are

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<sup>629</sup> Ibid.

<sup>630</sup> Ibid.

152 species of trees, 192 species of wild life, 194 species of orchid, 72 species of medical orchid, 62 variety of medicinal plant, 41 variety of reptiles, 4 variety of amphibians, 33 type of fishes, 264 variety of birds & a number of mammals, cheetahs, elephants and royal Bengal tigers. All these are endangered because the trees are illegally felled and smuggled in the flow of rivers like Raidak, Sankosh, Jayanti, Dima, and Poro. These illegally felled timbers are then sold in various markets of West Bengal. On an average daily timber worth rupees five lakhs are sold in the black market. The forest guards of the core area are not all equipped to resist the timber smugglers<sup>631</sup>.

The State of the forest in West Bengal is adversely affected in various ways:

- I. In Chapramari or Neoda Valley in North Bengal and in Pengolakha sanctuary of Sikkim there is a plan to build a road up to China border by the Indian Army. 200 hectares of core forest will be lost which means the biodiversity of the area will be affected. Various species of trees like Saal, Oak, Fir, Rhododendrons will be lost. Wild life like royal Bengal tiger, red panda, leopard, black bear, sloth, lemur cat and Himalayan Thor will be endangered. An alternative proposal has been given by the forest department that runs through Dam-Dim – Gorubatahan-Labha- Kolbong- Chagey-Lingsakha and Aditar but the same has not been accepted by the Army.
- II. It is reported that in West Bengal between 2001 and 2006, 298 people were killed in villages adjacent to the forest due to rampage by elephants the reason being loss of their habitat.

There is an extreme indifference to enforcement of forest protection laws on the part of forest department. It is important that the elephant migration route should not be obstructed and the natural salt water body in the forest must be protected. Neither of this is maintained effectively.

There is a railway line running through Alipurduar Forest which starts from Siliguri Junction and goes to Alipurduar Junction via Sevoke-Madarihata-Hashimara-Rajabhatkhaoa-Alipurduar Junction. Umpteen numbers of elephants and humans have been killed due to railway accidents. The forest department has been not taken any preventive action in this regard.

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<sup>631</sup> Ibid

- III. A report of the forest survey of India shows that the forest canopy in Hazaribag, Koderma, Lohardaga, Chatra, Pakur & Palaset in Jharkhand have suffer about 400 sq km reduction in forest canopy. The forest department has stated that this reduction is due to two reasons. One, indiscriminate felling of trees is taking place due to industrialisation purposes and two, there is extensive illegal felling of timber in this area.
- IV. Teesta, Torsha, Mahananda, Jaldhaka, Raidak, Shankosh, originate in the Sikkim Bhutan Himalaya these rivers used to be perennial in nature. Due to illegal felling of trees the mountains are denuded of vegetation and there is extensive landslide. As a result the river beds have elevated and the river source has dried. There is a considerable reduction in the rain fall in this region as a result the perennial rivers have dried up and there is an extensive flood even during inadequate monsoon.
- V. Some environmentalist have pointed out that in many situations the Conservation of Forest Act, 1980 has been deliberately relaxed to give a green signal to the hitherto fore held up projects which were considered harmful.

These issues have not figure in election manifesto of any political parties<sup>632</sup>

The researcher has been through his study stating that environmental issues especially matters relating to forest is linked with the socio-economic condition of a place. Had the youth been given sufficient incentive to protect the forest, they would have guarded the forest effectively instead of smuggling timber. The West Bengal government has started a new cadre called the Civil Police Force a similar force called the Civil Forest Police Force can be created with proper training to assess the forest guard.

