FOREST CONSERVATION AND FEDERAL GOVERNANCE: THE QUEST FOR SUSTAINABLE DEVELOPMENT

Dissertation submitted to Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the degree of

MASTER OF PHILOSOPHY

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I hereby, declare that the dissertation entitled, 'Forest Conservation and Federal Governance: The Quest For Sustainable Development' submitted by Ankita Verma, Centre for Political Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi, is in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of this University. This Dissertation is original and has not been submitted in part or in full for any other degree or diploma in any other University.

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Abbreviations used:

ACCOBAMS- Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea

AGMUT- Arunachal Pradesh-Goa-Mizoram, Union Territories (service cadre IAS)

APJA- Asia Pacific Jurist Association (Non-Government Organization of like minded jurists, leading lawyers and academicians. APJA has a specific interest in environmental laws and their enforcement with particular reference to the Asian Pacific Region)

ASCOBANS- Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas

ATS- Antarctic Treaty System

CAPART- Council for Advancement of People's Action and Rural Technology (voluntary organisations recognised in the Seventh Plan document led to its formation in 1986, as a nodal agency for catalysing and coordinating the emerging partnership between voluntary organisations and the Government for sustainable development of rural areas)

CBD- Convention on Biological Diversity

CCS- Centre for Civil Society (independent, non-profit, research and educational organisation devoted to improving the quality of life for all citizens of India by reviving and reinvigorating civil society)

CDM- Clean Development Mechanisms

CEC- Central Empowered Committee

CIDA- Canadian International Development Agency

CITES- Convention on International Trade in Endangered Species

CMS- Convention on Migratory Species

COFO- Committee on Forestry (highest FAO Forestry statutory body. The biennial sessions of COFO are held at FAO headquarters in Rome, Italy which bring together heads of forest services and other senior government officials to identify emerging policy and technical issues, to seek solutions and to advise FAO and others on appropriate action. Other international organizations and non-governmental groups also participate. Participation in COFO is open to all FAO member countries)

COP- Conference of Parties (Governing body of the Convention, and advances implementation of the Convention through the decisions it takes at its periodic meetings)

CPF- Collaborative Partnership on Forests (Voluntary arrangement among 14 international organizations and secretariats with substantial programmes on forests CIFOR FAO ITTO IUFRO CBD GEF UNCCD UNFF UNFCCC UNDP UNEP ICRAF WB IUCN. The CPF's mission is to promote the management, conservation and sustainable development of all types of forest and strengthen long term political commitment to this end)

CSD- Commission on Sustainable Development (Established in December 1992 by General Assembly Resolution as a functional commission of the UN Economic and Social Council, implementing a recommendation in the global agreement reached at the June 1992 United Nations Conference on Environment and Development/Earth Summit held in Rio de Janeiro)

DANIDA- Danish International Development Agency

DFID- Department for International Development (part of the UK government that manages Britain's aid to poor countries and works to get rid of extreme poverty.

Created in 1997 as a separate government department)

DFO- Divisional Forest Officer

DGSM- Dasholi Gram Swarajya Mandal

DIW- Deutsches Institut fur Wirtschaftsforschung (German Institute of Economic Research)

DLVS- Dudhatoli Lok Vikas Sansthan

DMMC- Disaster Mitigation and Management Centre

ECOSOC- Economic and Social Council

EEC- European Economic Community

EIA- Environmental Impact Assessment

EIS- Environmental Impact Statement

EMP- Environment Management Plan

ENMOD- Environment Modification Technique

ETF- Eco Task Force

EWSR- European Waste Shipment Regulation

FAC- Forest Advisory Committee

FAO- Food and Agriculture Organisation

FCO- Foreign and Commonwealth Office (the British government department responsible for promoting the interests of the United Kingdom overseas, created in 1968 by merging the Foreign Office and the Commonwealth Office)

FDA- Forest Development Agencies

FD- State Forest Departments (State)

FLEG- Forest Law Enforcement and Governance (multidonor trustfund of the World Bank. It aims to combat the threats posed to forests by illegal logging, trade, poaching and corruption)

FPC- Forest Protection Committee

FSI- Forest Survey of India

FYP- Five-Year Plan

GHG- Greenhouse Gas

GNP- Govind National Park

GWS- Govind Wildlife Sanctuary

HCFC- hydrochlorofluorocarbons

HFC- hydrofluorocarbons

IAEA- International Atomic Energy Agency

IBRAD- Indian Institute of Bio-social Research and Development (non-profit professional institute, established in the year 1985 in Kolkata)

ICFRE- Indian Council of Forestry Research and Education (constituted by Ministry of Environment and Forests in December 1986 to formulate, organize, direct and manage forestry research; transfer developed technologies to States and other agencies; and impart forestry education)

IFF- Intergovernmental Forum on Forests (Established by Economic and Social Council of United Nations in 1997)

IFS- Indian Forest Service

IIFM- Indian Institute of Forest Management

IISD- International Institute for Sustainable Development (Canada based independent, not-for-profit organization. Offices are located in Winnipeg, Ottawa, New York and Geneva)

IMO- International Maritime Organisation

IPCC- Intergovernmental Panel on Climate Change

IPF- Intergovernmental Panel on Forests (Established by Commission on Sustainable Development for two years- 1995-97 to provide a forum for forest policy deliberations)

ITFF- Interagency Task Force on Forests (FAO)

ITTO- International Tropical Timber Organization (Established under the auspices of the United Nations in 1986. Intergovernmental organization promoting the conservation and sustainable management, use and trade of tropical forest resources. Its members represent about 80% of the world's tropical forests and 90% of the global tropical timber trade. India is also a member)

IUCN- International Union for Conservation of Nature and Natural Resources

JFM- Joint Forest Management

JFMC- Joint Forest Management Committees

KSSP- Kerala Sastra Sahitya Parishath

LDC- Less Developed Countries

MAP- Medicinal and Aromatic Plants

MDG- Millennium Development Goals

MFP- Minor Forest Produce

MoEF- Ministry of Environment and Forests

MOU- Memorandum of Understanding

NAEB- National Afforestation and Eco-development Board

NCA- National Commission on Agriculture

NEP- National Environment Policy

NFAP- National Forestry Action Programme

NFC- National Forest Commission

NFFPFW- National Forum of Forest People and Forest Workers

NFP- National Forest Programme

NGO- Non Governmental Organisations

NLS- National Law School

NTFP- Non Timber forest Produce

OECD- Organisation for Economic Cooperation and Development

OECF- Overseas Economic Cooperation Fund

PADI- Programmes by Action in Development India

PIL- Public Interest Litigation

POP- Persistent Organic Pollutants

PRI- Panchayati Raj Institutions

SEEA- Society of Extension Education, Agra

SFAP- State Forestry Action Programme

SFR- State Forest Report

SFS- State Forest Service

SIDA- Swedish International Development Agency (Government agency of the country of Sweden. Sida channels its resources through NGOs, multilateral cooperation, and the EU, among others and is interested in promoting the idea of "international development cooperation." Supporting over 2,000 projects in over 100 countries Sida seeks to create partnerships with companies, popular movements, organizations, universities, and government agencies for its development projects. Sida's geographic focus is on countries in Africa, Asia, Latin America, and Central and Eastern Europe)

SIT- Special Investigating Team

SJVN- Satluj Jal Vidyut Nigam

SPSC- State Public Service Commissions

TAC- Technical Advisory Committee

TERI- The Energy Resources Institute

UK ODA- United Kingdom Official Development Assistance (Grants loans (net of repayments) to qualifying countries or territories, identified in part I of the Development Assistance Committee (DAC) list of recipient countries, that are undertaken by the official sector with promotion of economic development and welfare as the main objective and are made on concessional financial terms)

UN- United Nations

UNCCD- United Nations Convention to Combat Desertification

UNCED- United Nations Conference on Environment and Development

UNCTAD- United Nations Conference on Trade and Development

UNCSD- United Nations Commission on Sustainable Development

UNDP- United Nations Development Programme

UNEP- United Nations Environment Programme

UNFCCC- United Nations Framework Convention on Climate Change

UNFF- United Nations Forum on Forests

UPSC- Union Public Service Commission

US-AID- United States Agency for International Development (The U.S. Agency for International Development is headquartered in Washington, D.C. and has field offices in many of the countries. USAID's history goes back to the Marshall Plan reconstruction of Europe after World War Two and the Truman Administration's Point Four Program. In 1961, the Foreign Assistance Act was signed into law and USAID was created by executive order. Since that time, it is the principal U.S. agency to extend assistance to countries recovering from disaster, trying to escape poverty, and engaging in democratic reforms)

VFC- Village Forest Committee

VFJM- Village Forest Joint Management

VP- Van Panchayats

WDCS- Whales and Dolphin Conservation Society

WISE- World Institute of Sustainable Energy (The institute has been registered as a not-for-profit Society and Trust under the Societies Registration Act, 1860, and the Bombay Public Trusts Act, 1950, and began functioning in Pune in June 2004. WISE is a financially autonomous institution and comprises some major and eminent stakeholders from the renewable energy sector as its founder members)

WRM- World Rainforest Movement

INTRODUCTION

The environment consists of land, air, water, river, oceans, ponds, forests and the total flora and fauna that exist on this planet earth. It is the relationship of the living creatures with their biotic and non-biotic surroundings, their interdependence and mutual survivability. But over the period of time there has been a large-scale deterioration of the environment. The environmental problems in India as well as across the world are becoming issues of grave concern. The problem concerning environment arose mainly because of the adoption of the model of development, which proved disastrous to environment.

The protection of the environment throws various problems for a developing nation like India as it presents a most fundamental challenge to the nation's desire to industrialize faster, to be self-sufficient in food, and to be capable of fulfilling certain basic needs of the growing population. The environmental problems of today whether it is air and water pollution, ozone depletion, land degradation, deforestation, destruction of ecosystem or mismanagement of waste, all damages our natural environment and life on earth. Today the environmental problems worldwide, have acquired dangerous, if not crisis, proportions with both immediate and long-term consequences adversely affecting the course of development and progress, and the economic and social well-being of the people.

Thus the debate between development and environment came into the forefront. It has been argued that the continuous exploitation of the environment and the heavy reliance on the non-renewable energy resources has been the underlying features of the dominant and mainstream paradigms of development. The problem of environmental degradation has become an important concern for various countries as well as the scholars from different fields. The environmental degradation is the consequence of both abundance and scarcity. The abundance is the product of the techno-economic advancement whereas the scarcity is the nonfulfilment of the basic needs. This has given rise to various environmental

¹ S.N Pawar and R.B Patil (ed.), *Sociology of Environment*, Rawat Publications, Jaipur and New Delhi, 1998, p.68

² Ibid, p.69

movements across the world in varying measures like the Green Movement of the Western countries.

The protection of environment is always seen as opposed to the rapid industrialization process. This is because of the over utilization of resources and the limitations of resource availability. The development-environment debate is the outcome of different value systems in which the environment was conceptualized in the developing and the developed countries.³ This debate first emerged in the United Nations in 1972 where the need for conservation of environment in the developing countries was completely overlooked. According to the UN Report "It may be premature for many of the countries to divert their administrative energies to the establishment of new institutions or machinery." It was the period when the environmental destruction was most severe in the form of ozone layer depletion, greenhouse gases, rising sea level and threat of extinction of several animal as well as plant species. The main reason was the aggressive industrialization by the developed countries.

The process of development involves structural transformations in organisation of society and economy. Such a process cannot take place without altering relationships affecting the interests of different groups within society. Environment provides the resource base for development. But how people use these resources depends on their technological capacities and on the political and social structure which governs their relationships.

Thus, the concept of *Sustainable Development* came into existence. Sustainable Development was defined by Bruntland Report titled '*Our Common Future*' in 1987 wherein it was said "the development process should be aimed to meet the needs of the present generation without compromising the ability of future generations to meet their own needs." The report also mentioned the concern to eradicate poverty to meet the basic needs of humanity. It focussed its attention on finding the strategies to promote economic and social development without causing

4 Ibid

³ Pan Mohammad Faiz, 'Contemporary Environment Debate,' 4 April 2007 (http://politicalstudies.blogspot.com/)

environmental degradation, over exploitation or pollution. This idea was floated earlier as well at the Stockholm Conference of 1972.

Over the period of time various schools of thought have emerged in view of the emerging development-environment debate. These schools have questioned the limits of economic development in industrialised countries. So to combat various existing models of development, different alternative models also began to emerge which took into consideration the protection of the environment. This included the concept of *Ecological Model of Development* according to which the production of renewable natural resources is maintained at the highest sustainable limit. According to this model not only the basic needs of large majority of the people are directly satisfied from these natural resources, but the natural ecological processes create values for which there is no need for capital which is already in short supply in the poor countries.⁵ It calls for specific solutions to particular problems in particular regions in the light of cultural as well as ecological data.⁶ It also calls for ecological concerns and popular participation and ensures environmental sustainability.

Another alternative to the ongoing model of development is the *Gandhian Model of Development*. This is based on the ideas and thoughts of Gandhi who maintained that the better life is based on limited industrialization, decentralization and social reconstruction that ensures decent standard of living. According to him the economy that hurts the moral well-being of an individual or a nation is immoral. So he opposed big and heavy industries as it thrives at the expense of nature. Vast tracts of forests are being cut to facilitate the installation of big factories and machines. For Gandhi small is beautiful. So he advocated small and cottage industries, as they are ecologically friendly and less destructive to environment. According to Gandhi, the model of development that India has followed is the primary cause of environmental crisis and should be discarded altogether.

⁵ Pawar, S.N, and R.B Patil, Op.cit, p.70

⁶ Ibid

⁷ Ibid, p.85

The *Anthropocentrists* believe that the present nation-state and its legal structures that are modified to a greater or lesser degree by ecological consciousness, is adequate and necessary to meet the requirements of sustainable development. They consider humans to be the most important factor and value in the Universe. The humans have greater intrinsic value than other species. Anthropocentrism became common in environmental discourse since 1970s. But it has been highly criticised for perceiving humanity as distinct and separate from natural world.⁸

Light Anthropocentrist School believe that human beings are sole criterion of what is valuable and what it can value. The natural world only has value because humans give it a value. There are some important traditional environmental groups, conservation groups as well as preservation and recreational groups which usually stress on the importance of retaining some aspects of environment for the benefit or survival of human beings. But they work within the institutional framework and political process and might resort to some forms of public demonstration to make their point.

On the other hand, *Biocentrists* or *Deep Ecologists* give primacy to ecosphere of which man is a part rather than to human beings. Deep ecology is an environmental movement initiated by a Norwegian philosopher, Arnie Naess, in 1972. It believes in intrinsic value of nature and emphasized that the ecosystem should not be used as an instrument of human ends. Humankind is an intrinsic part of the environment. Deep ecologists support decentralization, the creation of ecoregions, the breakdown of industrialism in its current form, and an end to authoritarianism. Deep ecology has, as a major and important focus, the insight that the ecological crisis demands a basic change of values, the shift from human-centred anthropocentrism to ecocentrism and respect for the natural world. Some ideas associated with deep ecology are the love of nature, the concern with a

¹⁰ David Orton, 'Ecofascism: What is it?,' (http://home.ca.inter.net/~greenweb/Ecofascism.html)

⁸ 'Anthropocentrism,' Encyclopaedia of Science and Religion, (http://www.enotes.com/science-religion-encyclopedia/anthropocentrism)

⁹ 'Introduction to Deep Ecology: An Interview with Michael E. Zimmerman by Alan AtKisson,' (http://www.context.org/ICLIB/IC22/Zimmrman.htm)

needed spiritual transformation dedicated to the sharing of identities with other people, animals and most importantly nature.

The deep ecologists are in favour of *Frugal Sustainable Development*, which is based upon total value shift in the production and consumption habits of the people. It places more emphasis on the moral responsibility of the individual. They are for the society, which would be based on meeting only human needs and caring for environment. Energy would come from renewable sources like sun and wind, and all non-renewable energy would be conserved and recycled. Technologies should be appropriate but not harmful. The distinguishing and original characteristics of the deep ecology movement were its recognition of the inherent value of all living beings and the use of this view in shaping environmental policies.¹¹

The frugal sustainable society wants a change in territorial reorganization of state, which should not be a national or administrative political unit but an ecologically and biologically sustainable unit. The units in the State should be replaced by bioregions. Mountain ranges, rivers, vegetation, weather patterns, soils, plants and fauna characterize a *Bioregion*. Within this bioregion there is a sustainable ecosystem where humans can live without damaging the environment. Frugal sustainable society puts faith in decentralized commune life where needs and wants are reduced to bare minimum. Human scale and relatively harmless technologies would replace large-scale destructive ones.

Ecofeminism, or ecological feminism, is a term coined in 1974 by Françoise d'Eaubonne. It is born from the union of feminist and ecological thinking, and the belief that the social mentality that leads to the domination and oppression of women is directly connected to the social mentality which in turn leads to the abuse of the environment. Ecofeminism believes that a strong parallel exists between the male oppression and subordination of women in families and society and the degradation of nature by similarly masculine attitudes and methods. The ecofeminists argue that the capitalist and patriarchal systems that predominate throughout the world reveal a triple domination of the global south, women, and

¹¹ Deep Ecology Movement, (http://www.deepecology.org/movement.htm)

nature. According to Vandana Shiva in indian society it is perceived as unproductive if, for example, a lake is simply there, fulfilling the need for water of women's families and communities, until engineers come along and start constructing dams, using it for generating hydropower and other development purposes. The same is true of a forest which eventually is planted with a monoculture plantation of a commercial species. A forest may very well be productive, protecting groundwater, creating oxygen, allowing villagers to harvest fruit, fuel, and craft materials, and creating a habitat for animals that are also a valuable resource. However, if it is not for export or contribution to GDP, without a dollar value attached it cannot be seen as a productive resource. Also, 'women in subsistence economies, producing and reproducing wealth in partnership with nature, have been experts in their own right of holistic and ecological knowledge of nature's processes. But these alternative modes of knowing, which are oriented to the social benefits and sustenance needs are not recognised by the capitalist reductionist paradigm, because it fails to perceive the interconnectedness of nature, or the connection of women's lives, work and knowledge with the creation of wealth.'12

There is also a radical wing of ecologists known as *Eco- Fascists* for whom nature is more important than human beings. Industrialization is considered a foul corruption of the planet. According to them the famines, floods, epidemics are the symbols through which the ecosphere is reasserting its natural balance. The eco fascism can be traced back to the period of Nazism and Fascism wherein the Nazi government also investigated sustainable forestry. The Nazis were at the forefront of conservationism, with Nazi Germany having some of the first legally protected wildlife reserves. Presently, no country in the world has eco-fascist government. But many deeper environmentalists are of opinion that unless people organize themselves to counter the environmental destruction, 'countries like the United States and its high consumptive lifestyle allies like Canada and other 'over developed' countries would try to impose a fascist world dictatorship in the name

¹² Vandana Shiva, Staying Alive: Women, Ecology and Development, Zed Books, London, 1988, p.24

of "protecting their environment" and fossil fuel-based lifestyles. Such governments could perhaps then be considered eco-fascist.' 13

Similarly there is another viewpoint that wants to reduce the rates of depletion and pollution to a point where depletion is, as close to the capacity of regeneration and pollution does not exceed the capacity of environment to assimilate it safely. The careful conservation of non-renewable resources must be accompanied by a corresponding increase in both recycling and the use of renewable resources. It has also been argued that because of the population explosion the process of conservation has been hampered. Moreover the toxicity in air, water and land has been intensified and has polluted the planet beyond human control.

The debate that emerged between development and environment also had a considerable impact on India to such an extent that in India many, if not most, new large developmental projects have been questioned on environmental grounds. Such movements and issue-based concerns are also increasingly being seen as akin to, if not part of, the growing anti-capitalist movements in Western countries targeting forces and institutions of capitalist globalization and its consequences in different spheres of activity. These movements are also gaining strength among the middle-class and the intelligentsia. The biggest example is that of Narmada Bachao Andolan where people have demanded that the project be scrapped. Then there is also more recent example of the Sethusamundram Shipping Canal Project (SSCP) where the environmentalists fear that the canal will impact 21 marine national parks in the region with their rich coral reefs and marine species as well as adversely affecting the livelihood of lakh of fishermen. Also, the dumping of sand in Gulf of Mannar and along the coast will lead to long-term effects. Thus it can be said that radical movements and struggles in India, which could, and should, have been playing a leading role among developing countries, are yet to make a significant impact in due to weaknesses in evolving a perspective and praxis on sustainable development. In most of the discourse, it is implied that one has to be sacrificed in favour of the other or, at least, that some compromises in one are

¹³ David Orton, 'Ecofascism: What is it?,' (http://home.ca.inter.net/~greenweb/Ecofascism.html)

necessary in order to achieve the other, thus counter posing environment and development as seemingly mutually antithetical goals.

Thus, in the long term and in a fundamental sense, this dilemma between the needs of development and those of the environment which has to sustain the former, cannot be resolved by plumping in favour of one or the other. For both to go together, sustainable development (i.e., development which proceeds without destroying the natural base which sustains it) is a viable option. Two directions must be pursued simultaneously, that is, appropriate choice and development of technologies to reduce or eliminate imbalances within nature, and adoption of a different developmental path to reduce or eliminate imbalances within society. The development should be such that there is a need to avoid unbalanced approach and ruthless exploitation of natural resources for immediate gains.