The communication rout between Haldibari and Meckhliganj being very weak has led to flourishing of the timber mafia. The environmentalist and forest officials of the region fear for their life. The root for timber smuggling starts from Beltolirghat crosses the Teesta River and reaches the Meckhliganj market merely 15kms away. Since there is no bridge across the river here, ordinarily a person has to reach Meckhliganj after covering about 80kms via Mainaguri and Chengrabanda. So to catch a timber smuggler the forest official must travel

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<sup>632</sup> This part of the presentation is based on a special feature of Mr. Joydeb Dey Titled-Forest is Destroyed, Environment Endangered (Aronno Shompod Dhongsho Hochche, Biponno Poribesh), Uttarbanga Sambad , 14 March 2013, SLG.

about 80kms where as the smuggler escapes by covering only 15 Kms. Neither the local authorities nor the forest department have taken a conclusive step by constructing a bridge across the river. Range officer Mr. Dilip Das has publicly stated that there is a single bit officer in Haldibari. It is not possible for him to control the situation singlehandedly. Therefore the activities of timber mafias are on the rise in this area. Incidentally it may be recalled that this corroborates the finding of the present researcher when the empirical study of West Bengal was done.

The forest department is contemplating that they will appoint a friend of the forest in specific area jurisdictions. If anybody wants to cut a timber they will have to obtain an NOC from the so appointed friend of the forest. The tax so collected will be utilised for paying the friend of the forest. In this manner they plan to protect the forest from the mafia<sup>633</sup>.

This is not the only area where the timber mafia is active. In Alipurduar Block II, Salsalabari Model High School was under construction. On an anonymous tip off the mobile range of the forest department in Damanhur raided the premises and recovered a huge stock of illegal timber. Monotosh Choudhury, the range officer of the mobile range has stated that most of the doors and window frames of the school have been made of illegal timber<sup>634</sup>. The school authorities have defended themselves stating that the cost of legal timber is too high and beyond the schools budget. So, the school administration has decided to use illegal timber<sup>635</sup>. For a Central Water Project in Coochbehar about 386 trees have been felled with the permission of the forest department. However, much more than the permitted numbers of trees have been cut. There has been an extensive protest against this. The forest department have admitted to the fact that more than the permitted number of trees has been felled. However, no action has been taken by the forest department against this vandalism and the municipality too has been enacted in this regard<sup>636</sup>.

In Jaldapara Wild Life National Park the forest department, the legal timber traders and the adjacent villagers are facing some difficulty as illegal timber trade is taking place openly. This is also causing huge revenue loss for the Government. The key reason behind this is lack of availability of hammers. In West Bengal as per the forest department rule if a tree is cut from private forest or social forestry, one must obtain an NOC from the range or bit office. For every tree thus felled a transit pass is issued at a cost of Rs.40 and along with some

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<sup>633</sup> Dipen Roy, Haldibaritey Kath Mafia der dooratto barar ashonka (Increased Timber Mafia Activity Expected to Rise in Haldibari), Uttarbanga Sambad 12 September 2013, SLG.

<sup>634</sup> Uttarbanga Sambad, 17 October 2013, SLG.

<sup>635</sup> Ibid. 26 November, 2013

<sup>636</sup> Uttarbanga Sambad, 16 May 2013, SLG.

necessary papers for 35cft or 1cubic metre Rs.45 is to be paid. This money is deposited in the Government treasury. After this the forest official put a passing hammer mark on the log after which the log can be taken for sawing. This is the same process for purchasing legal timber as well but due to recent change of name of this area the older hammers cannot be used. In South Chilapata, Jaldapara, Kodal Basti, Madarihat and Bir Para range every range officer and bit officer are allotted a hammer. Until May, 2014 the bit officers and range officers had not received the new hammer as a result timber is felled, sawed and marketed without T.P. and hammer mark. The forest officials are forced to look on helplessly<sup>637</sup>.

But all is not lost in the state of West Bengal. In the style of the Chipko Movement and the Appiko Movement members of Rava Tribe in North-Khairbari forest resisted the felling of trees by the JFMC (Joint Forest Management Committee) and forest officials from cutting of the trees. Although the members of the JFMC and the forest officials maintained that they wanted to cut about 900 old trees and cultivate new saplings in their place. Kothin Rabha, a member of the Rabha Basti Gram Sabha stated that there is unholy nexus between the forest department, JFMC & timber contractors who are felling trees in discriminately as a result the forest wild life is suffering from habitat and food crises which has a negative impact upon the life of the Rabha's.