In the quest for sustainable development the forests can be seen as the most effective weapons to combat climate change and other environmental issues. The issue of climate change has only made the role of environment governance all pervasive and important. There has been an increasing realization that forests provide numerous benefits to mankind including improvement of the quality of environment. Forests provide goods and services and maintain life support systems like timber, fuel wood, fodder, and a wide range of non-timber products. Forests are also a source of natural habitat for biodiversity and repository of genetic wealth, and provide means for recreation and opportunity for eco-tourism. In addition, forests help in watershed development, regulate water regime, conserve soil, and control floods. They contribute to process of carbon sequestration and act as carbon sink, which is important for reduction of green house gases and global warming. In ecologically sensitive areas like mountains, as well as river catchments, forests play an important role for prevention of floods etc. Degradation of forest resources has a detrimental effect on soil, water and climate, which in turn affects human and animal life. This has created global concern for protection and preservation of forests.¹⁴

¹⁴ Archana S Mathur and Arvinder S Sachdeva, 'Towards an Economic Approach to Sustainable Forest Development,' Working Paper no. 2/2003, Planning Commission, Nov 2003 (http://planningcommission.nic.in/reports/wrkpapers/wrkp_forest.pdf)

So in the subsequent chapters I will be examining case of forests. I would like to start by giving an overview of various international treaties and conventions that have come across at international level for the protection and preservation of environment and the issue of climate change. But since the aspect of environment is very vast and covers a whole lot of issue like air pollution, water pollution, rising sea level and many more, I would like to stream down my focus to the forests in India. I have chosen the aspect of forests, as forests depletion is one of the major causes of environmental degradation and climate change. When we talk about the deteriorating environmental conditions and climate change we often restrict ourselves to the issues like cleaning air and water. Forests conservation and replenishment have often been overlooked or left out of the purview of the environment protection and sustainable development.

Thus, in my work I will be examining the role of government at national and state level in the protection of forests followed by the issues between Centre-State, the role of grass-root levels of governance, and the role of judiciary. In the end, I would substantiate my argument with the case study of Uttarakhand which presents a case of gradual loss of forest ownership and user rights but still maintaining the participation of people in the management of available forests. Then I would like to conclude by saying that though many claims have been made about adopting the strategies, which are environmentally suitable, when it comes to economic gains and benefits the environmental concerns always take a back seat. Concerted action needs to be taken to increase people's perception about the values and benefits of forests.

CHAPTER 1

CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT

The concept of sustainable development gained importance during the decades of 1970. It was then realized that in the process of development, environment is being severely neglected. Hence many international agreements and conventions were formulated which called for protection of the environment as top priority. These international agreements encouraged the need for sustainable development. But of late, due to neo-liberal policies and the process of globalization, the impact of these international accords on environment has been sidelined. This has been mainly due to the deadlock between developing and the developed countries. The developing countries do not want to compromise on their development aspect while the developed countries do not want to compromise on their trade and growth aspect.

In this chapter I will try and examine various international agreements related to environment and emergence of the concept of Sustainable Development. Although the concept of sustainable gained ground with Stockholm Conference in 1971, but the term "Sustainable Development" was first time used in the Earth Summit in 1992.

<u>International Dimensions of Environment Protection and Climate</u> Change

Antarctic Treaty

This treaty made Antarctica a scientific preserve and banned military activities on this continent. This treaty was opened for signature in *December 1959* and officially entered into force on *23 June 1961*. 46 countries have signed the *Antarctic Treaty System* (ATS). The original signatories were those countries which were active in Antarctica during 1957-58. These countries were Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa,

Soviet Union, United Kingdom and United States. This was first arms control agreement during the cold war period. The main objective of ATS was to ensure that Antarctica shall continue to be used for peaceful purposes and shall not become an area of international discord. This treaty avoided the questions of then existing territorial claims asserted by some nations.¹⁵ This treaty remains in force indefinitely.

The main points of this treaty were freedom of scientific investigation and cooperation, free exchange of information and personnel in cooperation with United Nations and other international agencies, no new claims shall be asserted while the treaty is in force, prohibition of nuclear explosions or disposal of radioactive wastes, treaty-State observers have free access to any area, jurisdiction over observers and scientists by their own States, peaceful settlement of disputes by parties concerned or ultimately by International Court of Justice. Later on other agreements and recommendations related to Antarctica were adopted. Some of them are Conservation of Antarctic Fauna and Flora (1964), Convention for Conservation of Antarctic Seals (1972), Convention for Conservation of Antarctic Marine Living Resources (1980), and Protocol on Environmental Protection to the Antarctic Treaty (1991, came into force on 14 January 1998).

Convention on International Trade in Endangered Species

The Convention on International Trade in Endangered Species (CITES) of Wild Fauna and Flora is an international agreement between governments. It was drafted as a result of a resolution adopted in 1963 at the meeting of members of the World Conservation Union. Annually, international wildlife trade is estimated to be worth billions of dollars and to include hundreds of millions of plant and animal specimens. The trade ranges from live animals and plants to a vast array of wildlife products derived from them, including food products, exotic leather goods, wooden musical instruments, timber, tourist curios and medicines. Levels of exploitation of some animal and plant species are high and the trade in them, together with other factors, such as habitat loss, is capable of heavily

¹⁵ The Antarctic Treaty- Background Information (http://www.antarctica.ac.uk//about_antarctica/geopolitical/treaty/)

depleting their populations and even bringing some species close to extinction.¹⁷ It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival and accords varying degree of protection to more than 33,000 species of plants and animals (roughly about 5000 species of animals and 28000 species of plants). It was concluded in *March 1973* in Washington DC and was then opened for signature till 31 December 1974. It came into force after tenth ratification in July 1975. By the end of 2003 all signatory States had become parties to this convention. By August 2006 about 169 States had become party to the convention.

Various plants as well as animal species are protected by CITES against over exploitation through international trade. CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention have to be authorized through a licensing system. Trade of wild species is even illegal. In case of trade of species in captive (animal or plant) the management authority of the exporting country must make a non detriment finding assuring that export will not adversely affect wild population. Any trade in these species requires export and import permits. The notable animal species include the gorilla, chimpanzee, tigers, Asiatic lions, leopards, jaguar, cheetah, Asiatic elephant, African elephant and all rhinoceros species. The Convention requires each party to submit an annual report on its CITES trade, containing a summary of information on the number and type of permits and certificates granted, the States with which such trade occurred, the quantities and types of specimens, and the names of species as included in Appendices I, II and III of the convention.

United Nation Conference on Human Environment

Also known as *Stockholm Conference*, the *United Nation Conference on Human Environment* came into existence in *1972* and passed 26 main resolutions and 109 recommendations. It was the first conference at international level on the

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¹⁷ Convention on International Trade in Endangered Species of Wild Fauna and Flora (http://www.cites.org/eng/disc/what.shtml)

issue of environment. The government of Sweden took the initiative. It was attended by representatives of 113 countries, 19 inter-governmental agencies, and more than 400 inter-governmental and non-governmental organizations. The purpose of this conference was to coordinate international policies regarding environment. The issue of the state of global environment was discussed. The key issues addressed in this conference were the CFCs (haloalkanes) which is responsible for depletion of ozone layer, and the issue of global warming. The Stockholm Declaration and *Action Plan* defined principles for the preservation and enhancement of the natural environment, and highlighted the need to support people in this process.¹⁹

The conference stated that industrial countries should help to close the gap between them and underdeveloped countries while keeping their own priorities and the protection and improvement of the environment in mind. Some of the recommendations included that governments should communicate environmental issues that have international implications to their respective countries, and that agencies must work together to address various issues such as access to clean water, reduction of air pollution and population growth. The conference also approved environmental fund and an "Action Program" which involved 200 specific recommendations for addressing problems like climate change, maritime pollution, dumping of wastes, population growth and preserving the biodiversity.

Moreover, to increase the awareness about environmental issues among public and the government, many governments created Ministries of Environment and National Agencies for monitoring and regulation of environment. The conference also laid stress on future environmental cooperation and subsequently led to the creation of *global as well as regional level environmental monitoring system* and acknowledged that the goal of reducing the negative impact of development on environment would require extensive international cooperation. This had a huge impact on the various regional level organisations like European Union which in 1973 created the Environmental and Consumer Protection

¹⁹ United Nation Conference on Human Environment: Action Plan for Human Environment, (http://www.oup.co.uk/pdf/bt/cassese/cases/part3/ch17/1204.pdf)
²⁰ Ibid

Directorate and composed first Environmental Action Program. Also, United Nation Environmental Programme (UNEP) was launched as a permanent environmental unit to increase international cooperation on the environmental issues.²¹ The United Nation Conference on Human Environment was considered widely successful.

United Nation Environmental Programme

The *United Nation Environmental Programme* (UNEP) was one of the biggest achievements of United Nation Conference on Human Environment. Its main *aim* was "to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations."²²

UNEP has *six regional offices* and various country offices. Besides coordinating at international level and coordination among nations it has over the period of time monitored research, collected disseminated information and has played an important role in the ongoing negotiations about environmental issues. UNEP also keep global environment under review and bring key emerging issues to the attention of governments and international community for quick action. Moreover it has played an important role in promoting environmental science and information, working with national governments, regional institutions, and environmental Non Governmental Organizations (NGOs) in development and implementation of policy.

Various major initiatives and programmes have been implemented by UNEP. For this purpose about seven divisions have been made to facilitate the working of UNEP. Some of the major works include Division of Early Warning and Assessment to help increase the capacities of governments to use environmental information for decision making and action planning for sustainable human development. The Division of Environmental Policy Implementation was created for the implementation of environmental policy in order to foster

²¹ Ibid

²² United Nation Environment Programme, (http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=43)

sustainable development at global, regional and national levels. Besides there are other divisions as well like Division of Technology, Industry and Economics, Division of Regional Cooperation, Division of Environmental Law and Conventions, Division of Global Environment Facility Coordination, and the Division of Communications and Public Information.

Many famous projects undertaken by UNEP is the UNEP sponsored solar loan program which is helping about 100,000 people finance solar power in India. After its success in India the project has been carried on to the other countries like Indonesia, Tunisia, Morocco and Mexico. UNEP has also sponsored Marshlands project in Middle East to help protect the marshlands. Besides, UNEP has been reporting and alerting on the issue of melting and shrinking of glaciers.

In 1988 the UNEP and World Meteorological Organization established *Intergovernmental Panel on Climate Change* (IPCC).

Convention on the Prevention of Marine Pollution by Dumping of Wastes

The Convention on the Prevention of Marine Pollution by Dumping of Wastes and other matter is commonly known as "London Convention" or "LC 72". It came into being in 1972 to control pollution of the sea by dumping and to encourage regional agreements supplementary to the convention. It covers the disposal at sea of wastes or other matter from vessels, aircrafts, and platforms but does not cover discharges from land-based sources like pipes and waste generated incidental to the normal operation of vessels.

The UN Stockholm Conference on Human Environment in June 1972 called for the convention and the treaty was drafted at Intergovernmental Conference on Convention on the Dumping of Wastes at sea. It was opened for signature in *December 1972* and entered into force in August *1975* after ratification from 15 nations. There were 81 parties to the convention till 2005.

The main objective of this convention was to prevent indiscriminate disposal of wastes into the sea that could be liable for creating hazards to human

health and marine life as well. The convention extends its scope over all other marine waters other than internal water of the States. It also requires further special permit for dumping various identifiable materials and also prior general permit for other wastes or matter.

In November 1996 at a special meeting, the Convention on Prevention of Marine Pollution by Dumping of Wastes was replaced by "1996 Protocol." It was in line with UNCED's Agenda 21 and reflected the global trend towards precaution and prevention approach which was adopted in 1992 where the parties agreed to move from controlled dispersal of various land generated wastes at the sea towards integrated land based solutions and controlled sea disposal of few. The other important aspect of 1996 Protocol was the "polluter pay principle." There was a major revision in the protocol and "reverse list" approach was adopted. ²³ It means that now instead of prohibiting dumping of certain hazardous materials, the parties are obligated to prohibit the dumping of any waste or other material that is not listed in the 1996 protocol. This list included dumping of radioactive and other related industrial wastes. Dumping of wastes would require permit.

ENMOD Convention

This convention came into existence in 1976 with regard to prohibition of military or other hostile use of Environment Modification Technique. It was opened for signature in may 1977 at Geneva and entered into force in 1978. There are 67 parties to the agreement including India. The term "Environmental Modification Techniques" refers to any technique for changing the dynamics, composition or structure of earth through natural process or through deliberate manipulation that includes biota, lithosphere, hydrosphere, atmosphere and even outer space. This convention came into existence due to the global opposition to the use of Agent Orange and other environmental modification technologies in 1960s during Vietnam War and also by fears during 1970s that technology was

²³ International Maritime Organisation. (http://www.imo.org/home.asp?topic_id=1488)

²⁴ Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, (http://www.State.gov/t/ac/trt/4783.htm)

rapidly reaching the point that deliberate catastrophic environmental changes could be triggered as a weapon for hostile use.²⁵

According to this convention each State undertakes not to engage in military or any other hostile use of environmental modification techniques that have widespread and severe effects caused due to destruction or damage to other State party. Also no signatory party would assist, encourage or induce any State, group of States or international organisation to engage in activities contrary to the provisions of the agreement. But these environmental modification techniques could be used for peaceful purposes and is of unlimited duration.

Bonn Convention

This convention was in relation to the conservation of migratory species of wild animals, which aims to conserve terrestrial, marine and avian migratory species throughout their range.²⁶ It is an intergovernmental treaty concluded under United Nations Environment Programme. Its membership includes over 100 parties from Africa, Central and South America, Asia, Europe, and Australia. The convention was signed in 1979 in Bonn (Germany) and came into force in 1985. These parties strictly strive towards protecting the migratory species, conserving or restoring the places where they live, remove obstacles to migration and controlling other factors that might endanger them.²⁷ All migratory species that are threatened with extinction were listed in Appendix I. The migratory species that would benefit from international cooperation are listed in Appendix II of the convention. The Convention encourages the Range States to conclude global or regional agreements. The agreements may range from legally binding treaties (called agreements) to less formal instruments, such as Memoranda of Understanding, and can be adapted to the requirements of particular regions.²⁸ The decision-making organ of the convention is the Conference of Parties (COP). A Secretariat under the UNEP provides administrative support to the Convention.

²⁵ Sunshine Project: ENMOD-Hostile Environmental Modification, (http://www.sunshineproject.org/enmod/)

²⁶ Convention on Migratory Species, (http://www.cms.int/about/intro.htm)

²⁷ Ibid

²⁸ Ibid

The year 2007 was declared as *International Year of Dolphin* by UNEP. The UN Convention on Migratory Species has proposed this together with its specialized agreements on dolphin conservation ACCOBAMS and ASCOBANS and Whales and Dolphin Conservation Society (WDCS).

Montreal Protocol

Montreal Protocol is an international treaty designed to protect the ozone layer depletion by phasing out production of various substances that were believed to be responsible for the depletion. The treaty was opened for signature in September 1987 and came into force on I January 1989. Since then it has undergone five revisions- in 1990 (London), 1992 (Copenhagen), 1995 (Vienna), 1997 (Montreal), and 1999 (Beijing). Due to the widespread cooperation at international level this agreement has been hailed as an example of "exceptional international cooperation."

There are 191 members to this protocol at present. The treaty has been structured around several groups of halogenated hydrocarbons that have been identified to play an important role in ozone depletion. All of these substances either contain chlorine or bromine. The treaty provides a timeline on which the production of these substances must be phased out and eventually eliminated. The phasing out began in 1996 and will go on till complete phase out is achieved by 2030.

Since the implementation of this protocol the atmospheric concentration of the most important chlorofluorocarbons and the related chlorinated hydrocarbons have either levelled off or decreased.²⁹ The assessment and review of control measures have also been provided beginning from 1990 on the basis of available scientific, environmental, technical and economic information. The rate of halon concentration that are stored in fire extinguishers has also slowed down and are expected to decline by about 2020. But because the overall level of compliance has

²⁹ United Nation Environment Programme: Ozone Secretariat, (http://ozone.unep.org/Publications/MP_Handbook/Section_1.1_The_Montreal_Protocol/)

been high that is why Montreal Protocol has often been called most successful international environmental agreement till date.

Now hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs) are thought to be contributing to anthropogenic global warming. These compounds are upto 10,000 times more potent greenhouse gases than carbon dioxide. The protocol currently calls for a complete phase out of HCFCs by 2030 but it does not place any restriction on HFCs. Over the period of time steady increase in the use of either HFCs or CFCs could increase the danger of change in climate due to human activity. For further implementation, United Nation Development Programme (UNDP) also assists the developing countries with financial support of multilateral fund for the Implementation of Montreal Protocol, the global environment facility and bilateral donors. In July 2007 UNDP conducted HCFC surveys in 12 countries as it was observed that numerous developed countries have begun phasing out HCFCs at a faster rate than required by the Protocol, while in developing countries HCFC use is escalating which could negatively impact the economies of developing countries apart from threat to ozone layer.

Basel Convention

Basel Convention is an international treaty to reduce the movements of hazardous waste between nations and to prevent transfer of hazardous wastes from developed to less developed countries (LDCs). It was also intended to minimize the amount of toxicity of wastes generated. But it does not address the movement of radioactive waste. The convention was opened for signature in 1989 and came into force in May 1992. There are 170 parties to the convention including Afghanistan, Haiti and United States of America, which have signed the convention but have not ratified it yet.

This convention came into existence mainly due to the tightening of environmental norms and raise in the cost of disposal of hazardous wastes. One of

³⁰ 'The Technical and Economic Feasibility of Replacing Methyl Bromide in Developing Countries,' Friends of the Earth, Washington, 1996,

⁽http://www.eia.doe.gov/oiaf/1605/ggrpt/other_gases.html) ³¹ 'July 2007 - UNDP conducts HCFC surveys in 12 countries,'

⁽http://www.undp.org/chemicals/montrealprotocol/news2.htm)

the incidents which led to the creation of Basel Convention was *Khian Sea* waste disposal incident, in which a ship carrying incinerator ash from the city of Philadelphia in United States after having dumped half of its load on a beach in Haiti, was forced away where it sailed for many months, changing its name several times. Unable to unload the cargo in any port, the crew was believed to have dumped much of it at sea. Another is the 1988 Koko case in which five ships transported 8,000 barrels of hazardous waste from Italy to the small town of Koko in Nigeria in exchange for \$100 monthly rent which was paid to a Nigerian for the use of his farmland.³²

For the purpose of proper implementation of this convention, stringent laws are required to prevent the movement of wastes across national boundaries. The Convention places prohibition on import and export of wastes between parties and non parties. According to one report by the Secretariat of Basel Convention in 2001 there are at least 8.5 million tonnes of hazardous waste moving from country to country each year.

LDCs, Greenpeace and European countries like Denmark adopted the *Basel Ban Amendment to the Basel Convention* after lobbying at the Basel Conference in *1995*. It has not yet been in force but is considered to be *morally binding* by the signatories. It prohibits the export of hazardous waste from a list of developed, mostly OECD countries to developing countries. The main area of concern was sale of ships for salvage, ship breaking. Various industrial groups and many nations including United States and Canada vigorously opposed the ban. By 2005 about 63 nations had ratified Basel Ban Amendment. European Union fully implemented it in its Waste Shipment Regulation (EWSR). It is now legally binding on all EU member states.

In a meeting held in 2006 the conference focussed on the issues of electronic waste and dismantling of ships. Many LDCs and NGOs have argued that there should be a total ban on shipment of all hazardous waste to LDCs.

³² Basel Convention, (http://en.wikipedia.org/wiki/Basel_Convention)

UN Conference on Environment and Development

Also known as *Earth Summit* and *Rio Summit*, the *UN Conference on Environment and Development* took place in *1992* at Rio de Janeiro. This summit followed the UN Conference on Human Environment, which took place in 1972. About 172 countries participated in this conference. Many representatives of NGOs were also present in the conference. *The main theme of this conference was Environment and Sustainable Development*.

The initiative of this conference was taken by United Nations and twenty years after the first global environment conference, the UN sought to help governments rethink economic development and find ways to halt the destruction of irreplaceable natural resources and pollution of the planet.³³ Governments of various countries that attended the conference recognized the need to redirect international and national plans and policies to ensure that all economic decisions fully took into account any environmental impact.

The major outcomes of this conference were Agenda 21, the Rio Declaration on Environment and Development, the Statement of Forest Principles, the United Nations Framework Convention on Climate Change, and the United Nations Convention on Biological Diversity. There were also certain follow up mechanisms that were decided in the conference itself. These follow up mechanisms are Commission on Sustainable Development, Inter-agency Committee on Sustainable Development, and High-level Advisory Board on Sustainable Development.

Another important achievement of this convention was the agreement on climate change convention that eventually led to Kyoto Protocol. Another agreement was signed which mentioned that no activities would be carried out on the land of indigenous people that would cause environmental degradation or that would be culturally appropriate. TH-17387

³³ UN Conference on Environment and Development. (http://www.un.org/geninfo/bp/enviro.html)

In *June 1997* the United Nation General Assembly held a "Special Session to Review the Implementation of Agenda 21" to assess international progress in addressing environment and development related issues over five years since the United Nations Conference on Environment and Development in Rio.³⁴ There were review of international effort to implement Agenda 21, areas were identified for urgent international action, and work plan was fixed for United Nations Commission on Sustainable Development (UNCSD) for the five years leading up to the next comprehensive review of Agenda 21, scheduled for 2002. ³⁵

But the biggest challenges faced at Rio Earth Summit were the problems of finance, consumption rates and population growth. The developed nations demanded environmental sustainability while the developing nations argued that they should be given a chance to catch up socially and economically with the developed world.

Convention on Biological Diversity

The Convention on Biological Diversity was adopted at Earth Summit in Rio de Janeiro in 1992 with three main objectives: conservation of biological diversity, sustainable use of resources, and fair and equitable sharing of benefits arising from genetic resources. It was opened for signature in 1992 and entered into force on 29 December 1993. 189 countries have signed it. USA has signed the convention but not ratified it. It was for the first time recognised in international law that conservation of biological diversity is a common concern of humankind and is an integral part of the development process. The agreement covers all ecosystems, species and genetic resources.