The North Bengal forest dwellers and Manual Workers Forum have stated that as per the 2006 Forest Dwellers Act no tree can be felled without the written permission of the Gram Sabha. This is not followed in North Bengal and several parts of West Bengal. As a result of which the biodiversity is being destroyed and there is an acute water crises in the hills. Ravi Rabha, Bipin Rabha, Chunu Rabha, Helani Rabha, Sitasree Rabha and about 100 other members resisted the tree felling attempt by the JFMC and the forest department. The ranger of the Madarihat Forest Bit has stated that there is no log that requires taking permission from the Gram Sabha. Some outsiders with vested interest are misleading the Rabha's. An appeal has been made to the higher authority to look into this matter<sup>638</sup>.

A division bench of Kolkata High Court comprising of Mr. Justice Arun Mishra and Mr. Justice Joymallyo Bagchi has directed that the panchayat office will not be able to issue timber trade licence without the concurrence of the forest department. The order further states that those traders who are using the earlier licence we forfeet their licence. The electricity board has been directed the electrical connection of those traders be disconnected. The forest department has notified this to all panchayat. Timber trade is officially nonexistent in

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<sup>637</sup> Uttarbanga Sambad, 22 May 2014, SLG.

<sup>638</sup> Uttarbanga Sambad, 25 December 2013, SLG.

Madarihat region. With the new direction it is feared that timber trade will stop altogether. As a result of this many artisans have migrated and there is a apprehension that illegal activities will increase<sup>639</sup>.

The forest guards and employees could resist timber smuggling in the Moraghat range, Totapara Bit. For this they have to use one round of shooting. The interesting part is only 4 workers fought against a group of 25; this shows all is not yet lost in West Bengal<sup>640</sup>.

In summation it can be stated that the green house effect and then climate change has affected the entire world. A few specific steps need to be taken to prevent global warming, destruction of biodiversity and loss of forest:

1. The forest canopy must be raised and the water bodies must be preserved by planting Neem, Cotton, Saal, Arjun, Mahogany, Cactus, and other fruit trees around the water bodies and on either side of the road.
2. The core forest along with its wild life must be protected from human access.
3. Every factory and industry must produce evidence of putting up anti-pollution machineries before giving them the NOC.
4. Use of plastic must be completely banned.
5. Thermal Power Station and Nuclear Power Station must be put under strong regulation and compliance.
6. Explore alternative source of energy.

The above mentioned measures can bring change in the environment.

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<sup>639</sup> Uttarbanga Sambad, 7<sup>TH</sup> April 2013, SLG.

<sup>640</sup> Uttarbanga Sambad, 28<sup>th</sup> May 2013, SLG.

## **CHAPTER: 9**

### **CONCLUSION**

For many years, there was a misconception that timber trade plays a negligible role in forest loss and that most of the deforestation is caused by agricultural clearance and fuel wood collection. Thankfully such misconception has been corrected and it is now recognized that timber trade is currently one of the most important causes of loss and degradation of forest around the world.

Timber trade has both direct and indirect influences on the environment. The direct influences are commonly considered to be more important. At the same time environmental conditions, policies, and regulations influence the market access and competitiveness of the timber trade. While regulation of trade in forest product is perceived to be a driving force for achieving sustainability in management of forest, international trade and the corresponding micro & macro-economic policy reforms are also dependent upon the trade in forest products. Lack of effective regulatory mechanism especially in the developing countries lead to unbridled and uncontrolled trade in forest products especially timber. In a number of countries like Africa, India, China, Indonesia, Brazil and Guyana Shield, illegal logging and

unregulated trade in timber apparently accounts for a significant share of forest loss and degradation.

In addition to these direct impacts, indirect impacts such as opening up of remote, inaccessible forest areas for encroachment which trigger a chain of underlying causes and effects of deforestation. Indirect impacts on deforestation are linked to such factors such as changing production and consumption patterns, expansion of subsistence agriculture, rising demand of fuel wood etc.

In spite of serious efforts at making sustainable cultivation of timber that is intended to contain both direct and indirect impact, there is an ever increasing demand for timber from sustainably managed forests in the international market. As a consequence thereof unlawful timber trade is on the rise. The subtle effects of deforestations can be seen in the form of forest fire, landslides, erosion, siltation, and global warming.

The reasons for the short supply of timber from sustainably managed forest are certain institutional deficiencies in the form of under developed land management systems, weak environmental protection policies and inadequate administrative control. Another significant factor is the rise in density of population and the onslaught of urbanization in the rural areas. Economic development involves agricultural development, environmental conservation, and industrialization. Agricultural and industrial developments earn the foreign currency that are fundamental to the growth of a nation but in both cases timber is an essential infrastructural requirement. Once the timber traders make an inroad in the inaccessible dense forest, the area opens up for non-traditional shifting cultivation, livestock grazing and fuel wood gathering. These activities create a vicious circle.

Excessive export oriented commercial logging, the conversion of agricultural land for business related plantations to grow oil palms, rubber, coffee; tea etc. and urbanization motivated land use coupled with non-traditional cultivation by landless peasants are some of the direct attributes of forest (mis)management. It would be oversimplification of matters if it is presupposed that deforestation is the fault of importing or exporting countries. Timber boom is not brought about by international market demands alone. Other socio-economic and political forces are equally responsible and actively involved in strongly encouraging both legal and illegal timber trade as it is highly revenue earning trade and till the last half decade the laws controlling logging and distribution was not properly enforced in many countries including India.

Illegal logging takes place when timber is harvested, transported, bought or sold in violation of laws. The harvesting procedure itself may be illegal, including corrupt means to gain access to forest, extraction without permission or logging from protected areas (such as national parks, sacred groves etc.), cutting of protected species or extraction of timber in excess of agreed limits or marking reserved forest illegally as private forests. Illegalities may also occur during transportation, illegal processing and export, mis-declaration to customs and avoidance of taxes and other charges. Possibly more than half of all logging activities in most vulnerable regions are conducted illegally.

An important aspect of the debate has been that the developed consumer countries are driving up the demand for timber & timber products and hence increasing the incentive for illegal logging. 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 depletion of scarce natural resources, destruction of ecosystems, loss of biodiversity, loss of carbon sinks and climate change. It causes economic and developmental problems with a loss of billions of dollars each year in Government revenues and inestimable environmental costs. It also causes social and economic problems as it promotes disregard for law and corruption which are damaging to governance and social cohesion alike. The loss of human life and property due to natural calamities resulting from forest degradation is incalculable.

## **SUMMATION OF CHAPTERS**

The present research work examined various aspects of the timber trade issues. A brief summary of the findings at each stage of study is briefly summarized below:

The introduction to this study traces the genesis of the problem and details out the hypothesis, objective & significant of the present work.

At the outset in **Chapter 1** the research work has been conceptually and theoretically rooted. Theories are required to study a new and emerging phenomena and providing it with contours of investigation. Different theories help to focus on different aspects of the problem and reduce the complexity of the subject. In this manner a focused understanding of the issue can be achieved.

This explodes the theory of common pool resource which requires the planting of a tree for a tree and a cooperation and commitment among the group perusing it and absence of ego based competition and drive for excess profit. The theory of reformation that became popular during the 80s adopted two lines of thinking: one, analyzing fundamental policies and two, studying environmental NGOs and protest. Built strongly on Neo-Marxist analytical scheme the state is perceived to be structurally unable to regulate, control the inherent environmental side effects of the ongoing timber trade. The environmental crisis is seen as closely related to economic demands of the market and the consumer.