Some of the *main issues* dealt with in this convention are the measures to be taken for conservation and sustainable use of biological diversity, regulated access to genetic resources and traditional knowledge, sharing the results of research and development and benefits arising from the commercial and other utilization of

³⁴ James Meadowcroft, 'The Politics of Sustainable Development: Emergent Arenas and Challenges for Political Science,' *International Political Science Review*, Vol.20, No. 2, 1999
³⁵ Ibid

genetic resources with the contracting parties, education and public awareness, national reporting on efforts to implement treaty commitments access to the transfer of technology to governments and local communities that provided biodiversity resources. The international community has recognized close and traditional dependence of many indigenous and local communities on biological resources, notably in the Preamble to the Convention on Biological Diversity. There is also a broad recognition of the contribution that traditional knowledge can make to both the conservation and the sustainable use of biological diversity, two fundamental objectives of the Convention. ³⁶

The 2010 Biodiversity Target was adopted in 2002 which aimed to achieve a significant reduction of the current rate of biodiversity loss at global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth. This target was subsequently endorsed by the World Summit on Sustainable Development and the United Nations General Assembly and was incorporated as a new target under the Millennium Development Goals.³⁷

There are *seven focal areas* to enhance the evaluation of achievements and progress towards its implementation and that of its 2010 Biodiversity Target. These are as follows:

- Reducing the rate of loss of the components of biodiversity, including: (i) biomes, habitats and ecosystems; (ii) species and populations; and (iii) genetic diversity;
- Promoting sustainable use of biodiversity;
- Addressing the major threats to biodiversity, including those arising from invasive alien species, climate change, pollution, and habitat change;
- Maintaining ecosystem integrity, and the provision of goods and services provided by biodiversity in ecosystems, in support of human well-being;
- Protecting traditional knowledge, innovations and practices;
- Ensuring the fair and equitable sharing of benefits arising out of the use of genetic resources; and

³⁶ Convention on Biological Diversity, (http://www.cbd.int/)

³⁷ Convention on Biological Diversity, 2010 Biodiversity Target, (http://www.cbd.int/2010-target/)

 Mobilizing financial and technical resources, especially for developing countries, in particular least developed countries and small Island developing states among them, and countries with economies in transition, for implementing the Convention and the Strategic Plan.³⁸

UN Framework Convention on Climate Change (UNFCCC)

The *United Nations Framework on Climate Change* is an international agreement on environment that was produced in Earth Summit in 1992. The treaty aimed at reducing greenhouse gases emission in order to reduce global warming. As the treaty did not set any mandatory limit on greenhouse gas emission for individual nation and contained no enforcement provisions, therefore this treaty is not considered to be legally binding. The treaty included provisions for updates that would set mandatory emission limits. It recognizes that climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases.³⁹ Its main update is Kyoto Protocol.

The UNFCCC was opened for signature in 1992 at the Earth Summit and came into force on 21 March 1994. It was ratified by 154 nations. This agreement has committed the signatories to a voluntary non-binding aim to reduce atmospheric concentration of greenhouse gases. These actions were aimed at primarily industrialized countries for stabilizing their greenhouse gases emissions at 1990 level by the year 2000. Since its enforcement the parties have been meeting annually in Conference of the Parties (COP) to assess the progress in dealing with climate change and to negotiate the Kyoto protocol to establish legally binding obligations for developed countries to reduce their greenhouse gases emissions.

Apart from UNFCCC, World Bank and OECD have also devoted their attention to the issues related to development and environment.

³⁸ Convention on Biological Diversity, 2010 Biodiversity Target-Focal Areas, (http://www.cbd.int/2010-target/focal.shtml)

The United Nations Framework Convention on Climate Change, (http://unfccc.int/2860.php)

Kyoto Protocol

Kyoto Protocol is an amendment to the international treaty on climate change assigning mandatory emission limitations for reduction of carbon dioxide and five other greenhouse gases by the signatory nations. The treaty was negotiated in Kyoto Japan in December 1997, was opened for signature on 16 March 1998 and closed on 15 March 1999. The agreement came into force on 16 February 2005. The total of 182 countries have ratified this agreement by May 2008. The only exceptions are United States and Australia. Although the countries like India and China have ratified the protocol, they are not required to reduce their carbon emissions under the present agreement. The treaty will expire in 2012.

The *major feature* of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions.⁴⁰ The main objective of this protocol is stabilization of greenhouse gases concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."⁴¹

Under this protocol the industrialized countries are required to reduce their collective emissions of greenhouse gases by 5.2% compared to the year 1990. The goal is to lower the overall emissions of six greenhouse gases over the five year period from 2008-12. These greenhouse gases are carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, HFCs and PFCs. Then national limitation range has been set which ranges from 8% reduction for European Union, 7% for United States, 6% for Japan, and permitted increase of 8% for Australia and 10% for Iceland.

Under this agreement all the Annex I economies have established designated National Authorities to manage their greenhouse gas portfolios. Countries including Japan, Canada, Italy, the Netherlands, Germany, France, Spain and others are actively promoting government carbon funds and supporting

⁴¹ Ibid

⁴⁰ Kyoto Protocol, (http://unfccc.int/kyoto_protocol/items/2830.php)

multilateral carbon funds intent on purchasing Carbon Credits from Non-Annex I countries. It also includes flexible mechanism which allows Annex I economies to meet their greenhouse gas emission limitation by purchasing GHG emission reductions from other countries through financial exchanges, from the projects which reduce emissions in Non Annex I countries under *Clean Development Mechanisms* (*CDM*), or from other Annex I countries through *Joint Implementation*. If the Enforcement Branch determines that an Annex I country is not in compliance with its emissions limitation, then that country is required to make up the difference plus an additional 30 percent. More recently Kyoto Protocol compliance mechanism is designed to strengthen the Protocol's environmental integrity, support carbon market's credibility and ensure transparency of accounting by parties. Basically emission trading is an effective and cost-efficient tool for diminishing greenhouse gas emissions.

But of late Russia has been creating hurdles in implementation of Kyoto protocol. With Russia accounting for 17.4 percent of greenhouse gas emissions at 1990 levels, its accession to the treaty would have allowed it to cross the crucial goal of 55percent reduction in emission levels required for it to enter into force. 42

Stockholm Convention 2001

Stockholm Convention is an international agreement on Persistent Organic Pollutants (POPs). The negotiations were completed in May 2001 in Stockholm, Sweden and it came into force on 17 May 2004. Initially it was ratified by 128 parties and later had 152 signatories. India signed this convention in 2006.

The main aim of this convention was to protect public health and environment from the ill effects of POPs and the measures to control, reduce or eliminate it to the extent possible. The convention also sought to ensure sound management and disposal of wastes containing POPs. In 1995 the Governing Council of UNEP called for global action related to POPs that were defined as "chemical substances that persist in the environment, bio-accumulate through food web and pose a risk of causing adverse effects to human health and the

⁴² 'Kyoto Protocol and the Future of Carbon Trading,' *The Financial Express*, October 27, 2003 (http://www.financialexpress.com/news/kyoto-protocol-and-the-future-of-carbon-trading/55951/)

environment." They are also known as "Dirty dozens" which include eight organochlorine pesticides, two industrial chemicals and two groups industrial by-products. Each party is required to develop a plan for implementing its obligations under the Convention. The signatory countries agreed to outlaw nine of these chemicals, limited the use of DDT to malaria control, and curtailed the inadvertent production of dioxins and furans. The treaty specifically permits the use of DDT for public health to control mosquitoes. There are other substances that are also added to the list like hexachlorobutadiene, octaBDE, pentachlorobenzene, polychlorinated napthalenes etc. For the effective implementation of this convention it was decided that evaluation should be conducted after four years in 2009, which will eventually serve as the baseline for further evaluation. To facilitate effective evaluation the conference initiated the arrangements to provide itself with comparable monitoring data on the chemicals listed in Annexes A B and C as well as regional and global environmental transport at its first meeting. The conference is currently negotiating procedures and institutional mechanisms for determining non-compliance with the provisions of the convention, and procedure for considering such information in the context of effectiveness evaluation.⁴³

Although steps have been taken to proceed towards chemical safety regime but there has been a little active participation. The Indian industry is resisting the country ratifying POPs treaty. Moreover, the participation of NGOs and communities in this area has not been encouraged much and there is almost no public information.⁴⁴ The governmental policies have also not addressed this issue substantially. The awareness at the community level is low as well.

Bali Summit

The *United Nations Climate Change Conference* took place in Bali, Indonesia in *December 2007* where about 180 countries participated along with many NGOs. The whole conference was dominated by the question of the

⁴³ Stockholm Convention on Persistent Organic Pollutants (POPs), (http://chm.pops.int/Programmes/EffectivenessEvaluation/Implementation/tabid/139/language/en-US/Default.aspx)

⁴⁴ Papiya Sarkar, 'POPs in South Asia: Status and Environmental Health Impacts,' Toxics Link, July 1, 2004, (http://www.toxicslink.org/pub-view.php?pubnum=34)

successor to Kyoto Protocol. The conference culminated in the adoption of Bali **Road Map**, which consists of a number of forward-looking decisions that represent various tracks that are essential to reaching a secure climate future. The Bali Road Map includes Bali Action Plan, which charts the course for a new negotiating process designed to tackle climate change, with the aim of completing this by 2009.45

The aim of the summit was to make Action Plan after the expiration of Kyoto Protocol in 2012. It was believed that global emissions trading system that includes high and low income countries could bring economic efficiency if all nations and relevant sectors were included properly and no market distortions took place. A global cap-and-trade system would determine a price for greenhouse gas emissions and allow for cost-effective trade of permits within industrialized nations and between developed and developing nations. 46 The Intergovernmental Panel on Climate Change in its report had presented a much bleaker picture of world climate and to prevent the worse possible effects if preventive measures are not taken right away. According to IPCC the reduction of 25-40 percent would be necessary if world was to halve its GHG emissions by 2050. Thus the Bali roadmap had put two-year process in place to attempt to agree on widespread reductions on anthropogenic climate emissions.⁴⁷ Besides, there was a broad agreement on setting up adaptation fund, to transfer clean technology to developing countries and to provide financial resources so that they could do their bit to address climate change.

But of late US and China have succeeded in preventing any agreements for future carbon reductions. Apparently United States was the last country to ratify the agreement following huge criticism by the developing countries. The US wanted to go by domestic regulations and incentives to reduce a GHG emission that was summarily rejected by the developing countries and the European Union. The

⁴⁵ The United Nations Climate Change Conference in Bali, (http://unfccc.int/meetings/cop_13/items/4049.php)

⁴⁶ Claudia Kemfert, 'The Bali Convention: Flexibility of Targets and Instruments Inevitable,' September 2007, (http://www.diw.de/documents/publikationen/73/63426/dp729.pdf) ⁴⁷ Jonathan M. Gitlin, 'Bali summit deal reached: tears and recriminations begin,' December 17, 2007, (http://arstechnica.com/news.ars/post/20071217-bali-summit-deal-reached-tears-andrecriminations-begin.html)

deadlock was over the question whether to have a 25-40 percent reduction in GHG emissions by 2020 in comparison to 1990 as the goal in the Bali roadmap. Thus, after some negotiations benchmark range was shifted to the preamble of roadmap text which is non-binding in UN treaties. But US was still not satisfied with the outcome.

The second point of deadlock arose because some industrialized countries were still saying that developing countries should also accept legally binding GHG emission reduction targets, though all developing countries and the EU have always called this a non-starter, as developing countries needed to increase their energy consumption for development and because industrialized countries were responsible for almost all GHG in the atmosphere anyway.

After the enforcement of Kyoto Protocol in 2005 other high level meetings took place. For example, *Washington Declaration* took place in 2007 which is non binding and the leaders of various countries of G8+5 group like Canada, France, Germany, Italy, Japan, Russia, United Kingdom, United States, Brazil, China, India, Mexico and South Africa agreed in principle to a "global cap-and-trade system" that would apply to both industrialized nations and developing countries, which they hoped would be in place by 2009. This declaration was mainly for tackling the problem of global warming as it was concluded from the report of Intergovernmental Panel on Climate Change that human activities since 1750 have warmed the planet.⁴⁸

In *June 2007, 33rd G8 Summit* took place which announced that G8 nations would 'aim to at least halve global CO₂ emissions by 2050'. The details were discussed by environment ministers within the framework of UNFCCC. It would also include major emerging economies. The G8 also announced their desire to use the proceeds from auction of emission rights and other financial tools to support climate protection projects in developing countries.

⁴⁸ 'Washington Legislator's Forum Statement 14-15 February 2007,' (http://www.globeinternational.org/docs/content/washington_Statement.pdf)

The 2007 Vienna Climate Change Talks and Agreements were concluded under the aegis of UNFCCC in August 2007. The main focus was the effective response to climate change and the energy efficiency which could yield significant emission cut at low cost. These talks were meant to create a stage for the meeting in Bali in December 2007.

The 2007 United Nation Climate Change Conference was dominated by the negotiations on the succesor to Kyoto Protocol. The United Nation Climate Change Conference 2008 culminated in December where delegates agreed on principles of financing for a fund to help the poorest nations cope with the effects of climate change. And also they approved a mechanism to incorporate forest protection in their agenda. The 2009 United Nation Climate Change Conference is scheduled to be held in December at Copenhagen where the treaty succeeding Kyoto Protocol is expected to be adopted. The other topics that could be included are carbon capture and storage, biofuels, adaptation financing, technology transfer, sustainable agriculture, emissions targets, tropical forests, and rural and transport electrification.

Environment Protection in India

The above-mentioned international conferences and treaties exerted tremendous influence on the policies and programmes of various countries at the national level as well. India was no exception and from time to time various laws have been formulated to protect the environment. It was realized that the conservation, protection and development of environment and ecology involve several regulatory measures such as prevention of air and water pollution, diversion of forest lands etc. These measures cannot be enforced without a constitutional or legal basis.

The environmental problems persisted even before independence. Prior to independence the major concern of colonial powers was mostly on extraction of forest resources for commercial purposes that resulted in a negative impact on both the environment and tribal population. Their main aim was not to conserve the

natural resources of colonial countries but to exploit them for their own commercial purposes. Although British government in 1927 adopted the Forest Bill, it was not to conserve or protect the forest or environment but to extract the resources by controlling the geographical area.⁴⁹

After independence new government under Nehru took up the policy of rapid industrialization and modernization. Initially no attention was given to environmental issue, and modernization and industrialization posed two major problems. Firstly, it was extremely destructive of the environment as there was no internalisation of environmental cost due to absence of strong laws. Secondly, modernisation was transforming the very character of nature where maximum production and maximum profits became the aim. In the name of economic development, any human activity resulting in destruction of ecology/ environment was justified. Originally there were no provisions on environment in the Constitution and the environment protection clause was neither Centre nor the State list subject. The environmental issues were completely overlooked during the first two decades after independence. Till date there is no explicit provision for environmental protection although Directive **Principles** assign responsibility to the State.

The 1972 Stockholm Conference exerted tremendous influence on the need for strict environmental legislations in India. Department of Science and Technology set up National Committee on Environmental Planning and Coordination to make necessary preparations for the conference and steps were taken to implement the decisions taken at the conference by amending the Constitution, formulating new legislation concerned with environmental protection and creation of institutions to implement the legislation. So various clauses related to environmental protection were inserted by 42nd amendment of the Constitution. This amendment inserted Articles 48A and 51A in the Constitution. The amendment also stated that protection of wild animals and birds, forests, population control and family planning were transferred from the State list to Concurrent list.

⁴⁹ Velayutham Saravanan, 'Economic Exploitation of Forest Resources in South India During the Early 19th Century.' (http://www.helsinki.fi/iehc2006/papers1/Saravana.pdf)

Most of the environment related laws enacted by Parliament have been based on Articles 252 and 253 of the Constitution that gave a dominant role for the Central Government on the matters relating to environmental protection. Of the three major components of the environment- air, water and land- land and water resource are included in the State list while air not included in any list. So it is with Centre under its residuary powers. Also, environment and environmental protection are not mentioned in any of the three lists. Presently there are about 30 major enactments related to protection of environment being administered by Central and State Governments.

The environment related problems were mentioned in 4th Five Year Plan (1969-74) and a committee was set up in 1972 to look into these problems. Another committee based on existing legislative measures was set up and following its recommendations Department of Environment was set up in 1980, which was later upgraded to full fledged Ministry of Environment. This Ministry of Environment and Forests is nodal agency at central level planning, promoting and coordinating the environmental schemes and programmes. The Ministry is also the nodal agency in the country for the United Nations Environment Programme.⁵⁰

The 6^{th} FYP envisaged that environment must not be considered as just another sector of national development. The environmental problems of India can be classified as those arising from conditions of poverty and under-development and those arising as negative effects of the very process of development. The 7^{th} FYP also focussed on the same aspect and it mentioned that the whole planning process is aimed at development and removal of poverty. The need to improve conditions of our people is gaining ground and under this pressure those concerned with developmental activities lose sight of environmental and ecological imperatives. Environmental management- a term encompassing environmental planning, protection, monitoring, assessment, research, education, conservation and sustainable use of resources- is now accepted as a major guiding factor for national development in India. 8^{th} FYP emphasized that the destruction and degradation of forests are taking a heavy toll of our soil and water resources. It also mentioned about formulation of national policy on nature and natural resources which should

⁵⁰ Ministry of Environment and Forest, (http://envfor.nic.in/)

spell out the position regarding environmental needs of the society in general and the rights of the weaker sections such as, tribals, nomads, women and children, especially in terms of giving access to and control over the natural resources, in particular.

The major tasks for meeting this challenge are:

- 1. To protect the natural environment;
- 2. To regenerate and restore degraded ecosystems and increase their productivity and to generate employment through these activities;
- 3. To decentralise control over nature and natural resources;
- 4. To develop and share an understanding of nature and natural processes;
- 5. To formulate a national policy for environment and an appropriate institutional and legal framework in support of the policy;
- 6. To ensure co-ordinated and integrated Governmental action aimed at conserving nature and sustainable use of natural resources;
- 7. To make individuals and institutions more accountable to the people for their actions impinging on environment and ecosystem; and
- 8. To monitor the State of environment.⁵¹

The 9th FYP (1997-2002) emphasized on protection of environment in its development strategy. The policy was guided by principles of Agenda 21 that was adopted at Earth Summit in Rio de Janeiro in 1992. It aims at integrating environmental imperatives with developmental aspirations.⁵² It stated that 33 percent of the total geographical area of the country should be under forest cover. However, the present level of forest cover is much lower than desired. Hence regeneration of the forest cover is an important component of environmental sustainability. So it proposed that every district in the country should reserve at least two percent of its available area under forest. The 10th FYP (2002-07) states that 'major instrument with the States to check environmental degradation is regulation. The country has adopted almost all environmental protection acts and rules enforced in developed countries. But environmental degradation continues

⁵¹ 8th Five Year Plan (Vol-2), (http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html)
⁵² Abhay Kumar, *Environmental Protection in India: Socio-economic Aspects*, New Century
Publications, New Delhi, 2005, p.12

despite long standing policies and legal-cum- institutional framework for environmental protection.'53 The 11th FYP (2007-12) also covered a section on environment sustainability. It aims at putting economy on a sustainable growth trajectory. It is also said that rapid economic growth intensifies environmental degradation. So it must be ensured that rapid growth is environmentally benign. This can be achieved through greater awareness.

Apart from constitutional provisions various *institutions* have been set up to monitor the environmental situations and to take adequate measures to prevent further degradation of the environment. These institutions also help in implementing the legislations. For example Pollution Control Boards are set up at both Central and State level and stringent norms for vehicular emissions were notified under the *Central Motor Vehicles Rules* that came into force in April 1996. The responsibility for prevention and control of industrial pollution lies primarily with Central Pollution Control Board. It is the apex body for assessment, monitoring and control of water and air pollution.

Besides this there is also a separate and independent concept of *Environmental Audit*, which came into being through Environment Protection Rules. This was added by an amendment in 1992. The Environmental Auditing recognizes self-regulation among the industry with a view to tailoring environmental safeguards into industrial activities.⁵⁴ The rules made submission of an environmental audit report compulsory. Every person carrying on an industry, operation or process requiring consent under Water or Air Act or authorization under the Hazardous Waste (Management and Handling) Rules 1989 has to submit this report for the financial year, ending 31 March, to the board. It is a management tool that ensures cost-effective compliance with the policies of industrial undertaking reduces occurrence of industrial accidents and strengthens expertise at operational level. It makes the industrial undertaking more environment conscious.

Moreover the *Environmental Impact Assessment* (EIA) is an assessment of all relevant environmental effects that would result from a project under

⁵³ Ibid. p. 14

⁵⁴ P. Leelakrishnan, Environmental Law in India, Butterworths India, New Delhi, 2000, p.101

consideration as it was realized that all developmental efforts needs to be harmonized with conservation of environment and ecology. It means a systematic examination of the likely environmental consequences of projects or programs, plans and policies proposed. The result of this statement are assembled in a document known as Environmental Impact Statement (EIS) which are intended to provide a balanced appraisal of the environmental, social and health implications of alternative course of action to decision makers. Prior to 1994 notification of Ministry of Environment and Forests, EIA in India was carried out under administrative guidelines which required the project proponents of major irrigation projects, river valley projects, thermal power station, airports and harbours etc, to secure clearance from Union Ministry of Environment and Forests. In January 1994, the Ministry of Environment and Forests notified mandatory EIA under rule 5 of the Environment Protection Act 1986 for 29 designated projects. The notification made it obligatory to prepare and submit an EIA and Environment Management Plan (EMP), and the project report to an impact assessment agency for clearance. The Ministry has also notified certain developmental activities, which could be taken up only after prior environmental clearance from Ministry under environmental regulations such as Coastal Regulation Zone. The environmental clearance based on EIA was also introduced as an administrative measure in 1978-79.