The contribution of the social sciences to environmental reform cannot be ignored. The decade of the 70s and the 80s were spent on understanding the continuum of environmental degradation. The decade of the 90s saw conventional political and civil society institutions receive more attention for contributing towards achieving sustainability. The decade of the 20s decidedly became aware of the global demand for privatization and open foreign trade but fail to provide any solution to its onslaught. The theory of ecological modernization empirically studies the methodology for environmental improvement, ecological restructuring and economic balance. The basic idea of this theory is that development crystallizes in constant ecological structuring of modernity. Ecological structuring means ecology inspired and environment induced process of transformation and reform of the society. The theory of network and flows applies the sociology of networks towards understanding environmental reform and reducing frictions with the contra elements such as infrastructure, travel, industry and cultural diversity.

But underline all these factors are the political will and the politics of environment. It is the political will that alone can bring about the desired policy framework of sustainable timber trade.

In this chapter in conclusion it is observed that the challenge is to frame policies which will induce biomass based development process. No biomass based strategy can succeed without the involvement of people especially women if a sustainable environment and a sustainable development has to be achieved, then nature will perforce have to be nurtured in a sustainable manner. This will also bring about general awareness among the common people and also reduce the work burden of women leading to greater literacy of women, economic growth and eradicate poverty. If India fails to recreate its environmental-trade policies on these lines then not only its villages but also its cities will become unlivable.

**Chapter 2** of the research work deals with multiple issues relating to sustainability of timber trade and seeks to reconcile the conflicting interest in the light of doctrine of sustainability. It is generally recognized that the world and particularly India broke its slumber over sustainable environmental protection and development during the mid 80s. In this chapter the researcher has examined the legislative framework, the role of the judiciary, the contribution of the five year plans, national forest policy, international instruments etc. However in conclusion the researcher is constrained to note that drawing a balance between environmental and developmental sustainability remains the toughest challenge yet. The legal framework, the policy framework, the judicial contributions and the international instruments, all rich mine of knowledge and information have not been successful in achieving sustainability.

**Chapter 3** specifically deals with the unique position and role played by the judiciary in achieving forest management through the number of decisions or orders passed in deciding the case of *Godavarman Thirumulpad v. Union of India*. This chapter analyses the case at length and examines the impacts of the judgment not only upon the forest policies but also upon each of the states which have been empirically studied by the researcher. In conclusion the researcher has expressed an opinion that although the Supreme Court has been accused of over stepping the delineated boundaries of separation of powers, the Supreme Courts interventions and aggressive stance towards forest management is most welcome. The Supreme Court's pro active role in sustainable development and sustainable forest management has already gone a long way in arresting the ecologically dangerous activities such as timber trade and it has raised awareness about forest among the general mass. Although its orders may have caused many predictable and unpredictable impacts but it has definitely benefited the forest in India.

**Chapter 4** of the present research work makes an endeavor to locate timber trade within the framework of WTO. It must be mentioned that the WTO framework and the international trade framework does not deal directly with timber trade. However, there are some provisions which impact upon timber trade sometime directly and often indirectly. It is observed in this chapter that during the journey of the WTO in 1999 from Seattle (Doha Development Round) till 2005 in Hong Kong and onward to 2014 the WTO was not able to convince the developing countries of an acceptable trade policy. Issues' relating to agriculture still remains "the last major frontier for trade liberalization". Since WTO itself does not possess the resources to deliver this aid, it relies heavily upon the members to propose the modalities for

achieving a balanced and acceptable trade policy. Timber is also listed on the non-agricultural market access product but that too is suspended because it is linked with other issues relating to agriculture. Import tariff is generally low for logs from developed countries but high for the developing countries, especially those countries which have a natural resource base like Indonesia and those countries that are expanding their timber plantation.

Non-tariff barriers involve restriction of import of illegally harvested and traded timber. They are meant to control and regulate the entry of illegally felled timber into the market for export import purposes, even if the price for such timber were kept very low. The real obstacle for effectively implementing the barrier comes from the developed consumer countries. GATT Article 3 requires that imported and domestic ‘like products’ should be treated equally with regard to internal taxes and regulations. This brings the goods produced from illegally felled timber at par with goods produced from legally felled timber. The GATT does not define like product. This is in direct conflict with the WTO norms of non-tariff barrier.

WTOs technical barrier to trade agreement is design to control and regulate standard of the goods. Requirement of proof of legality of the timber can brought within this category as a technical requirement. This provision aims at transparency, predictability and encourages the use of international standards even in the case of timber. The Forest Certification System [FCS] and Programme for the Endorsement of Forest Certification are international in scope but are not in the same categories of bodies accepted by the WTO system of standard setter. Voluntary Certification System is wide spread but not well recognized. The International Tropical Timber Agreement came into being in 1994 and was enforced in 2008. This agreement too did not have any significant impact upon illegal timber trading. Thus the international mechanisms of trade have failed to ensure a sustainable timber trade.

**Chapter 5** focuses upon illegal logging in south, east, and south East Asian countries that are home of dense to very dense forest. These regions are vulnerable to vandalism. A clear root for illegally logged timber lies from Indonesia to Thailand to Myanmar to China and another root via Mizoram to Myanmar to China. From China the illegally felled timber reaches the international market.

This chapter examines the situations in all SAARC countries such as Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. In the South Eastern region the focus has been placed upon Indonesia, Malaysia, and Myanmar. China is the only country that is focused upon in East Asia as it is a strategic culmination point of illegal timber trafficking. In

china the timber is laundered of its illegality and pushed into the international market for consumption of the developed countries.

It is noted in this chapter that issue of illegality has not been openly addressed until now with commitments made by the governments of South Asian countries and the South East Asian countries. The timber industries are expected to participate in ensuring that the resources from which the timber is obtained and the process of procuring is legal. There is an urgent need for imposing international sanctions against countries who have failed to ban trade in illegal timber. The international instruments merely express concern for environmental degradation and advocate sustainability without effectively addressing the issue under criminal law and imposing necessary sanctions not only upon the individuals indulging in illegal trade of timber but also against those countries who have failed to devise a mechanism for prevention of illegal timber trade. There is also failure on the part of the WTO and also the international trade policy because the non-tariff barriers and the technical barriers to trade do not address the issue of timber trade directly. Thus there is an indifference of international organizations towards the issue of indiscriminate trading of timber. Laundering of illegal timber is in itself a massive commerce for those who control the syndicates and cartels. In other wards it operates as a parallel economy. The governments need to develop new procurement policies that ensure timber and wood products come from legal sources. Industries too need to adopt transparent chain of custody processes which allows timber tracking from source to market. The producing countries must also formalize a system of cross border cooperation between national enforcement authorities and to enact legislation allowing the confiscation of illegal timber and those dealing in it outside the country of origin.

The World Bank estimates that up to 10 billion US dollars per annum of the global market in timber is lost through illegal trade.<sup>641</sup> The European Union is one of the major consumers of illegally sourced timber and wood products and is estimated to be responsible for about a loss of 3 billion euro's per annum of revenue<sup>642</sup>. This crime costs the developing countries a loss of 10.7 billion euro's per annum. Illegal logging funds armed conflicts and helps to fuel violence against those dependent on the forest. It creates conflict within the communities and is a tool by which those who seek power obtain great wealth. Undermining the rule of law,

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<sup>641</sup> . [www.worldbank.org/Forest](http://www.worldbank.org/Forest) and Forestry.

<sup>642</sup> . Failing the Forests, Europe's Illegal Timber Trade Report, 6bis7bis8WWF.

corruption and the ruin of any possible sustainable development are also symptoms of illegal logging<sup>643</sup>.

**Chapter 6** is based on empirical work. 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.

The framework of **Chapter 7** 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

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<sup>643</sup> . Faith Doherty, *Illegal Logging and The Illegal Trade In Timber and Wood Products-Fueling Conflict*, [eas.eurpoa.eu/ifs/publications/articles/bookto/book%20vol2\\_part3\\_chapter](http://eas.eurpoa.eu/ifs/publications/articles/bookto/book%20vol2_part3_chapter)

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** 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.