National Level Conferences on Environment in India since 2001

The National Level Conference on Environment called Coimbatore Charter was held in 2001 and attended by the State Environment and Forests Ministers, Secretaries to the State Governments, Principal Chief Conservators of Forests, Chairpersons of the Central and State Pollution Control Boards/Committees and senior officials of the Ministry of Environment and Forests, Government of India. The conference resolved to protect and improve the environment and forests of the country with regard to the issues of afforestation, joint forest management, forest fire control measures, strengthening of infrastructure, and wildlife conservation. For the strengthening and effective implementation of environmental laws, the

⁵⁵ The Coimbatore Charter on Environment and Forest, January 29-30, 2001, (http://envfor.nic.in/misc/coimchar.html)

Pollution Control Boards/Committees shall build up capacity for requisite expertise and infrastructure was also taken up.

The World Forestry Day is observed on March 21 every year across the world. The concept of having a World Forestry Day originated at the 23rd General Assembly of the European Confederation of Agriculture in 1971. In India the Ministry of Environment and Forests observed the World Forestry Day in collaboration with The Energy Resources Institute (TERI) in New Delhi.

TERI in consonance with Delhi Government organized a high-level conference on ecological and sustainable publishing practices in Delhi in April 2007. The event titled "Pathways to Green Publishing: a stakeholders' dialogue on ecological and sustainable publishing practices" was an attempt to bring together the stakeholders involved in process of publishing, including paper manufacturers and printers on a platform to discuss enormous environmental issues plaguing the industry as a whole. Commenting on the conference Dr. R K Pachauri, Director-General, TERI said, "One of the most important frontiers in tackling the global threat of environmental degradation lies in greening the entire chain of printing and publication activity. If one were to assess the power of this extended sector, it would become apparent that the message of green practices applied in this field would reach every member of human society. India should be a leader in the field of sustainable development and consequently pathways to green publishing are important avenues for India to tread in a leadership position." 56

Ministry of Environment and Forests had organized the 12th World Lakes Conference. The conference was titled 'Taal 2007' under the theme "Conserving Lakes and Wetlands for Future." The event aimed to find new and better alternatives to manage the lake water resources and their management throughout the world.

⁵⁶ 'TERI-Organizes-India-s-First-Ever-Conference-on-environment-friendly-Publishing,' (http://www.financialexpress.com/news/TERI-Organizes-India-s-First-Ever-Conference-on-environment-friendly-Publishing/293603/)

The Conference on Climate Change India 2008 was organised by the World Institute of Sustainable Energy (WISE), Pune. The conference focussed on impacts of climate change in India and the solution towards its mitigation. It also covered many topics like impact on economy, impact on industrial and economic sectors in terms of business risks and opportunities. It emphasized that India aimed to discover the causes and search for the solutions towards combating major challenge facing India in the 21st century and to find prime opportunities to create a sustainable world.

In March 2009 an International Conference on Energy and Environment, EnviroEnergy 2009, was conducted by National Institute of Technology, Kurukshetra, India. The Conference aimed at addressing the challenges in emerging areas of energy and environment to achieve sustainable development. The Conference provided a useful forum to academicians, technologists, entrepreneurs and policy makers worldwide for exchange of concepts and emerging technologies in the fields of energy and environment. The attempt was made to evolve an agenda for environmental policies, identification of green technologies and their subsequent implementation for sustainable development.

Summing up

Thus it can be said that the notion of *sustainable development* has remarkably evolved from environment related policy-making at both international and national level. Even at the national level, new environment related policies have come into existence with the view to integrate both environmental and economic factor in the decision-making. Although there have been many international laws and treaties regarding the protection of environment and sustainable development, but it is generally found that the efforts are rather bleak. This is mainly because of the disputes between north and south over issues such as overseas development assistance, technology transfer, and the adoption of innovative financial instruments to fund sustainable development, and the

⁵⁷ 'EnviroEnergy 2009, International Conference on Energy and Environment,' March 2009, (http://www.enviroenergy2009.org/)

generalized reluctance of states to commit to binding timetables and plans of action. 58

Although the issues of environment covers a wide range of areas like air, water, wildlife, biological diversity and others my main area of focus in the subsequent chapters will be restricted to the aspect of *forests* only.

⁵⁸ James Meadowcroft, 'The Politics of Sustainable Development: Emergent Arenas and Challenges for Political Science,' *International Political Science Review*, Vol.20, No. 2, 1999

CHAPTER 2

ROLE OF THE STATE: MULTI LEVEL ANALYSIS

Even though many steps have been taken up by the government to ensure the protection of forests, the environmental legislations have not been very effective and vested interests have overlooked the rules thereby endangering human life, health and safety. Before the state intervention, forests were managed as communal property and the crucial role of forests in the economic subsistence of individuals, families and community was the basis for managing them as communal resources. Failure to recognize community control of forests led to a collapse in institutional norms that were instrumental in protecting and managing forest resources for local use. A shift in property rights to the State steadily undermined rights of tribals to use and extract forest resources.⁵⁹

The *Indian Forest Act of 1927* has classified the forests as Reserve Forests, Village Forests and Protected Forests. The village forests were assigned to village communities for management while the reserved and protected forests were managed by the government/forest departments. Then there are *Mangrove forests* also the number of which is dwindling very fast. West Bengal has maximum mangrove cover in the country followed by Gujarat and Andaman Nicobar Islands. The Ministry of Environment and Forests has established a National Mangrove Genetic Resources Centre Orissa. The project titled "Mangroves for Future: a strategy for promoting investment in Coastal Ecosystem Conservation" is being coordinated by World Conservation Union (IUCN) covering six tsunami affected countries in South and South East Asia and Western Indian Ocean. The project involves collaboration between multiple partners, including government agencies, NGOs, Research Institutes, UN agencies and other multilateral bodies.

⁵⁹ Anuja Chopra and Shivangi Sharma, 'Analyzing The Efficacy Of Participatory Approach To Achieve Sustainable Forest Management In India,' (http://www.legalserviceindia.com/article/l215-Forest-Management-In-India.html)

⁶⁰ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

⁶¹ Ministry of Environment and Forest Annual Report 2007-08, Executive Summary, (http://envfor.nic.in/report/0708/ExecSummary.pdf)

Policies framed at National Level

The issue of protecting forest as well as the tribal communities was taken up during the making of the Constitution. For that matter certain statutes came into existence like the *Fifth Schedule* of the Constitution which provides for *Tribal Adivasi Council* at State level that is to be consulted as and when the Governor promulgates regulations on specified matters for peace and good government of Scheduled Areas. The *Sixth Schedule* of the Constitution is about self-management and autonomy in selected tribal areas in North East India. It provides for *Autonomous Regions* and corresponding level of autonomous councils. These *Autonomous District Councils* have law making power, judicial power, regulatory power in matters like control of money lending and trading by non tribals, establishment of village or town committees, executive powers in matters like establishing and managing primary schools, dispensaries, road transport, markets etc.⁶²

Although the Constitution of India originally did not emphasize much about the issue of forests and particularly the environment, *Forty-Second Amendment in* 1976 included the issue of protecting and safeguarding forests in the Directive Principles of State Policy as well as in the Fundamental Duties of the citizen. *Article 48* of the Constitution provides that:

"The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country."

On the other hand, $Article\ 51A(g)$ which is the part of the Fundamental Duty provide that:

"It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures."

⁶² B.K. Roy Burman, Indigenous and Tribal Peoples: Gathering Mist and New Horizons, Mittal Publishers, New Delhi, 1994, p.55

The issue of forest has been covered in various legislations, and various committees and commissions have been set up for this purpose. For example, *National Commission on Agriculture* (NCA) in 1976 ushered in a major shift in forestry sector, when it pronounced the need of a new forest policy to address the production of industrial wood for forest based industry, defence and communication and the present and future demand for protective and recreative functions of forests.⁶³

The Forest Conservation Act of 1980 deals with the grant of forestry clearances for diversion of forestry lands for non-forestry purposes in respect of development projects like power, roads, railways, irrigation, mining, schools, defence, resettlement and rehabilitation etc. To boost the development in underdeveloped area one-time clearance has been granted under this act for public utility developmental projects involving not more than one hectare of forest land.⁶⁴ In tribal areas approval has been accorded for underground laying of electric cable and wires to individual household which involve felling of trees not exceeding 50 in number per project and should be outside National Parks and Sanctuaries, and are laid along the road. To provide better living conditions for tribals and rural people the Central Government has issued general approval under the act to permit right holders recognized under Indian Forest Act 1927, to collect stones boulders etc from the forest areas for their bonafide domestic use and no commercial use is permitted. The government has also issued directions to the State/UT Governments not to evict tribals and forest dwellers other than encroachers from forest lands till the process of verification of their rights is complete. 65 Fresh guidelines have been issued in 2005, which provide for constitution of village level, block level and district level committees criteria for accepting claims for settlement of rights.

Though enacting of the Forest (Conservation) Act, has certainly succeeded in reducing the area of forestland being transferred for non-forestry use, the general

⁶³ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

⁶⁴ Ministry of Environment and Forest Annual Report 2007-08, Executive Summary, (http://envfor.nic.in/report/0708/ExecSummary.pdf)
⁶⁵ Ibid

perception among common people and political circles is that the act is anti-people and legitimate demands of people are not being fulfilled. The act is also considered as the biggest stumbling block in regularizing encroachments on forestlands.⁶⁶

Encouraging agro/farm forestry and building interface between industry and farmers was an important strategy suggested in the *National Forest Policy* 1988. An enabling environment would be created for encouraging tree growing by farmers. Subsidized supply of raw material to industries from government forests would be discouraged. Domestic and international trade on farm forestry produce by support price mechanisms and exim/ tariff regulation would be considered. Forest management would be encouraged to withdraw from raising farm forestry plantations in government forests to provide better market opportunities to the farmers.

The *National Forest Policy* was set up to ensure the environmental stability and maintenance of ecological balance including atmospheric equilibrium which is vital for sustenance of all life forms- human, animal and plants. Accordingly, the *basic objectives* that should govern the National Forest Policy are the following:

- 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.
- 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.
- 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.
- Checking the extension of sand dunes in the desert areas of Rajasthan and along the coastal tracts.

⁶⁶ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

- Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
- Meeting the requirements of fuel-wood, fodder, minor forest produce and small timber of the rural and tribal populations.
- Increasing the productivity of forests to meet essential national needs.
- Encouraging efficient utilization of forest produce and maximizing substitution of wood.
- Creating a massive people's movement with the involvement of women, for achieving these objectives and to minimize pressure on existing forests.

Essentials of forest management include the following provisions:

- Existing forests and forestlands should be fully protected and their productivity improved. Forest and vegetal cover should be increased rapidly on hill slopes, in catchment areas of rivers, lakes and reservoirs and ocean shores and, on semi-arid, and desert tracts.
- Diversion of good and productive agricultural lands to forestry should be discouraged in view of the need for increased food production.
- For the conservation of total biological diversity, the network of national parks, sanctuaries, biosphere reserves and other protected areas should be strengthened and extended adequately.
- Provision of sufficient fodder, fuel and pasture, especially in areas adjoining forest, is necessary in order to prevent depletion of forests beyond the sustainable limit. Since fuel wood continues to be the predominant source of energy in rural areas, the programme of afforestation should be intensified with special emphasis on augmenting fuel wood production to meet the requirement of the rural people.
- Minor forest produce provides sustenance to tribal population and to other communities residing in and around the forests. Such produce should be protected, improved and their production enhanced with due regard to generation of employment and income.

• The forest policy provides strategy for area under forests, afforestation, social forestry and farm forestry, management of State forests, rights and concessions, diversion of forest lands for non-forest purposes, wildlife conservation, tribal people and forests, shifting cultivation, damage to forests from encroachments, fires and grazing, forest-based industries, forest extension, forestry education and forestry research.⁶⁷

A project has been drawn up by the Ministry of Environment and Forests to conserve degraded forests. Known as the *National Forest Programme- India* (NFP), it evolves programmes in accordance with the provisions of National Forest Policy and integrates the proposed Forestry Development Programmes in the country within the framework of the FYPs. The *National Forest Policy* in India treats forests as environmental and social resource with the initiative of assigning ownership of *Non Timber forest Produce* (NTFP) to local communities including the grass root level democratic institution for enhancing their livelihood opportunities and also improving their income with the value addition.

The *National Afforestation and Eco-development Board* (NAEB) was set up in August 1992 for promoting afforestation, tree planting, ecological restoration and eco-development activities in the country. Special attention is being given to the regeneration of degraded forest areas and lands adjoining forest areas, national parks, sanctuaries and other protected areas as well as ecologically fragile areas like the Western Himalayas, Aravallis, and Western Ghats etc. Some achievement of NAEB can be seen from the fact that seven hundred forty three *Forest Development Agencies* (FDAs) have been operationalized since the launch of FDA in 2001. Rehabilitation and shifting cultivation lands have been given specific focus and so far 25 jhum projects have been sanctioned in Northeastern States and in Orissa. Apart from that four *Eco Task Force* (*ETF*) *Battalions* are being supported under Eco Development Forces Scheme. ⁶⁹ They have undertaken works

⁶⁷ Cumulative Impact Assessment 09/2006.

⁽http://sjvn.nic.in/projects/rampurpdf/chap3 revised 4.pdf)

⁶⁸ Forest Management, (http://www.manage.gov.in/managelib/extdig/Untitled-1.pdf#search=%22%22joint%20forest%20management%22%22)

⁶⁹ Ministry of Environment and Forest Annual Report 2007-08, Executive Summary, (http://envfor.nic.in/report/0708/ExecSummary.pdf)

like raising nursery, and plantation and protection measures to protect the plantation area.

In 1994 new forest bill titled "Conservation of Forest and Natural Ecosystems Act 1994" has been brought in the parliament with the view to incorporate new concept of forest management. It was to replace Indian Forest Act 1927. Certain sections opposed this bill as it ignored the concept of people's participation in forest management and it was felt that this bill was a continuation of the colonial policy of commercializing forest resources with total disregard for forest populace.⁷⁰

Land Acquisition Amendment Bill 1998 places certain restrictions on acquisition of lands in areas mentioned in Schedule V of the Constitution. The Act permits the Collector to dispense with the normal process of enquiry in case there is urgency for acquisition. No guidelines have been given for the exercise of urgency powers with the result that many a time these powers have been abused. The compensation payable is based on the value of land as on the date of publication of the preliminary notification. This method of assessment of compensation ignores the subsequent increases in land value. The act has been criticized for deeming acquisition of land for a state owned company/corporation. The act has also been criticized for not recognizing the rights of certain categories of people who do not own land but are nonetheless dependent on the land for their survival, like landless labourers, forest cultivators, pastoral people and artisans.⁷¹

The Environment Ministry has also formulated the *National Forestry Action Programme* (NFAP) in August 1999. It is a comprehensive work plan for sustainable development of forests in the country in next twenty years as well as to achieve a national goal of 33 percent geographic area of the country under the forest and tree cover as enshrined in the National Forest Policy 1988.⁷² Some issues have been identified in NFAP process such as to protect the existing forests,

⁷⁰ The Times of India, November 19, 1994, cited in Gurdip Singh, *Environmental Law in India*, Macmillan, 2005, p. 336

⁷¹ The Land Acquisition Bill 2009, (http://www.nlsenlaw.org/land/articles/the-land-acquisition-bill-

⁷² National Forestry Action Programme –India, (http://envfor.nic.in/news/nov99/action.html)

improve the forest productivity, reduction of demands placed on forests, to strengthen the policy and institutional framework, and to expand the forest area. A guideline was circulated to all States/UTs with the request to prepare State Forestry Action Programme (SFAP). Later on, Ministry prepared a comprehensive work plan taking into account the proposals of SFAPs from 25 states and one UT of Andaman and Nicobar Islands and the recommendations of regional and national workshops, held during the NFAP process. The NFC has identified that the primary reason confronting forestry in India is the current level of forest utilization in India which is not sustainable under the existing conditions.⁷³

It was also realized that large scale forest loss would lead to catastrophic, permanent change in the country's ecology, leading to major stress on water resources and soil erosion, with consequent loss of agricultural productivity, industrial potential, living conditions, and the onset of natural disasters including drought and flood. Pursuant upon the recommendation made by the *Indian Board of Wildlife* in its 21st meeting held on 21 January 2002 under the chairmanship of Prime Minister of India, Government of India resolved to constitute a National Forest Commission to review the working of forest and wildlife sector. Accordingly *National Forest Commission*, set up in 2003, is reviewing the legislative and institutional basis of forest management. The report which was submitted in 2006, examined the current status of forests, reviewed the forest policy, legal framework, institutions, and administrative structure of the forestry sector. The report also examined the forest-related international instruments, forestry research, relation between forests and industries, and financial support to the forestry sector.⁷⁴

The states in which the increase in forest cover has been reported in the 2003 report were: Assam, Goa, Delhi, Jammu and Kashmir, Jharkhand, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttaranchal, West Bengal, Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, and Pondicherry. The states and Union Territories showing lesser forest cover were Andhra Pradesh, Arunachal Pradesh,

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⁷³ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)
⁷⁴ Ibid

Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan and Lakshadweep.⁷⁵

The *National Environment Policy* (NEP) 2006 also talked about substantive reforms regarding environment and forest clearance. According to this report the *Environment Impact Assessment* (EIA) will continue to be the principal methodology for appraising and reviewing new projects. Under the new arrangements, there would be a significant devolution of powers to the state/UT level. But such devolution needs to be accompanied by adequate development of human and institutional capacities to be effective.

Regarding forests, NEP report mentioned that forest provide multiplicity of environmental services like recharging of mountain aquifers, conserve the soil, prevent flood and drought, provide habitat for wildlife and ecological conditions for maintenance and natural evolution of genetic diversity of flora and fauna. They are homes of traditional forest dependent communities and possess immense potential for economic benefits for local communities from sustainable ecotourism. But in the recent decades there has been a significant *loss of forest cover*. The main direct cause has been conversion of forests to agriculture, settlements, infrastructure and industry. Moreover commercial extraction of fuel wood, illegal felling and grazing of cattle has also degraded the forests. The environmental values provided by forests are not realized as direct financial benefits by various parties take precedence. Also, the *traditional community entitlements* over forests were effectively extinguished in many parts of the country, which has also led to degradation of forests and the perennial conflict between forest dependent communities and the Forest Department.

It was thought essential that women should play a greater role in the management of natural resources because they have to bear the burden of natural resource degradation but have little control over management of these resources. So the relevant provisions of the National Policy for Empowerment of Women are to provide a framework for incorporating elements of proposed action.

⁷⁵ Ibid

Regarding the green cover the 10th FYP made the target of 25% of total land to be covered. But the satellite data for 2002 indicate green cover of 23.68%, representing a net improvement of 0.65% since 2000. Also, the overuse of resources has been identified as a major cause of land degradation. Creation of forest/biomass resources in all the cultivable vacant lands will be taken up for strengthening life support system of communities and maintaining soil/water regimes. A programme for social forestry will support development and sustainable management of the common property resources through Panchayati Raj Institutions.

In the 11th FYP it was also stated that it is a matter of concern that the quality of green cover has deteriorated. There has been a 6.3% reduction in dense forests indicating degradation. State forest management would need to work for attaining productivity potential of the forests. The timber and non-timber benefits must be optimized with adequate investment for regeneration. The 12th Finance Commission has also supported this cause through grants-in-aid for forest maintenance.

But according to 11th Plan the solution does not lie in slowing growth since slow growth also leads to its own form of environmental deterioration. With rapid growth we can have the resources to prevent and deal with environmental problems, but we must also ensure that rapid growth is environmentally benign. This can be achieved through greater awareness, starting with school children, and appropriate policies.⁷⁶

So the various initiatives are to be pursued in the 11th Plan, which are as follows:

• Encourage PRIs to revive common property resources through social afforestation.

⁷⁶ Planning Commission 11th Five Year Plan (2007-2012), (http://planningcommission.nic.in/plans/planrel/11thf.htm)

- Rationalize forest regulations to allow industry to partner farmers in undertaking agro-forestry for augmenting the raw material base for forest based industries like paper and pulp.
- Encourage the corporate sector to participate in development of degraded land for forestry, without compromising community's priorities.
- Rationalize rules and procedures under environmental laws to expedite investment, production and employment growth.

Apart from these legislations the issue of management of forests in India have been raised during British times as well. That is why during the year 1864 the then British India Government started Imperial Forest Department and appointed Dr. Dietrich Brandis, a German Forest Officer Inspector General of Forests in 1866 and Imperial Forest Service was constituted in 1867. Having realized the importance of a multi-tier forest administration in the federal and provincial governments for effective management of forest resources the British India Government also constituted Provincial Forest Service and Executive and Subordinate Services, which were quite similar to the present day forest administrative hierarchy. 77 The Imperial Forest Research Institute, Dehradun, presently and popularly known all over the world as FRI was established at Dehradun in the year 1906. The baton to train the IFS officers was passed on to Forest Research Institute, which it did successfully from 1927 to 1932. Subsequently the Indian Forest College was established in the year 1938 at Dehradun and the officers recruited to Superior Forest Service by provinces/States were trained there. The Government of India Act, 1935, transferred the subject of "Forestry" which was managed by the federal government until then, to the "Provincial List" and subsequently recruitment to the Imperial Forest Service was discontinued.⁷⁸

Later on, after independence the *Indian Forest Service*, one of the three All India Services, was constituted in the year 1966 under *All India Services Act*, 1951 by Government of India. The main aim of the service was implementation of National Forest Policy, which envisages scientific management of forests and to

⁷⁸ Ibid

⁷⁷ Indian Forest Services an Introduction, (http://ifs.nic.in/)

exploit them on a sustained basis for primary timber products, among other things.⁷⁹ The IFS consists of 24 State Cadres including three joint cadres of Assam-Meghalaya, Manipur- Tripura and Arunachal Pradesh-Goa-Mizoram, Union Territories (AGMUT).

Until 1980, Forestry Department was being funded predominantly with internal resources. Since then support has been received from approximately 31 external assistance projects on social forestry, afforestation and integrated forestry development. The main donors were: UK-ODA, EEC, UNDP, World Bank, Japan, Netherlands, Germany, US-AID, DANIDA, SIDA, CIDA and OECF. Now the financial resources mobilized annually for forestry are currently about Rs.990 crores. External assistance financing alone is about Rs.300 crores.

Apart from this the *Forest Survey of India* (FSI) was set up in 1981 for forest resource assessment under the Ministry of Environment and Forests. The FSI has its headquarters in Dehradun and four regional offices at Shimla, Kolkata, Nagpur and Bangalore. Their major activities are forest cover mapping, data processing and conducting training. FSI assesses forest cover of the country by remote sensing satellite data and publishes the results in State Forest Report (SFR).⁸¹ The Technical Advisory Committee (TAC) of FSI was constituted by the Ministry in November 2006 to oversee the technical activities of FSI.

Moreover, for the forestry research the *Indian Council of Forestry Research and Education* (ICFRE) was mandated to develop a holistic forestry research strategy through appropriate planning, coordination, execution and promotion of research, education and extension covering all aspects of forestry. The ICFRE has completed Environment Impact Assessment (EIA) studies for various developmental projects and also evaluated number of forestry related projects for various ministries/organization of Government of India and State Governments.⁸²

⁸² Ibid

⁷⁹ Ibid

⁸⁰ Report of the National Forest Commission, Ministry of Environment and Forest 2006 (http://envfor.nic.in/divisions/nfr.html)

Ministry of Environment and Forest Annual Report 2007-08, Executive Summary, (http://envfor.nic.in/report/0708/ExecSummary.pdf)

Key Issues at State Level

Since State Government owned forestlands, the subject of forest was initially kept by the Constituent Assembly under State list of the 7th Schedule in the Constitution. However, realizing the importance of forest and wildlife the subject was transferred to Concurrent list, by section 57 of the Constitution (Forty-second Amendment) Act 1976, with effect from 3 January 1977.

The *laws framed by the Union Government* with regard to the forests have to be implemented by State Governments under Article 246 of the Constitution. In many cases States have to modify the act to suit and implement in the State according to the local conditions. But there are many other States as well, which usually resist administratively or politically, any step taken by the Centre in the name of development.

Moreover, there is *the issue of expenditure on forest* which has to be borne out by the Centre. This amount is then allocated to the States based on their control of the forestland and to provide staff in the field. The State has few funds for capital investment and virtually all investment resources come from national forestry programmes. This allocation of funds is not very encouraging as most of the State Governments are not too good and for the meager resources that they have, the claimants are many. Also, the fund allocation in case of non-plan expenditure in operations like fire protection, cleaning of fire lines, maintenance of forest boundary pillars, inspection paths and buildings, thinning and cleaning, fencing in some cases, etc. has not increased. These funds could not be utilized properly as well because of the delay in release of funds by the Centre.

The main concern of Union Government was that the forestland was transferred on a large scale for various developmental, commercial and industrial purposes. Moreover some forestlands were also being allotted to the landless

84 Ibid

⁸³ Report of the National Forest Commission, Ministry of Environment and Forest 2006 (http://envfor.nic.in/divisions/nfr.html)

people and other categories for agriculture under various schemes. Further, those who are not entitled for such allotment were illegally encroaching upon forestlands, some of which were being regularized by various State Governments. All these had resulted in shrinkage of forestland, which was already under tremendous pressure due to increase in human as well as cattle populations. 85 Because of all this the Forest Conservation Act (1980, amended in 1988) came into being which held that forest area might be dereserve to a limited extent for development purposes but only with the consent of Central Ministry. The Government of India issued guidelines to all States and Union Territories to implement this act, which was later on amended in 2003. So there has been opposition of the centralization of government power over forestland because of the delays that occur when proposals have to be cleared. State Governments have maintained that this act is an obstacle to development and have sought major amendments to it. State Governments want the authority to dereserve up to 5 hectare of forestland for public purposes. In October 1992 the Ministry vested the requisite authority in its 6 Regional Chief Conservators of Forests who were not accountable to respective State Governments. States are not satisfied but environmentalists have supported Central Government. The Forest Act has been amended occasionally by State and Central Government to increase their control over forests. The act has specified that clearing land for agriculture should be prohibited on reserved and protected forests unless the forest settlement officer who excluded this area from the demarcated forest recognizes such a right.

All legally constituted forests are under the ownership and control of State Governments. The State and Union Governments are jointly responsible for sustainable management of the forest resource. State Governments generally have the freedom to manage forest resources on the basis of forest management plans. However, under the Forest Conservation Act of 2003, State Governments must obtain prior approval from the Union Government for any forest clearance for non-forestry purposes. ⁸⁶ These rules were later amended in 2004 and the Central

⁸⁵ Thid

⁸⁶ India, (http://www.itto.or.jp/live/Live_Server/1239/India.e.pdf)

The International Tropical Timber Organization (ITTO) was established under the auspices of the United Nations in 1986 amidst increasing worldwide concern for the fate of tropical forests. ITTO develops internationally agreed policy documents to promote sustainable forest management and forest conservation and assists tropical member countries to adapt such policies to local

Government has been issuing the executive instructions on various issues covering the Forest Conservation Act.

The National Forest Policy, 1988 aims at maintaining one-third geographical area of the country under forest/tree cover. However, all the States have not been able to achieve this target. Some States have rich forest cover of more than 33 percent as has been recommended in the National Forest Policy while the others have much less forest area than required. Under the prevailing situation, the States, which have forest/tree cover more than 33 percent are demanding compensation to maintain it at that higher level or else the State should be free to fell their forests. Such demand has come from forest-rich States like Madhya Pradesh, Jharkhand, Arunachal Pradesh, etc. The National Forest Commission is of the opinion that forests are a national wealth and their protection and maintenance should be viewed from that angle and, therefore, asking compensation for maintaining higher area of forests than the targeted cannot be justified. Further, asking compensation is against the very basis of a federal structure, which we have adopted in India. Of course, there is need to provide incentives but not compensation. For that matter, incentives should be given to deficient States as well so that they could increase their area under forest/tree cover. Thus, incentives are to be given for both type of states - forest-rich as well forest deficient - for both increasing their individual cover as well as for retaining them, both based on recent past performance.87

There are also forest departments at the national and state levels with defined functions and responsibilities. While at national level the role of Forest Department is mostly the provision of advice and guidance, the State Forest Departments are custodians of public forest resource and act as the forest authorities. Often they also perform an enterprise function, becoming involved in production, processing and trade. All the forested states of India have set up Forest Development Corporations, which are responsible for production within the public

circumstances and to implement them in the field through projects. In addition, ITTO collects, analyses and disseminates data on the production and trade of tropical timber and funds a range of projects and other action aimed at developing industries at both community and industrial scales. India is also a member of ITTO.

⁸⁷ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

forest estate. These corporations are meant to operate as autonomous business entities, but, in effect, most of them function as extensions of the forest departments.⁸⁸

To manage forest departments in states, the *State Forest Service* (SFS) is a premier forest service. Recruitment is made by the concerned States/Union Territories under the provisions of recruitment rules of each State/ Union Territory Government, through the respective State Public Service Commissions (SPSCs). Recruitment to the service is fairly irregular and some States have discontinued direct recruitment. SFS is a feeder service to the IFS, as one-third of the posts in IFS cadre in any State/Union Territory cadre are filled up by promotion from the SFS through selection on merit-cum-seniority basis by a board constituted by the UPSC.⁸⁹

Moreover, regarding JFM there has been absence of any legislation in most state government orders. This flexibility allows them to be modified updated and repealed at will which itself questions the legal foundation of JFM. Moreover the duties and responsibilities seems to be heavily loaded towards community but the correlating duties and responsibilities of the state government hardly finds any mention in those agreements.

There was another issue which became the bone of contention between Centre and the States. This was *Scheduled Tribes (Recognition of Forest Rights)*Bill 2005 which was formulated by the Union Government. But this bill was not referred to the National Forest Commission which was set up specifically to look into the matters of forests in India. According to NFC the bill only addresses to one community that is tribals whereas forests of the country belong to the whole nation and not to a segment of the community, and that any action that we take vis-à-vis the forests and nature conservation in this country should be with a view to safeguard the forests as a national resource. 90 Also, the states were not consulted when the bill was compiled as per the recommendations of Sarkaria Commission

io Ibid

⁸⁸ India, (http://www.itto.or.jp/live/Live_Server/1239/India.e.pdf)

⁸⁹ Report of the National Forest Commission, Ministry of Environment and Forest 2006 (http://envfor.nic.in/divisions/nfr.html)

that the states should be consulted prior to any enactment on subject in the Concurrent List.

More interestingly the state governments in 2006 had also put up the demand on Centre for the *relaxation of forest laws in the Naxal-affected States to tame the Maoists*. The Forest (Conservation) Act, 1980, places severe restrictions on "non-forest" activity—building of roads and bridges, which could have given the governments an upper hand in the battle against Naxals. ⁹¹ The Prime Minister also underlined the need for greater inter-state coordination and a two-pronged strategy comprising effective policing and development measures. The states agreed to pursue a long-term multi-pronged approach including a special recruitment drive to fill up vacancies in the State Police Forces. They also agreed to make optimal use of financial and technical support provided by the Centre. The Centre has assured assistance for expansion of reserve battalions and more troops on the Indo-Nepal border.

Apart from that in view of the rising conflict between Centre and the States over the issue of forests, Centre has taken up the task of *defining the forests* in 2007 which could decide the fate of industrialization, mega projects, tribal life as well as agro and corporate forestry. The move has a direct bearing on setting up of industries and projects, as any use of forestland requires permission from the Environment Ministry. It is felt that a well-defined 'forest' would liberate large tracts of land from the purview of government and the Supreme Court vis-à-vis the Forest Act, thereby pleasing both pro-industry and pro-tribal lobbies. But even after the Supreme Court's intervention, just how much of "green cover" would make that land a forest has remained open to states' interpretation - it is 200 trees per hectare in MP and even barren land in Ladakh, depending on the local ecology. 93

⁹¹ 'Demand on Centre to relax forest laws to take on Naxals,' 14 April 2006, (http://www.indianexpress.com/news/demand-on-centre-to-relax-forest-laws-to-take-on-naxals/2419/)

 ^{92 &#}x27;Centre to Define Forest Afresh,' March 12, 2007
 (http://timesofindia.indiatimes.com/articleshow/1749957.cms)
 93 Ibid

Treaties/ Agreements on Forest at International Level

The issue of protection and conservation of the forests have been covered at the international level from a long time now. More recently, the issue of forest was covered in the Earth Summit of 1992 wherein 27 forest treaties came into existence. The Rio Declaration talked about non-legally binding authoritative statement of principles for a global consensus on management, conservation and sustainable development of all types of forests [The Forest Principles]. This was the first global consensus on forests, which deals with the needs of people who want to protect forests for environmental and cultural reasons and with the needs of people who use trees and other forest life for economic development.94 The Rio statement says that 'forests, with their complex ecological processes, are essential to economic development and the maintenance of all forms of life. They are a source of wood, food and medicine, and are rich storehouses of many biological products yet to be discovered. They act as reservoirs for water and for carbon, that would otherwise get into the atmosphere and act as a greenhouse gas. It recommended that all the countries should take part in "greening of the world" through forest planting and conservation. International financial support including some from the private sector should be provided to developing nations to help protect their forests. The planning and implementation of national forest policies should involve a wide variety of people including women, forest dwellers, indigenous people, industries, workers and non-government organizations.⁹⁵

In 1994 *International Tropical Timber Agreement* was signed to promote international trade in tropical timber, the sustainable management of tropical forests and development of forest industries through international consultation and cooperation, policy work and project activities. It is a commodity agreement under the auspices of the United Nations Conference on Trade and Development (UNCTAD). This agreement is *legally binding* on all members. It came into force in 1997 with 58 members signing the agreement. This agreement replaced International Tropical Timber Agreement of 1983. Its objective was to ensure that by the year 2000 exports of tropical timber would originate from sustainably

⁹⁴ Statement of Principles of Forest, (http://www.iisd.org/rio%2B5/agenda/principles.htm)

⁹⁶ Report of the National Forest Commission, Ministry of Environment and Forest 2006 (http://envfor.nic.in/divisions/nfr.html)

managed sources. Recently, in 2006 again the International Tropical Timber Agreement was signed. Its basic objectives are 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. It will help countries to improve forest law enforcement and governance, address illegal logging and related trade in tropical timber, and undertake sustainable forest management and forest restoration. Recent activities and issues receiving special attention include: training in applying ITTO Criteria and Indicators for Sustainable Management of Natural Tropical Forests; restoration, management and rehabilitation of degraded and secondary tropical forests; improved market access; means of assessing and combating illegal logging and illegal trade; encouragement of reduced-impact logging practices; forest certification; mangrove conservation and management; and the establishment and management of trans-boundary conservation areas. 98

The Intergovernmental **Panel** on **Forests** (IPF) and the Intergovernmental Forum on Forests (IFF) represent five years of international forest policy dialogue. The Intergovernmental Panel on Forests was established by the Commission on Sustainable Development (CSD) for two years (1995-97) to provide a forum for forest policy deliberations. Subsequently, in 1997 ECOSOC established the Intergovernmental Forum on Forests for three years (1997-2000). The IFF's deliberations were aimed at resolving several issues on which IPF had not reached consensus such as financial resources, transfer of environmental sound technologies, and other issues left pending, including deliberations on international arrangements and mechanisms on forests.⁹⁹ One of the most important legacies of IPF/IFF process is the wide-ranging set of approximately 270 proposals for action. known collectively as the IPF/IFF Proposals for Action. These proposals provide governments, international organizations, private sector entities and all other major groups guidance on how to further develop, implement and coordinate national and

99 IPF/IFF Process (1995-200), (http://www.un.org/esa/forests/ipf_iff.html)

⁹⁷ 'Explanatory Memorandum on 2006 International Tropical Timber Agreement,' (http://www.fco.gov.uk/en/about-the-fco/publications/treaty-command-papers-ems/explanatory-memoranda/explanatory-memoranda-2008/EMTopicalTimber)

⁹⁸ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

international policies on sustainable forest management.¹⁰⁰ Also an informal, high level Interagency Task Force on Forests (ITFF) was set up in July 1995 to coordinate the inputs of international organizations to the forest policy process.

The IPF encouraged countries, in accordance with their national sovereignty, specific country conditions and national legislation, to develop, implement, monitor and evaluate national forest programmes, which include a wide range of approaches for sustainable forest management, taking into consideration the following: consistency with national, sub-national or local policies and strategies, and international agreements; partnership and participatory mechanisms to involve interested parties; recognition and respect for customary and traditional rights of, inter alia, indigenous people and local communities; secure land tenure arrangements; holistic, intersectoral and iterative approaches; ecosystem approaches that integrate the conservation of biological diversity and sustainable use of biological resources; and adequate provision and valuation of forest goods and services. The panel called for improved cooperation in support of management, conservation and sustainable development of all types of forests, and urged all countries to use national forest programmes, as appropriate, as a basis for international cooperation in the forest sector. The panel urged countries to recognize and enhance the role of forest plantations as an important element of sustainable forest management complementary to natural forests. 101 The panel also took into account other issues related to forests like traditional forest related knowledge, about drought and desertification, impact of airborne pollution on forests, strengthen financial assistance, to enhance national capacity and coordination, international cooperation etc.

On the other hand IFF proposal was mainly for promoting and facilitating the implementation of the proposals for action of the Intergovernmental Panel on Forests, and reviewing, monitoring and reporting on progress in the management, conservation and sustainable development of all types of forests. The forum invited countries to implement, with the assistance of international organizations,

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¹⁰⁰ Ibid

¹⁰¹ IPF Proposals for Action, (http://www.un.org/esa/forests/pdf/ipf-iff-proposalsforaction.pdf)

donor countries and financial institutions, the proposals for action of this new programme element through partnership mechanisms involving, where appropriate, the participation of governmental institutions, non-governmental organizations, community-based organizations, and indigenous and local communities. The forum encouraged countries to commit themselves to protection, conservation and representativeness of all types of forests, consistent with national forest policies and programmes that recognize the linkage between forest conservation and sustainable development. 103

The **Kyoto Protocol** of 1997 also had some clauses related to forests. It was mentioned that there would be no cap on the amount of carbon credits that can be developed through afforestation. The protocol also mentions the definition of the forests as structurally based comprising:

- 1. A minimum area of land of 0.05 hectares with tree crown cover (or equivalent stocking level) of more than 10 per cent with trees with the potential to reach a minimum height of 2 metres at maturity in situ.
- 2. It includes (i) young stands of natural regeneration; (ii) all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 metres; (iii) areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forests. 104

But the Kyoto Protocol definition makes no distinction between, among other things, planted crops of monoculture perennial woody plants and complex biodiverse natural forests.

The Marrakech Accord that was signed November 2001 acknowledged four major roles of forests in climate change:

- 1. As a source of carbon dioxide when destroyed or degraded
- 2. As a sensitive indicator of a changing climate

¹⁰³ Ibid

¹⁰⁴ Sean Cadman, 'Defining Forests under the Kyoto Protocol: a way forward,' October 2008, (http://unfccc.int/files/methods_science/redd/application/pdf/seancadman1_12nov08.pdf)

- 3. As a source of bio-fuels to replace fossil fuels
- 4. As a carbon sink, when managed sustainably. 105

The United Nations in 2007 had adopted an agreement to protect the world forests. Delegates called the final agreement a milestone, noting it was the first time states have agreed to an international instrument for sustainable forest management. The new agreement, although not legally binding, sets a standard in forest management that is expected to have a major impact on international cooperation and national action to reduce deforestation, prevent forest degradation, promote sustainable livelihoods and reduce poverty for all forest-dependent peoples. 106

Apart from all these international agreements which are legally binding on the member nations, certain *Non-Legally binding Instruments*, *Agreements and Processes* related to forests also came into existence. Some of these agreements are as follows:

October 2000 as a subsidiary body to the council. Its main objective was "... the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end..." The UNFF is composed of all states members of the United Nations and specialized agencies, and meets in annual sessions. ECOSOC also invited the heads of relevant international organizations to form a Collaborative Partnership on Forests (CPF) which was created in 2001 to support the work of the UNFF and to foster increased cooperation and coordination on forests. The CPF consists of 14 major forest related international organizations both within and outside the UN system.

¹⁰⁵ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

^{106 &#}x27;UN adopts new International Agreement to protect world's forests,'

⁽http://www.un.org/apps/news/story.asp?NewsID=22389&Cr=forests&Cr1)

¹⁰⁷ Report of the National Forest Commission, Ministry of Environment and Forest 2006, (http://envfor.nic.in/divisions/nfr.html)

- Millennium Development Goals (MDG): adopted in 2000 where the world leaders summed up the key goals and targets in millennium declaration. The MDGs include 8 goals, 18 targets and over 40 indicators, of which forests are closely linked to many of these.
- Asia Forest Partnership: it was initiated in 2002 and is one of over 200 partnerships for sustainable development registered with the United Nations Division for Sustainable Development. The Government of Japan and its partners, including several other governments, intergovernmental organizations and NGOs, launched the Asia Forest Partnership to promote sustainable forest management in the region. The collaborative arrangement addresses issues related to good governance and law enforcement, capacity building, illegal logging, forest fires and degraded lands. The Partnership expects to enhance the ongoing sustainable forest management initiatives by providing a framework for conducting research. 109
- FAO Committee on Forestry: the Committee on Forestry (COFO) was created to seek solutions and to advise FAO and others on appropriate action in forestry. The Organization's approach balances social, economic and environmental objectives so that present generations can reap the benefits of the earth's forest resources while preserving them to meet the needs of future generations. FAO provides strong support to the UNFF process and in collaboration with other CPF members assists the UNFF in its work related to monitoring, assessment and reporting on progress towards IFP and IFF proposals for action. FAO also supports countries in their implementation of the IPF/IFF plan for action and is to report about it at the next COFO session. FAO also collaborates with other agencies and key international conventions related to forests, such as the UNFCCC, IPCC, CBD and UNCCD in providing technical input regarding elaboration and reconciliation of terms and definitions.

⁰⁹ Report of the National Forest Commission, Ministry of Environment and Forest 2006, http://envfor.nic.in/divisions/nfr.html)

¹⁰ About FAO Forestry- organization and structure, (http://www.fao.org/forestry/49435/en/)

⁰⁸ About Asia Forest Partnership "AFP", (http://www.asiaforests.org/files/_ref/about/index.htm)

¹¹ Report of the National Forest Commission, Ministry of Environment and Forest 2006, http://envfor.nic.in/divisions/nfr.html)

G8 Action Programme on Forest: held in 1998 at Birmingham, United Kingdom this Action Programme on Forests consist of five elements- the monitoring and assessment of forests, national forest programmes, protected areas, the private sector and illegal logging. An initial report on the implementation of the programme was presented at the G8 Summit in Miyazaki, Japan in July 2000 where the countries agreed to take initiatives to implement the IPF and IFF proposals for action. The G8 had also launched Forest Law Enforcement and Governance (FLEG) in 1998, which sought to complement actions undertaken at regional and international levels. The G-8 action programme motivated a partnership on forest law enforcement for East Asia between the World Bank, UK and US, which led to the FLEG East Asia Ministerial Conference in September 2001. The Conference adopted a Ministerial Declaration, whereby participating countries committed themselves to, *inter alia*, intensify national efforts and strengthen bilateral, regional and multilateral collaboration to address forest crime and violations of forest law. 112 The first working meeting of the FLEG Task Force and Advisory Group was held in Jakarta in January.