## CONCLUSION

At the outset it may be mentioned that there is a conceptual crisis and lack of theoretical rooting where timber trade is concerned. There is lack of clarity in this field and hence formulations of controlling and regulatory mechanisms are in isolation from the ground level reality. A holistic approach is lacking in relation to timber trade and it has not been linked with social and economic issues especially with a target group of people living below poverty line and the rich and affluent afflicted with corruption. Therefore, the arena of timber trade enjoys no legal social or economic controls which can be effective. On the issue of sustainability it is found that there is no dearth of information and materials. The Indian judiciary has time and again through innumerable cases ruled in favor of sustainable management of environment. However, during the decade of the 20s there is a significant paradigm shift towards sustainable development. The clarion call of the hour is to balance both environmental conservation and development. It however, befalls upon the shoulders of the policy makers to draw policies and strategies to achieve the balance contemplated by the judiciary and satisfy the popular demand. It must be understood that underlying the above is the question of cost. Development apparently appears to be beneficial but is achieved at stupendous environmental cost which in the long run is detrimental. It appears that the policy making machinery has entered a vicious circle. The indications of climate change and global warming can no longer be dismissed as incidental. Policies' relating to poverty eradication has a direct relationship to policies relating to sustainable development. The international community has responded to the crisis at hand through a number of instruments. It may however be recalled that even if countries are bound by those instruments there are no

effective sanctions, there may be economic or political sanction but one is yet to see them imposed upon any nation.

The national legislative scenario is replete with legislations intended to control, regulate and prevent environmental pollution. In other words the focus is on prevention of pollution and not on sustainability. Even the Indian forest Act, 1927., Forest Conservation Act, 1980., & the National Forest Policy 1988., belong to this school of preventive mechanism. It is important that the legislations and the policy adopt a focus on sustainability. It is appalling to note that until 1988 timber trade was considered as an important means of earning revenue for the state. India seems to have open up to the disaster staring at its face merely 25 years ago.

The situation is not much different under the five year plans. The plan documents did not appear to be sensitive to the issue of sustainability till 1988. Till the 4<sup>th</sup> five year plan forest was not a separate issue for consideration. In the 5<sup>th</sup> five year plan, the plan document outlaid a programme for development and felt the need for maintenance of forest because it was a source of timber for infrastructural use. Therefore programmes for social forestry and economic plantation were encouraged. In the 6<sup>th</sup> plan issues of deforestation and erosion were taken note of and for the first time during the plan period 1980 to 1985 India looked at its forest for conservation point of view. Then onwards and especially from the 8<sup>th</sup> plan India has been expressing concern over depleting forest canopy and emphasizing the need for controlling and regulating timber trade.

Despite all these the Schedule Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights), Act 2006 has thrown open the gateway for forest land encroachment. Due to lack of individual information data bank at national level, it is easy for anyone to obtain a certificate from the panchayat stating that he is legitimately entitled to rehabilitation under the Act. The result is the encroachment of large areas of forest. Therefore, lack of practicality and focus has not helped India to achieve the desired sustainability.

It is again the Supreme Court which has taken the first decisive step towards control and regulation of timber trade in the Godavarman Thirumulpad case in which it has generated more than thousand directive orders clearly drawing a map at the ground level for sustainably managing the forest and carrying on timber trade. However it must be admitted here that even such a ground breaking step taken by the Supreme Court did not take into account the issues of poverty, occupation and trade. Therefore to a large extent the steps taken by the Supreme Court, in Godavarman case, have become unrealistic.

The international trade regime also fails to focus on issues relating to timber trade. Processes like non-tariff barriers and technical barriers to trade could have been utilized effectively for sustainable management of timber trade and prevention of illegal trading in timber. Unfortunately that is not being done. The forest certification system and the programme for effective forest certification are not recognized as they are endeavors of the private body and are not recognized as international standard setters. The International Tropical Timber Agreement 2006 aims to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forest and to promote sustainable management of tropical timber producing forests but the agreement does not lay down the process for achieving the same.