Apart from these non-binding agreements, the major international institutions like *World Bank* and *Asian Development Bank* also laid emphasis on the issue of sustainable forest resource utilization for alleviating poverty. In 2002 World Bank approved its new forest strategy and operational policy for the forest sector, which recognize that forests are critical in alleviating poverty and developing sustainable economies and environments. The policy is based on three interdependent components: harnessing the potential of forests to reduce poverty, integrating forests into sustainable economic development in client countries, protecting vital local and global forest services and values.¹¹³

Similarly the Asian Development Bank, which is dedicated to reducing poverty in Asia and the Pacific, prepared a document on 'Guiding Principles for Assistance to the Forestry Sector' in 1995. These principles stress the multiple and

¹¹² Ibid

¹¹³ Ibid

complimentary uses of forests for their economic, environmental, and social values; the renewable character of forest resources; forest development strategies; identity, culture and rights of forest-dwelling communities; and the role of forests in maintaining biodiversity, global carbon storage and air pollution.¹¹⁴

Summing up

Forests are important as they both influence and are influenced by climate change. For too long forests have been regarded as an earning sector rather than a repository of biodiversity natural heritage and a provider of water and of ecological and biotic goods and services. India has an excellent forest policy. It is not being fully implemented. Almost everywhere the aspect of conservation and preservation of the forests has not gained as much importance as it should have. This is causing a major problem in getting forest laws implemented effectively at the national as well as international level. Sustainable Forest Management can contribute towards emissions reductions and to carbon sequestration.

¹¹⁴ Ibid

¹¹⁵ Ibid

CHAPTER 3

ROLE OF THE PEOPLE AT GRASSROOT LEVEL IN CONSERVING FORESTS

Although issue of environment has come to the forefront recently, the concern for environment is not new. Especially when it comes to issue of forests the concern has been mainly reflected among the people who are dependent on forests for their livelihood. Even historically speaking, the tribal folklore and customs had harmonious relations with nature.

The crisis in Indian forestry relating to high rates of deforestation, and unregulated and unsustainable use of forest produce in the past can be attributed to the twin processes of erosion of customary resource management regimes and the acquisitive tendencies of the state in the period following independence.¹¹⁶

The Tribal Question

According to *United Nations Development Programme's* report 67.7 million people belonging to "Scheduled Tribes" in India are generally considered to be 'Adivasis', literally meaning 'indigenous people' or 'original inhabitants', though the term 'Scheduled Tribes' is an administrative term used for purposes of administering certain specific constitutional privileges, protection and benefits for specific sections of peoples who are considered historically disadvantaged and 'backward'. Out of the 5653 distinct communities in India, 635 are considered to be 'tribes' or 'Adivasis'. With the ST population making up 8.08% (as of 1991) of the total population of India, it is a nation with the highest concentration of 'indigenous peoples' in the world. Of the 68 million tribals who inhabit forests and wild lands throughout India, Adivasis have evolved an intricate convivial-custodial

¹¹⁶ Study on Joint Forest Management conducted by TERI for Ministry of Environment and Forests, (http://www.envfor.nic.in/divisions/forprt/terijfm.html)

Anuja Chopra and Shivangi Sharma, 'Analysing the Efficacy of Participatory Approach to Achieve Sustainable Forest Management In India,' (http://www.legalserviceindia.com/article/l215-Forest-Management-In-India.html)

mode of living. 118 United Nations had declared 1993 as the year of Indigenous Peoples.

The *World Bank* has declared that in India the term 'Indigenous' means 'Scheduled Tribes' whereas India and most Asian and African countries have asserted that in these parts of the world it is difficult to say who are indigenous and who are not in the historical-chronological sense.¹¹⁹

The tribals in India constitute an integral component of forest ecosystems. The primitive tribal groups are still dependent upon their natural environment. Their dependence on forests should be seen from the fact that tribals are economically and ecologically inseparable from the forests, as forests constitute their major means of livelihood. They know when and how to cut a tree so that other branches would sprout and add to the forest. Even their Gods are nature Gods and they believe that forests are abode of their mother deity. For example, the Bhil totem is reflected through the worship of certain trees. Some Bhils have surnames (gotras) after the trees they worship like Jamnia Bhils worship jamnia, Semalia Bhils worship semal and Palasia Bhils worship palas on marriages and other occasions. They never cut those trees for any reason. Thus every tribe has a set of trees, plants and animals which they protect and prevent, in turn restricting its exploitation. Moreover, restrictions are placed on the quantity exploited and the religious myths and social customs ensure egalitarian distribution. The forests are conserved in this manner.

Before the advent of the British administration local chieftains preserved the forests or princes and the indigenous tribal people were their forest guards. ¹²¹ The coming of the Britishers led to displacement of tribals from forests. The British administration was indifferent towards tribal population. Over the period of time tribals have been pushed back into hilly and undulating low quality tracts as most fertile lands are in plains. In pre British times community right over land was the

¹¹⁸ Ibid

¹¹⁹ B.K. Roy Burman, *Indigenous and Tribal Peoples: Gathering Mist and New Horizons*, Mittal Publishers, New Delhi, 1994, p.7

¹²⁰ Pawar, S.N, and R.B Patil, Op.cit, p.111

¹²¹ Ibid, p.126

basic principle of operation, which was marginalized through the land settlements of nineteenth century. For the purpose of controlling forests in India the *Forest Department* was formed in 1865 and *Forest Act* of 1878 declared that State would own all forestlands. So the forest department had arbitrary and exclusive control over these lands, develop its own police, courts and laws. It authorized the government to declare forests and wastelands as reserved forests. The *Indian Forest Act 1927* which is still in force has classified forests into reserved, protected and village forests. It did not classify forests according to their biological value but according to the rights of the people.

Thus, damage began with the coming of Europeans and their struggle for control over forests. This was mainly because of the industrial revolution and introduction of railways in India that large numbers of forests were cut down. In many areas forests were viewed as an obstruction to agriculture and were seen as a limiting factor to the prosperity of the colonisers. At times this kind of destruction of forests was resisted through 'forest satyagrahas' throughout the country. Later on after independence, the market-oriented path of industrial development has resulted in the disturbance in balance between man and environment. At that time a small but rich and articulate bourgeoisie in alliance with State was responsible for the destruction of forests. Moreover the new capitalist class recommended a mixed economy the consequences of which were extremely uneven and disastrous on forests as well as the forest dwellers. 122 As a result, many activities in the name of development and industrialization like mining, building dams, agricultural purposes, pulp and paper industry, etc severely destroyed forests in India. This kind of economic development neglected the ecological dimension and has destabilized the life support system of the indigenous groups including tribals.

The problem of degradation of forests can be seen from the fact that balance between these forest dwellers and nature has tilted due to extraneous pressure of burgeoning population and entry of outsiders in their home through construction of dams, power stations, steel and aluminium plants, mines, railway and

¹²² Ibid, p.47

telecommunication installations and related townships which have brought skilled workers into these forest areas.¹²³

But then over a period of time the need was felt to preserve and conserve the environment. This also included the forests which were the source of livelihood of many people. The forest conservation and protection is also linked to the land question in tribal India. 'The environmental movement argues that the tribals have lived in harmony with their forest surroundings from time immemorial and therefore have the first right to their forestlands. The Left also agrees that it is not possible to class tribals as 'encroachers' as their very existence is dependent on forests. The ownership of land would ensure employment, a place of permanent residence, social and psychological security for the people of marginal areas.'124 Currently more than half of India's tribal population is landless. So the demand for land rights for tribal people is one of the main planks of mobilization for people's movement. But this problem of land restoration is complex and has variegated difficulties. While there is no dispute about the need for stopping land alienation in tribal areas, there is a difference of opinion on what type of property rights should be created- whether land restoration should be communal, community based or class based.

The rights of tribals are also provided in the Constitution in various articles including Fundamental Rights to equality and against exploitation, and Directive Principles of State Policy. There is also special provision for *reservation of tribals* in education and employment. Even there are two Schedules of the Constitution, which specifically deals with the tribal area and its administration. The Fifth Schedule provides for *Advisory Councils*, three- fourth of whose members being from the tribal background are expected to advise the respective states on the welfare and advancement of Scheduled Tribes. But the Fifth Schedule has so far remained ineffective and inoperative in practice as many states have either not formulated special regulations or have not enforced them. Moreover council

¹²³ Desh Bandhu and R K Garg (ed.), Social Forestry and Tribal Development, Dehradun Natraj Publishers, New Delhi. 1986, p.26

Archana Prasad, Environmentalism and the Left: Contemporary Debates & Future Agendas in Tribal Areas, Left Word Books, New Delhi, 2004, p.25

¹²⁵ Ajit Bhattacharjea, Social Justice and the Constitution, Indian Institute of Advanced Studies, 1997, p.154

meetings are rare and tribal leadership has failed to make the council a powerful voice in favour of the tribals. 126

But the Sixth Schedule of the Constitution is more powerful legal instrument towards tribal self-management as well as their self-development. It is applicable to the states of Meghalaya, Mizoram, Nagaland and Arunachal Pradesh and authorizes the autonomous district and regional councils to frame laws relating to use of land for agriculture, grazing, residential or non-agricultural purposes- with the exception of the reserved forests and lands acquired by the state for public purposes. 127 These Autonomous District Councils are also empowered to administer justice, which can only be challenged in High Court or the Supreme Court. These councils have executive, legislative and judicial functions besides administrative powers. But over the period of time these Autonomous District Councils have been reduced to merely administrative entities. The series of amendments in 1971, 1972 and 1988 have eroded the legislative powers of the district councils in Mizoram, Meghalaya and the Sixth Schedule areas of Tripura, and the councils have been subjected to the overriding law making powers of the concerned legislatures. 128 Moreover the Governor's discretionary powers, non effective implementation of Sixth Schedule and its dilution through several amendments, state's right to extinguish the tribal customary corporate rights over land, water and forest for stated public purpose or interest, frequent delay in payment of royalty to the district councils on mining and in grants-in- aid from the Union Government, creation of a new oligarchy and more people of the northeast demanding autonomy have limited the significance of this schedule of the Constitution. 129

State monopoly ownership of forests has been a colonial legacy and also the major bone of contention between grassroot movements and the State. The State enjoys absolute ownership and control over bio resources in the forests, and forest officers enjoy arbitrary power to settle the rights in reserved, protected or village forests. The rights of the people are severely restricted and their control over bio

¹²⁶ Ibid

¹²⁷ Ibid, p.155

¹²⁸ Ibid, p.156

¹²⁹ Ibid

resources of their area is minimal. The Forest Act has been amended occasionally by State and the Central Government to increase their control over forests. Under this act no local people are entitled to and are to be evicted from reserved forest areas. The act specified that clearing land for agriculture should be prohibited on reserved and protected forests unless the forest settlement officer who excluded this area from the demarcated forest recognizes such a right.

In the changing scenario these tribals who have contributed and protected the growth of the forests are seen as the perpetrators who are destroying the forests. Their presence in the forests is now seen as against law. On the other hand, it has also been argued that the coming in of modern ways of managing forests by outsiders over the years have made an impact on forests and forest dwellers as they have absorbed commercial values and their traditional community ties have broken down. There has been a change in tribal economy and way of life and they have lost vested interest in preservation and regeneration of forests.

As the situation began to worsen, tribals were being exploited more and more. Things went to such an extent that these tribals did not even hesitate to support the terrorists who were considered the 'saviours' when the opportunity came.

Also, the fight over regularization of land holdings in forests has occurred for many decades. Many Gandhians and Left movements believe that inhabitants living inside the forests should have recorded rights and should be the owners of their own land. This confrontation between these movements and Forest Department intensified in the wake of Supreme Court order in May 2002 for the eviction of all encroachers from forests within the next six months.

Moreover, Forest Policy adopted by the government has also gone against the tribals, as they were *alienated* from their own forests. The tribals were treated with suspicion because they depended on forests for their basic needs and hence they were not involved in the preservation and maintenance of the forests. The forest department and other government agencies could have used the traditional knowledge, values and expertise of the tribals to preserve and protect the forests.

But due to their ill-conceived government policies the tribals have been looked down upon as thieves in their own forests. Also, land alienation among the tribals is facilitated by the nature of land tenure held by tribals. The modern legal concept of private property does not record a tribal as legal owner of these lands. The need for commercial exploitation of the forests has facilitated disposition of tribals on the plea that land was not formally recorded in their names.

Another problem that these tribals are facing is the *population growth*, which is undermining the sustainability of traditional land use systems. Even the tribal land use strategies have been changing which in turn have been throwing various issues like ecological viability of shifting cultivation, soil erosion due to depletion of forestry and decline of soil nutrients in soil. ¹³⁰ The shrinkage of tribal resource base could be overcome by emphasis on increase in the productivity of tribal holdings, which in turn will help them in realizing their stake in land and prevent land alienation among them. Also, through strengthening the farm sector of tribals their ethnic and cultural identity could be protected.

Related to the problem of land alienation among tribals another major problem is the *impact of displacement* on their lives. The socialisation of tribal children from very young age makes them aware of the huge resource base around them. Tribals are used to staying in small villages and well knit social structures. Hence it becomes difficult to bring a change overnight among such people. After displacement their traditional community ties breaks down and usually it has been observed that whenever there is drastic change in the environment of the tribal habitat, the landless tribals prefer to migrate to urban, industrial or mining areas.

After displacement there is a provisions that government plots of land are to be supplied to the landless tribals. Most of the time the plot that have been supplied is not ready for cultivation. Moreover the land and other facilities that are provided do not solve their purpose, for example, of feeding their animals properly or providing them with constant veterinary care because of the changed

¹³⁰ Pawar, S.N, and R.B Patil, Op.cit, p.138

environment.¹³¹ So proper care should be taken before deciding on any policies relating to the tribals like their informal or formal right to carry on the local beliefs and dogma.

Concept of Joint Forest Management (JFM)

Joint Forest Management is the term used for partnerships in forest management involving both the State Forest Departments and local communities. The Joint Forest Management circular issued in 1990 was to set a new policy on "involvement of village communities and village assemblies in the regeneration of degraded forest lands". The circular took the National Forest Policy, 1988 as its basis for envisaging people's involvement in the development and protection of forests. 132 The welfare of forest dwelling communities has been accepted as a major objective of the forest policy. Orissa was the first state that passed the first resolution in 1988, followed by West Bengal in 1989. After that 27 states have issued JFM orders for implementation of the programme. The schemes of JFM vary from state to state and are known by different names. Usually a village committee is known as the Forest Protection Committee (FPC). In this the villagers agree to assist in the safeguarding of forest resources through protection from fire, grazing, and illegal harvesting and in exchange they receive non-timber forest products and a share of revenue from the sale of timber products. In many parts of India, small village groups have started to protect and reclaim degraded forestlands through collective action. The main aim is that local women and men who are dependent on forests have the greatest stake in sustainable forest management.

The concept of Joint Forest Management originated in West Bengal at the Arabari Forest Range in West Midnapore in 1971. *Ajit K. Banerjee*, a silviculturalist, working for the Forest Department as Divisional Forest Officer, was conducting trials which were constantly being disturbed by grazing and illegal harvesting by the local populace. At the time there were no initiatives for sharing of

¹³¹ Ibid

¹³² Sanjay Upadhyay, 'JFM in India: Some Legal Concerns', *Economic and Political Weekly*, August 30, 2003

forest resources between government and the locals. The forest official, against the suggestions of his co-workers, sought out representatives of eleven local villages and negotiated the terms of a contract with an *ad hoc* Forest Protection Committee. The initial program involved 612 families managing 12.7 square kilometres of forests classified as "degraded." 25% of profits from forests were shared with the villagers. The experiment was successful and was expanded to other parts of the state in 1987. A few years later, JFM was employed in the state of Haryana to prevent soil erosion and deforestation.

There are two major reasons behind introducing JFM: *one* that the government's management system was not succeeding in arresting growth of forest degradation and deforestation. *Second*, a new management paradigm was evolving in which the local people's participation was found to be an appropriate and promising tool in arresting forest degradation. ¹³⁴

The Government of India has constituted a "JFM Network" with the Inspector General of Forests, Government of India as the Chairman. Objectives of the network are:

- (i) To act as a regular mechanism of consultation between various agencies engaged in JFM work in the country, and
- (i) To obtain constant feedback from various stakeholders on the JFM programme for proper policy formulation and suitable direction to States.¹³⁵

To facilitate participatory forestry management between forest department, the user community and non-government organizations most of the orders on JFM have annexed a model Memoranda of Understanding (MoU) or some form of agreement between the stakeholders which will lay down the terms and conditions

¹³³ India: Andhra Pradesh Forestry Project,

⁽http://www.worldbank.org/wbi/sourcebook/sb0207.pdf#search=%22arabari%20banerjee%22)

Anuja Chopra and Shivangi Sharma, 'Analyzing the Efficacy of Participatory Approach to Achieve Sustainable Forest Management In India,' (http://www.legalserviceindia.com/article/1215-Forest-Management-In-India.html)

¹³⁵ Ibid

including duties and responsibilities of all parties.¹³⁶ In most of the states JFMCs (termed variously as Van Samrakshana Samittee, Van Suraksha Samiti, forest protection committee, and village forest committee) were registered by the DFO. Gujarat, Andhra Pradesh, Haryana, Madhya Pradesh and West Bengal have recorded improvements in productivity, diversity of vegetation and increased income to members of community institutions from non-timber forest products.¹³⁷

India has shifted the approach of forest management from regulatory to participatory mode of management with the resolution promulgated in 1990. At present, more than 17 million forest area is being managed by almost 10,000 Joint Forest Management Committees with the benefit sharing mechanism. The JFM resolution was circulated by Ministry of Environment and Forests in the year 1990 and 2000. In the course of evolution, approaches like village resource development, micro watershed development have got integrated into JFM as most State Governments are attempting to improve the socio-economic status of forest-dependent communities in order to reduce pressure on forests.

Main reason for the failure of JFM in many states is lack of information among the village community regarding the concept of joint management of forest resources. It has also been noticed that local people and specially women were sidelined and state through the forest department retained the ownership of forests. Moreover the powerful elite groups tend to dominate the arena of JFM. The problem could be overcome if there can be better mechanisms to ensure more people's participation at all the levels. The role of state and the forest department should be reassessed and their level of interference with the local tribal policies should be minimal as externally imposed development is not feasible.

1.pdf#search=%22%22joint%20forest%20management%22%22)

¹³⁶ Sanjay Upadhyay, 'JFM in India: Some Legal Concerns', Economic and Political Weekly, August 30, 2003

¹³⁷ Forest Management, (http://www.manage.gov.in/managelib/extdig/Untitled-

¹³⁸ Anuja Chopra and Shivangi Sharma, 'Analyzing the Efficacy of Participatory Approach to Achieve Sustainable Forest Management In India,' (http://www.legalserviceindia.com/article/1215-Forest-Management-In-India.html)

¹³⁹ People and Development 2: Is Participatory Development Possible?, (faculty.washington.edu/cjj3/Tue10thOctLecture.ppt)

JFM is slowly emerging into a form of sustainable forestry, which augments the forestry regime with processes for rapid adaptation to changes in what people need, want, and can do. As an adaptive social process it is striving to create sufficient future forest production opportunity to satisfy potentially competitive/conflicting interests that would diminish the forest if left unresolved. The challenge with JFM has thus been to develop social processes that recognize, accommodate, and respond more effectively to diverse and dynamic perspectives of what the forest is about and should be. 140

Experiment of Social Forestry

The term 'Social Forestry' was first used in 1976 by the National Commission on Agriculture. After that India embarked upon a social forestry project with the aim of taking pressure off the forests and making use of all unused and fallow land. It has often been argued that scientific forestry and scientific management of forest resources in India began with the British. It began with the introduction of Indian Forest Act 1865 and amounted to formalization of the erosion both of forests and of the rights of the local people to forest produce.¹⁴¹

The Central Government has evolved the policy/strategy of social forestry to provide village communities with fuel wood, fodder and small timber by raising trees, grasses and fodder in farmer's land, village wastelands, degraded forests and lands on the side of roads, canal banks and railway lines. It aimed at involving people in building up forest resources. Almost every state has launched the programme of social forestry. With the introduction of this scheme the government formally recognised local community's rights to forest resources, and is now encouraging rural participation in the management of natural resources. It was implemented on larger area with greater funding from both government and foreign resources. During the 5th FYP Rs. 373 million were allocated for afforestation projects. 1.2 million hectare was planted with 50% under social forestry

¹⁴⁰ Study on Joint Forest Management conducted by TERI for Ministry of Environment and Forests, (http://www.envfor.nic.in/divisions/forprt/terijfm.html)

George A James, (ed.), Ethical Perspectives on Environmental Issues in India, APH Publishing Corporation, New Delhi, 1999, p.80

programme. 6th FYP increased allocation to 6925 million. The Government of India decided to implement the social forestry programme in 100 selected districts in the country. But the programme failed to achieve wide ranging environmental goals that had been envisaged and ended up subsidizing rich farmers. People in areas of southern Bihar and parts of Tamil Nadu vigorously opposed social forestry. The early success of social forestry in Uttar Pradesh, Punjab, Haryana and Gujarat was because of the encouraging response of medium and large farmers who appropriated its benefits.

To assist State Governments in carrying out the programme of social forestry and rural participation in forestry development both *FAO* and *World Bank* have financed social forestry projects in various States with the following *objectives*:

- To increase fuelwood supplies through the establishment of plantation on public, village and private wastelands.
- To secure the cooperation of the local population by involving them in planning, execution and protection of plantations.
- To establish an organization that is required to support a long-term social forestry programme. 142

The social forestry scheme has been categorized into different groups, which are as follows:

- Farm Forestry- Individual farmers are being encouraged to plant trees on their
 own farmland to meet the domestic needs of the family. The main aim is to
 make farmers aware of the economic returns from this practice without having
 any adverse effect on crop yields.
- Community ForestryThe raising of trees on community land and not on
 private land as in farm forestry. It aims to provide benefit for the entire
 community and not for any individual. The government has the responsibility

¹⁴² Pranab Kumar Bhattacharya, Social Forestry: A Step Towards Environmental Change, Khama Publishers, New Delhi, 1990, p.17

of providing seedlings and fertilizer but the community has to take responsibility of protecting the trees. Over the last 20 years, large-scale planting of Eucalyptus, as a fast growing exotic, has occurred in India, making it a part of the drive to reforest the subcontinent, and create an adequate supply of timber for rural communities.