Illegal logging is rampant in South, East and South East Asia wherein the illegal root of the problem lies. This is an open secret. Yet very little has been done to prevent illegal trafficking in timber. This criminal activity does not even figure under the conventional criminal justice system both at the national and international level.

The empirical experience of the research shows that except in Kerala there is illegal trade in timber in the other states investigated such as West Bengal, Assam, Tripura, and Mizoram. The post Godavarman scenario may have restricted illegal logging to a large extent but has held corrupt indulgence. Tripura has made strict laws following the Godavarman judgment but has not been able to root out corrupt practices detrimental to the forest. It has been noticed that in all the states under investigation that there is an expansion of private timber estates but there is also the tendency of encroaching/converting the reserved forests into private forest. Kerala reflected least illegal activity. On asking around the researcher gathered that the literacy rate being very high in Kerala, and being a small state with saturated employment opportunities a large number of keralites prefer going abroad. This requires police verification for passport purposes. Smallest entanglement with law may extinguish an opportunity of going abroad. Besides this Kerala has a heightened awareness of social issues. Therefore exploitative tendencies and corrupt practices are comparatively less. On the contrary the literacy rate in Tripura is higher than Kerala and corruption is also higher than Kerala. The reason being that the Tripura youth do not aspire to travel abroad in search of job opportunities like the Kerala youth. So unlike Kerala, employment saturation has increased corruption in Tripura.

## **SUGGESTIONS**

In the light of the foregoing discussion, the researcher humbly submits the following suggestions:

1. Legislations and policies relating to environment in general and timber trade in particular must be linked to the poverty eradication programmes taking into account the socio-economic conditions of the state/country in question. There is a lack of clarity in understanding the ground level issues and factors relating to environment in general and timber trade in particular are compartmentalized and hence isolated from ground realities as a result people below poverty line and the affluent both participate in corruption. Issues of climate change, protection of biodiversity, and trade in minor and major forest produce are all linked with poverty and subsistence of people.
2. Offences relating to illegal timber trade, Timber trafficking and timber mafiaism should be made a subject of national and international criminal law regime and also a subject of the department of revenue service calling for most stringent punishments.
3. The Indian legal framework should shift from “prevention of pollution” mode to “promotion of sustainability” mode. Judiciary can be the guiding beacon in this process.
4. The Godavarman process is still open. In the ongoing deliberations the Supreme Court should now take into account the socio-economic condition of the state vis-à-vis the environmental cost. Only then the Godavarman case will achieve its logical conclusion.
5. There should be a direct and committed policy framework of international trade regime directly addressing the issues of timber trade. The non-tariff barriers and the technological barriers must be made directly applicable to timber trade.
6. The countries of South, East and South-East Asia must enter into a multilateral agreement for prevention of passage of illegally felled timber within their countries and for transboundary cooperation. The existing root of passage of illegal timber must be sealed.
7. More emphasis is to be given on strict implementation of laws and prevention of corruption in the Indian states in order to promote fair and legal timber trade.

8. Measures must be taken to spread awareness regarding sustainable forest management and community based forest management (JFM) must be given greater impetus.
9. Effective land reform is necessary for cultivation of timber plantation with necessary incentives, so that people are encouraged to cultivate timber as a part of their livelihood.
10. The scientific community must come up with substitutes of timber so that the demand of timber in the market is reduced which will also protect the natural canopy.
11. The researcher has been through his study stating that environmental issues especially matters relating to forest is linked with the socio-economic condition of a place. Had the youth been given sufficient incentive to protect the forest, they would have guarded the forest effectively instead of smuggling timber. The West Bengal government has started a new cadre called the Civil

Police Force a similar force called the Forest Policing Force can be created with proper training to assess the forest guard.

An ideal situation is banning of timber trade. However, reality would be different. So it is desirable to have a sustainable timber trade. All natural forest should be left untouched. The forest must do its own selection and survival without human interference. Timber required for infrastructural purposes may be obtained from these plantations. Timber trade in India, if it has to survive, must be done through scientific processes without affecting the natural forest canopy.

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