- Extension Forestry- Planting of trees on the sides of roads, canals and railways, along with planting on wastelands to increase the boundaries of forests. Extension forestry intends to cover mixed forestry on wastelands, panchayat lands, village commons, raising of shelter belts in dry and arid regions, raising of plantations of different quick growing species.
- Agro-Forestry- In this silvicultural practices are combined with agricultural crops like leguminous crop, along with orchard farming and live stock ranching on the same piece of land. It maintains or increases the total yield by combing food crop together with forest tree and live stock ranching on the same unit of land, using management practices that takes care of the social and culture characteristic of the local people and the economic and ecological condition of the local area.
- Recreating Forestry- It aims at reforestation in those areas where sufficient degraded forests exist within a reasonable distance of the rural and semi urban complex and link them to the supply of fuel wood and small timber at fair rates to the villagers. The programme of clearing and planting the degraded forests would itself give year-round employment to a large number of people.

The main reason for the *failure of social forestry* is that it expects larger degree of collaboration between villagers and the forest department. Many villagers in Gujarat, Madhya Pradesh, Uttar Pradesh and elsewhere were reluctant to let the forest department afforest their common land for the fear that they would claim the afforested areas as their own. ¹⁴³ Even the forest officials were not willing to take up the additional task of wooing rural people as partners in afforestation as most

¹⁴³ Satish Kumar, Protecting Environment: A Quest for NGOs, Kalinga Publications, Delhi, 1999, p.85

significant beneficiaries of the social forestry were paper factories and forest department and the subsidiary beneficiaries were rural elites and owners of medium sized plots and not mainly the villagers.

Role of Voluntary Agencies, Non Governmental Organizations and Local Self Government

In the field of environment and particularly forest the role of various voluntary agencies and NGOs has been considerable as well as critical. Their main aim is to create awareness among the people. In other words, it can be said that people should be aware about what government is doing in the field of environmental protection and implementation, and various legislations in the country, which concerns them as well. In this context the voluntary agencies could play a significant role.

The role of voluntary agencies have been emphasized by *Indira Gandhi* in 1982 for implementation of 20 point programme with the suggestion to set up a Consultative Group of Voluntary Agencies under the Chairmanship of either the Chief Secretary or the Development Commissioner. Once chosen, these voluntary organizations would be receiving funds through *Programmes by Action in Development India* (PADI), which is an autonomous organization, sponsored by the Ministry of Rural Development. It has now become CAPART, a voluntary sector in India which has played a major role in rural development through mobilizing communities and catalysing people's initiatives for change as well as through direct implementation of interventions around specific issues.

The local self-government, that is, *Panchayati Raj institutions* are also given some powers regarding administering the forests and look after the grievances of tribal people. A committee made in 1966 dealing with rural urban relationship laid emphasis on the voluntary organizations in mobilizing community support for local development activities.¹⁴⁵ The committee viewed that "local

¹⁴⁴ Ibid, p.110

¹⁴⁵ Ibid, p.112

voluntary organizations can be very helpful in mobilizing popular support and assistance of the people in activities of local body. It is possible to maintain close relationship with the people through these organizations."¹⁴⁶

Various voluntary organizations have proliferated and have actively taken part in various sectors of protecting and conserving the forests. Most of these organizations are recipients of government funds and in recent times government policies are being implemented through these agencies as well. Since these organizations are not bound by strict government rules and regulations they are expected to perform better than the government departments. They are generally expected to be more people oriented as they work in non-partisan way. They can play a very crucial role in creating environmental awareness and preserving our natural resources.

In the field of environment Non Governmental Organizations (NGOs) are involved in several prominent areas like Environmental Education and Awareness, Nature Conservation and Nature Resources, Pollution Control, Afforestation and Social Forestry, Floristic and Faunal Studies, Rural Development, Wildlife Conservation, Waste Utilization, and Eco-development. Apart from that NGOs also bring out various publications like reports, proceedings of the seminars and workshops, newsletters and journals. This has helped in mobilizing public opinions.¹⁴⁷

Various research studies and programmes have been initiated by the Department of Environment to fund NGO activities in 'eco-development' and environmental education. The maximum concentration of these NGOs has been found in Delhi followed by Uttar Pradesh, Maharashtra and West Bengal.¹⁴⁸

The efforts of these NGOs have resulted in forcing the local administration to take certain policy decisions regarding protection of environment. Some of the

 ¹⁴⁶ India report of the Committee on Panchayati Raj Institutions, New Delhi, 1978 cited in Satish Kumar, *Protecting Environment: A Quest for NGOs*, Kalinga Publications, Delhi, 1999, p.112
 ¹⁴⁷ Satish Kumar, *Protecting Environment: A Quest for NGOs*, Kalinga Publications, Delhi, 1999, p.115
 ¹⁴⁸ Ibid

voluntary organizations as well as the NGOs, which are related to the forests, are as follows:

1. Dasholi Gram Swarajya Mandal (DGSM)

DGSM pioneered the 'Chipko Movement" and has been organizing various eco-development camps mainly to prevent destruction of forests. The movement began in Uttarakhand region in 1970s. DGSM uses the camps to stimulate debate on problems of economic and social development and focuses mainly on protection and improvement of local eco-system for meeting immediate household needs. ¹⁴⁹ For example groups like Lok Chetna Manch in Kumaon Himalayas are organizing the eco development camps. The Environmental Cell of Gandhi Peace Foundation has assisted in organizing several eco development camps in Himalayas and in other parts of the country. The organization has played an active role in making the villagers of Chamoli district understand the importance of forests and in the process seeking their active participation in afforestation and conservation. ¹⁵⁰

2. Kerala Sastra Sahitya Parishath (KSSP)

KSSP was founded in 1962 and has been engaged in environment related problems since the establishment of Health Environment Brigade in 1978. At grassroot level KSSP has been involved in social forestry and the analysis of the reasons for the failure of Vanmahotsava. It came to the conclusion that its failure was due to lack of people's participation in planning and implementing large scale plantings. In 1981 KSSP undertook massive tree schedule in all panchayats to stress the importance and need for social forestry. The major emphasis was given to educating public to make them realize that man himself is engaged in the act of destroying his own environment.¹⁵¹

The biggest victory of KSSP can be seen in spearheading the Silent Valley Hydroelectric Project wherein it highlighted the relationship of forests to climate,

¹⁴⁹ Ibid, p.120

¹⁵⁰ Eco Development Camps by Dasholi Gram Swarajya Mandal (DGSM), Chamoli, Uttaranchal, (http://www.boell-india.org/en/web/index_101.html)

¹⁵¹ Satish Kumar, Op.cit, p.120

floods and drought, interrelationship of plants, animals and men, and eco systems. Still Kerala State Government was under populist pressure to allot forestland to the landless. Since 1980 KSSP has been organizing 'Sastra Kala Jathas' and attempts are made to increase people's awareness on issues like deforestation, pollution etc. through the medium of folk art, street corner plays and music.

3. Kalpa Vriksh

Kalpa Vriksh is an environmental action group formed to prevent the deterioration of environment of Delhi especially fast vanishing green areas in the city. This group has been actively associated with activities like tree planting and bird counts, running nature clubs and holding workshops for students for creating awareness among them. One of their significant contributions is that they played an instrumental role in getting the ridge and other green areas as 'Protected Areas' by presenting memorandum to the Prime Minister in 1980. Kalpavriksh believes that a country can develop meaningfully only when ecological sustainability and social equity are guaranteed, and a sense of respect for, and oneness with nature, and fellow humans is achieved.¹⁵² Also, the conservation strategies cannot be sustainable if they exclude communities.

4. Indian Institute of Bio-Social Research and Development (IBRAD)

IBRAD is the most prominent NGO working on Joint Forest Management in Bengal. IBRAD uses various rural appraisal techniques to promote participatory forestry. It was founded by *S B Roy* in 1985 and this NGO became operational in 1987. Working initially in health sector, IBRAD expanded slowly in other areas including tribal development, joint irrigation management, and participatory forestry. The list of donors includes Ford Foundation (India), Department for International Development (DFID), Swedish International Development Agency (SIDA), Euro-consult, and World Bank. The Government of India and the State of West Bengal, too, have financed IBRAD for carrying out training programmes for

¹⁵² Kalpavriksh Environment Action Group, (http://www.kalpavriksh.org/)

the forest officers.¹⁵³ IBRAD terms its activities 'need-based and action-oriented research and training in the field of development' that 'aims to develop human resources through a holistic approach capable of evolving solutions to both particular and special problems'.¹⁵⁴

Thus, it can be seen that new NGOs have stepped in to work on forest management issues and the older established NGOs have begun to put the 'forest' component on their agendas. These NGOs as well as the voluntary agencies also act as lobby or pressure groups for conserving the environment and have often come into conflict with the other groups, which are representing industrial groups. These organizations and the NGOs have successfully forced the ministers and other development related agencies to analyze the impact of their projects on environment. In some cases they have brought about the speedy implementation of recommendations of Department of Environment by pressurizing the state and administrative machineries.

There is a major difference in the perspectives of governmental education efforts and voluntary organizations working. The government agencies mostly end up blaming poor for environmental degradation while the voluntary agencies stress on the over consumption of elites, government policies, and exhort the people to appreciate alternative development process. Many a times it can also be seen that while on one hand the government agencies have been showing increasing interest in involving voluntary agencies in development programmes because of their efficiency, on the other hand they want to bring these agencies under control by regulating various sources of funds. ¹⁵⁵ It has also been noticed that the conservation and education based groups tend to get more fund from the government than the ones opposing the government.

¹⁵³ Manish Tiwary, 'NGOs in Joint Forest Management and Rural Development: Case Study in Jharkhand and West Bengal', *Economic and Political Weekly*, December 27, 2003

¹⁵⁴ IBRAD (http://www.ibradindia.org/aboutibrad.php)

¹⁵⁵ Satish Kumar, Op.cit, p.124

Panchayati Raj Institutions

Through the Constitution (Seventy-Third Amendment Act, 1992) Part IX "The Panchayats" was inserted in the Constitution that paved the way for "Village Panchayats" by making provisions for the constitution of Panchayats, their composition, election, powers, authority, responsibility, audit, etc. This Act does not apply to schedule area and tribal areas as mentioned in Article 244 and certain other specified areas Village Panchayats have been given the responsibility of social/farm forestry, minor forest produce (MFP), and soil conservation through Eleventh Schedule. Besides some exceptions have also been made in 73rd Amendment in respect to Fifth and Sixth Schedule of the Constitution. The 73rd Amendment of the Constitution specifies that model of Panchayati Raj would not automatically apply to the Fifth and Sixth Schedule areas, Darjeeling district and other tribal predominant areas. For the tribal areas in Nagaland, Meghalaya and Mizoram the state legislatures may extend provisions of the 73rd amendment within their jurisdiction except in scheduled areas.

But Fifth Schedule does not stipulate any devolution of power at local level. Rather it stood for centralization of power that the executive power of Union should extend to giving directions to the states to administer the given area. ¹⁵⁸ In contrast the 73rd amendment stands for devolution of power through structural arrangement.

The Sixth Schedule mentions about the formation of Autonomous District Councils. But judicial powers cannot be operated by the council automatically but has to be conferred by the Governor. These Autonomous District Councils can also set up village and town councils as well. The development activities have not been included as mandatory functions upon the District Council unlike the panchayat bodies under 73rd amendment. The panchayat bodies are supposed to take up some social service activities of higher order like establishing and managing secondary

¹⁵⁶ Anuja Chopra and Shivangi Sharma, 'Analyzing the Efficacy of Participatory Approach to Achieve Sustainable Forest Management In India,' (http://www.legalserviceindia.com/article/1215-Forest-Management-In-India,html)

¹⁵⁷ B.K. Roy Burman, Op.cit, p.50

¹⁵⁸ Ibid, p.54

schools and hospitals. But even though in theory Autonomous District Councils are institutions of higher order, in reality in actual function they enjoy less power and sometimes hedged by state level political elites.¹⁵⁹ This in turn undermines their effective functioning.

To extend the provisions of Part IX of the Constitution in the scheduled areas Ministry of Rural Development, Government of India constituted a committee known as *Bhuria Committee*, which submitted its report in 1995. The committee reported that though the provisions of the Seventy Third Amendment were wholesome, certain unique characteristics of tribal societies must be kept in view as they have their own customary laws, traditional practices, community ethos, political and administrative systems. The committee felt that while shaping the new Panchayat Raj structure in tribal areas it is desirable to blend the traditional with the modern by treating the traditional institutions as the foundation on which modern superstructure should be built. 160

More recently, a draft bill titled 'The Constitutional Provisions Relating to Panchayats (Part IX of the Constitution) Extension to Scheduled Areas Bill, 1996-A Tentative Draft Incorporating Salient Features of Bhuria Committee report' was formulated. The provisions received presidential consent in December 1996 and it became a Central law. All states except Bihar and Rajasthan have passed similar law within one year after Central legislation. ¹⁶¹

The main points of Bhuria Committee Report laid down the foundation of the Act of 1996:

- Traditional tribal conventions and laws should continue to hold validity.
 Harmonization with modern systems should be consistent therewith.
- The basic lacunae of the Land Acquisition Act 1894 have to be removed.
 The consent of the local village community should be obligatory. The

¹⁶¹ Ibid, p.31

¹⁵⁹ Ibid, p.56

¹⁶⁰ Savyasachi, Tribal forest Dwellers and Self Rule: Constituent Assembly Debate on 5th and 6th Schedule, Indian Social Institute, New Delhi, 1998, p.30

- rehabilitation package should be operated with consent of the local village community.
- The Gram Sabha.... should exercise different functions...as traditionally prescribed. More specifically management of land, forest, water, air etc resources should be vested in it. This right should be deemed as axiomatic, in the functioning of Gram Panchayats.¹⁶²

But the Bhuria Committee never talked about self-rule. It recommended enhancement of special rights and privileges under the provisions of Fifth and Sixth Schedules through which self-rule is to be accomplished. The Act of 1996 undertakes to empower Gram Sabha constitutionally. ¹⁶³

Summing up

Tribals from the time immemorial have been protecting and conserving the forests in India. The examples could be seen in various agitations and struggles, which have taken place over the period of time most prominent of which is Chipko Movement. The catalysts of this movement were *Sunderlal Bhuguna*, *Chandi Prasad Bhatt*, *Mira Behn*, *Sarala Behn* and many others. In early days the movement was basically directed against removing non-local forest contractors. Later on, the local women continued the struggle even when the government agency started working through local labour contractors and forest cooperatives. Tribal economy and forest development are dependent in the sense that a right balance must be sought to avoid destruction of forests and tribal life in the name of industrial development.

Although it is always local people who are held responsible for deforestation, it is the commercial demands that have more frequently resulted in large-scale forest destruction.¹⁶⁴ The destruction of forest and its resources hurts the economic interests mainly of tribals who depend on them for their survival.

¹⁶² Ibid

¹⁶³ Ibid, p.33

¹⁶⁴ George A James, (ed.), Ethical Perspectives on Environmental Issues in India, APH Publishing Corporation, New Delhi, 1999, p.79

Forest health and regeneration is far better when local communities have a stake in it rather than anonymous bureaucrats in collusion with corrupt politicians and trader. Even though many forestry programmes have been implemented, people's participation in development has never been conceptualised and operationalized. Thus most of these programmes have been failure even though the concept was good. The association of people in the implementation of these forest related programmes would result in creation of awareness, exchange of views and better appreciation of realities in the field of environment and particularly the forests. The alternate strategy could be to find out how the knowledge of tribal forest dwellers of forest universe could become the basis for entrusting them with the responsibility of protecting forest. Thus it can be said that the success or failure of any government policy is linked to or dependent upon the support and participation of people. In case of forests the aspect of forest dependent communities cannot be overlooked. Moreover NGOs could play a better role in both formulation of environmental legislations and in monitoring their implementation. Therefore, they should be given more powers so that their efficiency could be enhanced.

There is an urgent need to review the land ownership including that under the forest departments and concede just and fair aspirations of our tribal people. The 1.5 million hectares of area under encroachment may appear large but compared to the total area of 68 million hectares under forests in India it constitutes about 2 percent of the area and dereserving this, spread over thousands of forest blocks will have no adverse influence on the ecology and environment of the country, but a very salutary impact on the peace and prosperity of the tribal belts of the nation. ¹⁶⁵

¹⁶⁵ R.K Rao and S.R Sankaran, 'Forest Myths Jungle Laws and Social justice,' *Economic and Political Weekly*, November 15, 2003

CHAPTER 4

ROLE OF JUDICIARY IN PROTECTING AND CONSERVING FORESTS

Ever since 1980s, after the Supreme Court began to actively consider the cases relating to environment and leaving aside formalities of litigation, the judiciary in India has responded actively towards environmental problems. The judiciary has also played a significant role in championing the cause of forest and biodiversity conservation. The need for judiciary is felt even in the cases related to forests because of fair and unbiased judgement given by the judges, which are highly eco friendly in nature. More so, there have been gross violations of forest related laws. This is because of the powerful actors who may engage in lucrative illegal logging on a wide scale, as they know that in certain settings they can get away with it. Moreover the poor farmers may commit minor illegal acts on a daily basis because they feel they have no choice. The other factors include unclear and/or discriminatory land tenure systems contributing to a lack of local responsibility for sustainable forest stewardship; prohibition of subsistence use by people whose livelihoods depend on forest products; cumbersome bureaucratic procedures and complex legal demands; policy and legal failures making illegal operations more profitable than legal activities; weak law enforcement and low penalties for illegal operators when caught; and unfeasible provisions creating the perception among forest users that the law is unfair and out of touch with reality. 166

Role of the Judiciary

While the doctrine of separation of powers does not find explicit enunciation in the Indian Constitution, Supreme Court has over the years elevated the separation of powers to basic inviolable structure of the Constitution in its landmark judgment in *Kesavananda Bharati vs. Union of India*. The judiciary's role is therefore primarily one of interpreting the law, resolving contradictions between laws and the Constitution, and protecting the basic structure of the

¹⁶⁶ 'Rationalizing the Policy and Legal Environment,' FAO Corporate Document Repository, (http://www.fao.org/DOCREP/008/a0146e/A0146E08:htm)

Constitution.¹⁶⁷ At the same time the Indian Constitution endows judiciary with certain extraordinary discretionary powers and powers of Judicial Review.

Judiciary has used the tool of *Public Interest Litigation* (PIL) quite effectively for the cause of environmental protection. Failure on the part of governmental agencies to effectively enforce environmental laws and non-compliance of statutory norms by the polluters has resulted in an accelerated degradation of the environment. The court has innovatively read the *Right to a Healthy Environment* into *Article 21* (right to life) and thereby equated it to a fundamental right. The Supreme Court, in its interpretation of *Article 21*, has facilitated the emergence of Environmental Jurisprudence in India. For example, in *Subhash Kumar vs. State of Bihar*, the Court observed that:

"The right to live is a fundamental right under Article 21 of the Constitution, and it includes the right of enjoyment of pollution-free water and air for full enjoyment of life. If anything endangers or impairs that quality of life in derogation of laws, a citizen has the right to have recourse to Article 32 of the Constitution..."

In certain cases, the judiciary has to choose between preservation of environmental resources in state, and the right of communities to extract value out of those resources. To facilitate this choice, the courts have evolved a right to livelihood for communities affected by new state-run conservation initiatives. The court has also observed environment-development debate, and stated that the most desirous position is a harmonious form of co-existence of these ends. Apart from that, unlike the PIL where the Supreme Court and the Green Benches of the High Courts have been paying special attention in recent years, the lower courts are too busy to devote enough time for environment related litigations.

The judiciary has also played a very important role with regard to protection and conservation of forests in India. Supreme Court held that the word

Armin Rosencranz and Sharachchandra Lélé, 'Supreme Court and India's Forests', Economic and Political Weekly, February 2, 2008
168 Ibid

'forest' must be understood according to the dictionary meaning and clarified that this description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise with regard to Forest Conservation Act. The term forest land as occurring in section 2 of the Forest Conservation Act 1980 will not only include forests as understood in dictionary sense, but also any area recorded as forest in government record irrespective of ownership. Moreover, provisions enacted in the act for protection and conservation of forests must apply clearly to all forests irrespective of the ownership.

Important Cases and Jurisprudence related to Forests

The Supreme Court of India has also adjudicated cases concerning forest and environment under *Article 14* (Equality before Law), and *Article 21* (Protection of Life and Personal Liberty). So far as protection of tribal communities is concerned, it has been provided under *Article 46* which states that,

"The State shall promote with special care the educational and economic interests of the weaker sections of the people, and in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation."

A writ petition was filed by the *Environmental Awareness Forum and T.N Godavarman Thirumulpad* on limited and restricted issue of forest conservation in the Supreme Court on September 2, 1996. The Court issued a notice to the Chief Secretaries of all the State Governments and stated that inspite of notices being issued, many of them have not entered appearances and still there was no representation on behalf most State Governments. Court felt that the version of northeast states in particular is necessary but no assistance to that effect was available to the Court on the account of absence of any representative at that time on behalf of any of the seven northeastern states.

¹⁶⁹ Ritwick Dutta and Bhupendra Yadav, Supreme Court on Forest Conservation, Universal Law Publishing Co., Delhi, 2005, p.3

In another order dated 12 December 1996 Supreme Court interpreted the Forest Conservation Act of 1980 and held that the act was enacted with the view to check further deforestation and ultimately ecological imbalance and therefore the provisions made therein for forest conservation must apply to all types of forests irrespective of nature of ownership or classification. The Court also directed in accordance with section 2 of the act that 'all ongoing activities within any forest in any state throughout the country without prior approval of Central Government, must cease forthwith. Moreover, specific orders were passed for northeast states and specially for Tirap and Changlang in Arunachal Pradesh, for Jammu and Kashmir, Himachal Pradesh, and hilly regions of Uttar Pradesh and Tamil Nadu. The felling of trees in all forests is to remain suspended except in accordance with the Working Plans of State Governments, as approved by the Central Government. In absence of any Working Plan in any particular State, felling under the permits can be done only by the Forest Department of State Government or the State Forest Corporation. It was directed that this order will be operated and implemented notwithstanding any order at variance, made or which may be made by any government or authority, tribunal or court, including High Court.'170

The Court also directed the states to constitute an expert committee comprising of Principal Chief Conservator of Forests and another senior officer to oversee the compliance of this order and file status reports. The committee then will give its report within one month of being constituted. The committee should review the following:

- (i) Identify areas which are 'forest' irrespective of whether they are so notified, recognised or classified under any law, and irrespective of the ownership of the land of such forest
- (ii) Identify areas which were earlier forests but stand degraded, denuded or cleared
- (iii) Identify areas covered by plantation trees belonging to the government and those belonging to private persons¹⁷¹

¹⁷⁰ Ibid

¹⁷¹ Ibid, p.3

Thus, the case came to be known as Godavarman case or Forest Conservation case. With this case Supreme Court's engagement with the issue of forest conservation increased. The central notion of this case was the effective implementation of Forest Conservation Act 1980. But subsequently, Wildlife Protection Act 1972 and all the state and local laws relevant for forest conservation also came within the purview of this case.

In another related case known as T.N Godavarman vs. Union of India, which came up in 1997 the states were directed to file comprehensive statement of the past activities and future programmes to tackle degradation of forests. Research Foundation for Science and Technology and Ecology, and Bombay Environmental Action Group were also permitted to file their affidavits through Amicus Curiae. Certain directions were given to the states like filing an affidavit on the action taken against non performing forest officials in last five years, and it was clarified that any person giving false information to any of the committees appointed by the Court would be guilty of perjury as well as be liable to be hauled up for contempt of Court. 172

In Godavarman case Supreme Court recognised that the effective implementation of its orders would not be possible unless suitable steps are being taken to boost the morale of Forest Department. For example, regarding the Forest Department in northeast the Court in 1998 concerned itself with the issue of reforming Forest Administration in northeastern states and made some important decisions. The Court held that a full proof institutional arrangement should be made functional under the strict supervision of the North Eastern Council. The Ministry of Environment and Forests was directed to provide technical support in foresty matters by opening a separate cell in the Ministry under an officer of the rank of Chief Conservator of Forests, and also to start a satellite office of Forest Survey of India (FSI) at Shillong and Meghalaya. 173 Moreover the Court directed Principal Chief Conservator of the Forests of states and UTs to prepare a detailed action plan for intensive patrolling and protective measures needs to be taken in certain identified areas. The action plan along with the quarterly report would be

¹⁷² Ibid, p.105-106 ¹⁷³ Ibid

then sent to the Central Government for its approval. The Court also ordered that the Forest Officers of northeastern States should be empowered on the lines similar to powers conferred on forest officers in many other States.

Meanwhile a case came up before Supreme Court known as *Union of India* vs. Kamath Holiday Resort Pvt Ltd where the collector of the Union Territory Daman leased out land in the reserved forest area to the respondent for a period of five years for promotion of tourism and to put up snack bar and a restaurant to cater to the needs of tourists visiting the forests. The Conservator of forests raised objection that the permission of central government was not obtained as required under section 2 of the Forest Conservation Act 1980. But the collector was of view that since the area that was leased out is within the Union Territory under the administration of central government, the permission of central government would not be required. Even High Court approved the orders of collector. When the matter was presented before the Supreme Court, the Court held that Forest Conservation Act 1980 applies to whole India except for the State of Jammu and Kashmir, and therefore the act aplies to Union Territories as well.¹⁷⁴

The forest conservation law has also impacted the litigations concerning National Parks and Sanctuaries. In 2000, the case *Centre for Environmental Law WWF-India vs. Union of India* came up before Supreme Court wherein the Court through an interim order restrained all state governments from dereserving national parks, sanctuaries and forests without the prior approval of Supreme Court. Here the word 'forest' added a completely new dimension to the implementation of forest law in the country. By this order power of the state governments to dereserve a 'reserved forest' which can only be exercised by the prior approval of Centre has been obtained. Previously in 1996 Godavarman case, Supreme Court had restrained all state governments from using forest lands for non forest purpose without the prior approval of Central Government in accordance with the provisions of the Forest Conservation Act 1980. The Court had also put a stay on

175 Dutta, Ritwick, and Bhupendra Yadav, Op.cit, p.3

¹⁷⁴ Gurdip Singh, Environmental Law in India, Macmillan, India, 2005, p.340

the existing non forestry activities as they were being carried out without the prior approval of central government.¹⁷⁶

In 2000, another *T.N Godavarman vs. Union of India* case came up before the Court filed by Amicus Curiae, which sought clarification regarding the order dated 12.12.1996 as to whether it contained a ban on removal of any diseased or dry standing trees from areas notified under Wildlife Protection Act 1972. Here it was put forth by the Court that 'no removal of dead, diseased, dying or wind fallen trees would take place from the National Park, Game Sanctuary or Forests. If any order to this effect has already been passed by any of the respondent-states, the operation of the same shall stand immediately stayed. The Union Government will also indicate in its reply affidavit as to what safeguards or steps should be taken in relation to such trees.' 177

In Centre for Environmental Law vs. Union of India lack of compliance by government of the provisions of Wildlife Protection Act 1972 led the petitioner to seek intervention of the Court. In its order the Court directed that 'immediate steps should be taken to immunise all livestocks near the protected areas. Also, the registration of person carrying arms around protected areas should be immediately undertaken. Moreover, all ill-equipped forest guards be provided with modern equipments so that the menace of poaching could be tackled.' 178

The constitution of *Central Empowered Committee* had led to thousands of cases coming up before it mainly because of simplified procedure of filing and hearing of the cases. Later on the committee utilized formal set up of the *National Environment Appellate Authority* for hearing the cases. Over the years CEC has submitted over 100 significant recommendations on important issues of forests and wildlife. These documents are treated as *Interlocutory Applications*.

With regard to the issue of *encroachments* in forest land one of the first reference was made in an order of the Supreme Court in 2000 wherein the Madhya

¹⁷⁷ Ibid, p.195

¹⁷⁶ Ibid

¹⁷⁸ Ritu Dutta, Sunita Dubey, Colin Gonsalves, Aparna Bhat (ed.), *The Environmental Activist Handbook I*, Legal Information Centre, Mumbai, 2000, p.309

Pradesh Government had requested the central government to regularize the encroachments from 1.01.1977 to 25.10.1980. Supreme Court observed that 'the experience has shown that wherever regularization takes place subject to imposition of conditions such as compensatory afforestation, regularization becomes effective without the condition ever being fulfilled.' Therefore, the Court was of opinion that central government should consider that the conditions imposed in relation to reglarization are fulfilled first before any regularization is granted.¹⁷⁹

2002 Central Empowered Committee brought the problem of encroachment to the attention of Court in a report. The application was filed by Amicus Curiae in which it was pointed out that encroachments are still continuing in National Parks, Sanctuaries and ecological sensitive areas like Andaman and Nicobar Islands, the evergreen forests of northeast and western ghat regions, which is a clear violation of the order prohibiting any non forestry activity on forest land without prior approval of central government. According to the report, some of the main reasons for continued encroachment were as follows: 180

- Lack of political will: influential people with political affiliations promote the encroachments. Moreover the encroachment removal drive is often met with strong backlash and unwillingness of the officials to remove them.
- The officials initiating the encroachment removal have to face the hostile politicians, humiliations and threats of transfers which in turn demoralizes them.
- There is always a hope that the encroachments will be regularized in future mainly beacause it had happened in the past. Moroever the promises are also made by the politicians cutting across the party lines which further strengthen their hope.
- Inadequate laws and lenient punishments also aggravate the encroachments. The punishment meted out to the offender is very insignificant as compared to the gravity of crime. Also, there is no provision to punish the abettor of the encroachment which encourages land mafia and influential sections of society to support the land encroachments.

 $^{^{179}}$ Dutta, Ritwick, and Bhupendra Yadav, Op.cit, p.40 180 Ibid, p.41-43

- There is also no provision of recovering the environmental loss from the encroachers for the damage of flora and fauna and the loss of productivity of the forest land.
- In most of the states the *forest departments do not have administrative* control over the large tracts of forest areas which leads to ineffective control of the forest department over the forests.

Keeping in view all these problems, the CEC has made certain recommendations. Of all the recommendations made by CEC, some of the important ones are firstly, it said that further regularization of the encroachment would be strictly prohibited except ones which are eligible for regularization in conformity with the guidelines dated 18.09.1990 issued by the Ministry of Environment and Forests. All other encroachments shall be evicted forthwith from forest land. Secondly, Chief Secretary of the concerned State shall be personally responsible for ensuring effective and timely compliance of this order. Thirdly, in case of failure of state governments to remove the encroachments, compensation shall be paid for environmental losses caused by the encroachments. Fourthly, the amount of compensation shall be determined by CEC after considering total forest area under encroachment. Fifthly, the performance of revenue, police and forest officials in removing encroachments shall be recorded in their Annual Confidential Reports.

Another important aspect was the issue of 'forest compensation' which the Supreme Court took in an order in 2000 where the Court emphasized preservation of natural forests and there should be no depletion of forest cover in areas such as Madhya Pradesh, Western Ghats, the North Eastern Regions, and the Himalayas. The Court said that it is essential that forest deficient states should be asked to contribute towards the preservation of forests by the means of compensating forest rich states, so that they maintain their existing forest cover. The Court emphasized the need that there should be partnership between different states to ensure preservation of forest cover. The suggestion of the Court was to be considered by the committee consisting of Finance Secretary and the Secretary of Ministry of

¹⁸¹ Ibid, p.57

Environment and Forests in consultation with the Chief Secretaries of all the States. The matter was discussed with various states and in 2001 it was pointed out to the Court that about twelve forest deficient States (Tamil Nadu, Uttar Pradesh, Bihar, Rajasthan, Karnataka, Maharashtra, Haryana, Delhi, Orissa, Gujarat, Punjab, West Bengal and Andhra Pradesh) have expressed their reservations in accepting the suggestions of the Court. The Court after issuing notices to the Chief Secretaries of these States, also issued notice to the Government of India to consider the suggestion that if the forest deficient states cannot be asked to compensate the forest rich states then the Union Government should be able to bear the expenses of maintaining the natural forest cover in view of *Article 48A* of the Constitution of India.¹⁸²

In one of the cases, Supreme Court decided to examine a Union law of giving the right to possess upto four hectares of forest land not only to tribals but to other forest dwellers, feared to be land mafia and encroachers. A bench of Chief Justice K G Balakrishnan, Justices Arijit Pasayat and S H Kapadia issued a notice to the Union and state governments on a petition challenging the constitutional validity of the law, known as the *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act*, 2006. The petition filed by Bombay Natural Historical Society, Wildlife Trust of India, All Assam Tribal Youth League and Wildlife Society of Orissa sought the stand of Ministry of Environment and Forests and state governments on the petition within four weeks. As per the Constitutional provisions, only the state legislatures are empowered to enact a law on a subject matter, figuring in the State list.

Apart from all these cases, the need for scientific and judicial inputs has crystallized the necessity for establishment of *Environmental Courts*. It was felt that the officers drawn from executive or the judges would not suffice in resolving the disputes concerning environment. The Supreme Court noticed that in the past few years there has been an increase in the number of cases based on environmental pollution and ecological destruction. In most cases there is a need for scientific expertise as an essential input in judicial decision-making. But the

¹⁸² Ibid

Court had to face a lot of difficulty in finding out independent experts who would be able to advise the Court on these kinds of issues. So it was thought that an independent Centre with professional experts to provide necessary scientific and technological inputs should be set up. Therefore, the Court requested the government to set up an *Ecological Science Research Group* consisting of experts in different branches of science and technology. Moreover since the cases involving environmental pollution, ecological destruction and conflict over natural resources are increasing, Court suggested that it might be desirable to set up environmental courts on regional basis with one professional judge and two experts drawn from Ecological Science Research Group keeping in view the nature of case and expertise required for adjudication. ¹⁸³

National Environment Appellate Authority Act 1997 was close to the expectations of Supreme Court which provided for establishment of Appellate Authority consisting of a sitting or retired Supreme Court judge or sitting or retired Chief Justice of High Court and Vice-Chairman who has been an administrator of high rank with expertise in technical aspects of problems relating to environment and technical members not exceeding three who have professional knowledge or practical experience in areas pertaining to conservation, environment management, and development. It was also stated that any person aggrieved by an order granting environmental clearance in the areas in which any industries, operations or processes or class of industries, operations and processes shall not be carried out or shall be carried out subject to certain safeguards may, within thirty days from the date of such order, prefer an appeal to the authority.¹⁸⁴

The issue of forest also came up before the High Courts in various states. In *Banwasi Sewa Ashram vs. State of UP* the contradictory policies of government was brought out wherein on one hand it laid emphasis on conservation of natural resources while at the same time destroying these resources. In this case, State Government declared large part of the forest land as reserved forests under Indian Forest Act 1927 on which the lives of tribal people depended. This deprived the

183 Gurdip Singh, Op.cit, p.50

¹⁸⁴ National Environment Appellate Authority Act 1997, (http://envfor.nic.in/legis/others/envapp97.html)

Adivasis of their right to collect forest produce and made them evict that forest area. 185 Criminal cases for encroachments and also other forest offences were registered against them and systematic attempts were made to obstruct their free movement, and even steps were taken under the U.P. Public Premises (Eviction of Unauthorised Occupants) Act, 1972 for throwing them out of the villages raised by them, and in existence for quite some time. On the basis of a letter received from the petitioner, which was the Ashram, a writ petition under Article 32 of the Constitution was registered with regard to the claims of these Adivasis to land and related rights. By its order dated 22 August 1983 Court directed the claims of Adivasis or tribals, to be in possession of land, regularisation of such possession, to be investigated by a high-powered committee with a view to 337 reaching a final decision. The committee has identified 433 villages relevant for the present dispute, and roughly one lakh eighty two thousand acres in unauthorised occupation. While the matter had been pending before the Court, government decided to locate a super thermal power plant of National Thermal Power Corporation (NTPC) in a part of these lands and acquisition proceedings were initiated. 186 The Court observed that forests are a much wanted national asset and even though the Court allowed acquisition of land but it instructed that it could be done only after NTPC agreed to provide the facilities approved by the Court to the forest dwellers. 187

In the second *Banwasi Sewa Ashram case* Supreme Court issued a series of measures to be taken to rehabilitate the oustees of Rihand Super Thermal Project. But like the earlier case no claims to the rights of forest dwellers to the produce of the forests were dealt by the Court.

In Goa Foundation Conservator of Forests, the public interest litigation was initiated in High Court of Bombay wherein the petitioner challenged the developmental activity in form of construction of residential complex by Tata Housing Development Company Limited and sought to challenge various permissions granted which were contrary to the provisions of the Forest Conservation Act 1980. The respondents challenged the *locus standi* of petitioners

¹⁸⁵ Dutta, Ritu, Sunita Dubey, et al, Op.cit, p.305

^{186 &#}x27;Banwasi Sewa Ashram vs. State of UP,' (http://vlex.in/vid/banwasi-sewa-ashram-vs-State-and-ors-29683078)

¹⁸⁷ Dutta, Ritu, Sunita Dubey, et al, Op.cit, p.305-306

and contended that the act would apply only respectively from the date the forest area was identified. The Bombay High Court upheld locus standi of the petitioners on the basis that there were large-scale violations of relevant laws in matters of constructions. The Court also did not agree with the contention of the respondents that Forest Conservation Act 1980 would be applicable only prospectively from the date forest area was identified. 188 Therefore, as no permission from central government was obtained before using the forest area for non-forestry purpose, the Court ordered that all the construction activities should be stopped.

In Bhagwan Bhol vs. State of Orissa the question before Orissa High Court was whether the Forest Conservation Act 1980 should be applied to private forests. The owner of land filed a writ petition in Orissa High Court for the issuance of a writ of certiorari to quash the directions issued by Divisional Forest Officer calling upon him to stop felling of trees on the property which formed a part of private forests. 189 Court referred to the case of T.N Godavarman vs. Union of India and held that Forest Act 1980 applies to private forests as well. Thus, the writ petition was dismissed.

In Nagarahole Budakattu Hakku Sthaapana Samiti vs. State of Karnataka the petitioner challenged leasehold rights of certain properties situated in the midst of Nagarhole National Park under lease deed by Government of Karnataka in favour of M/s Gateway Hotels Resorts Ltd. The petitioners contended that the grant of leasehold rights violates the statutory restrictions of Wildlife Protection Act, 1972 and Forest Conservation Act, 1980. The petitioner argued that there is a threat to tribals and eco-tourism will bring in modern day voices of ultra urban culture. The petitioners alleged that under the name of renovation of the structures, the respondent company is putting up new structures extending its operational activities to unworked forestlands by constructing metalled roads and cutting trees. They also claimed that powerful generator sets have been installed, which in due course will severely affect natural movement of wild animals. 'The Court felt that the State Government should have taken prior approval of the Central Government as stated under section 2 of Forest Conservation Act before

¹⁸⁸ Gurdip Singh, Op.cit, p.352 ¹⁸⁹ Ibid

leasing the same land to the private company. The Court felt that after the declaration by the State Government about its intention to declare an area as a National Park under section 35(1) no one can acquire any right in on or over the land comprised therein. The Court ordered to the respondent company to immediately stop all its activities on the forestland in question and handover its possession to State Government. The cost of the Public Interest Litigation assessed at 1,00,000 to be paid by the State Government and respondent company. 190

In State of Tripura vs. Sudhir Kumar Ranjan Nath case the regulation on timber and other forest produce was challenged as violative of the fundamental rights of the profession of trade and commerce. The Supreme Court, however, observed that this law is to preserve, protect, and promote forests wealth in the interest of the nation. ¹⁹¹

In Pradeep Krishnan vs. Union of India, the petitioner environmentalist, filed a petition under Article 32 of the Constitution challenging the legality and constitutional validity of an order of the Department of Forest, state of Madhya Pradesh. The order permitted collection of tendu leaves from sanctuaries and national parks by villagers living around the boundaries in order to maintain their traditional rights. The petitioner contended that the said order violates Wild Life (Protection) Act, 1972, Article 14 and 21, 48-A and 51 A (g) of the Constitution. He also argued that order is malafide and against the public interest. The petitioner clarified to the Court that he is challenging commercial exploitation of tendu leaves through the contractor as it goes against the scope and object of Wildlife Protection Act, not the rights of tribals in relation to collection of tendu leaves in the National Parks and Sanctuaries. The tribals sought an intervention in the case. They argued that they are genuine users of tendu leaves. It is for their livelihood and not for commercial purposes. Collection of tendu leaves is a privilege for generations. The Court directed to the State Government that steps

¹⁹¹ Dutta, Ritu, Sunita Dubey, et al, Op.cit, p.309

¹⁹⁰ 'Nagarhole Budakattu Hakku Sthaapana Samithi v. State of Karnataka AIR 1997 Kar. 288,' (http://www.nlsenlaw.org/wildlife/case-laws/high-court/nagarhole-budakattu-hakku-sthaapana-samithi-v-State-of-karnataka-air-1997-kar-288/)

must be taken issuing final notification and also ordered to institute an enquiry regarding acquiring rights of tribals with regard to land. 192

But there were also many cases where the courts have issued orders in favour of the developmental activities. For example, in the case of *Goa Foundation vs. Konkan Railway* when the Konkan Railway Project was challenged on the ground that it violated section 2 of Forest Conservation Act 1980, Bombay High Court did not accept this contention because the actual forest area, which would get denuded by the project was negligible. 193

In another case of *Niyamdevi vs. State* in 1993 Kerala High Court upheld the need for setting up Biological Park mainly after being satisfied that the existing forest was already degraded and Biological Park was closely connected with preserving wildlife. The project was known as Agasthyavanam Biological Park, and a portion of Kottur Reserve Area was to be utilized for this purpose. 194

The interface between Executive and the Judiciary: Convergence and Divergence

The Forest Conservation Act 1980 did not provide any opportunity for setting up of tribunals and authorities to adjudicate on forest related cases. As people started approaching the courts, need was felt to urgently render justice. Many a times it has also been seen that in tackling the cases related to environment and particularly forests, policy statements of government, which otherwise are not enforceable in courts, have been used as aids by the judges for interpreting environmental statutes and for spelling out obligations of the government. It was during that time reliance was put on section 3(3) of the Environment (Protection) Act 1980 to set up High Powered Committees, Forest Protection Authority and later on Central Empowered Committee. 195

^{192 &#}x27;Wildlife Protection and Conservation Case Laws,'

⁽http://www.nls.ac.in/CEERA/ceerafeb04/html/documents/wildlifematerialsandcases.htm)

^{193 &#}x27;Preservation of Forests-Legislative and Judicial Response,' 2007,

⁽http://www.nlsenlaw.org/forest/articles/preservation-of-forests-legislative-and-judicial-response/)

194 Thid

¹⁹⁵ Dutta, Ritwick, and Bhupendra Yadav, Op.cit, p.14

The *Forest Advisory Committee* was constituted in 1995 by the Ministry of Environment and Forests under Forest Conservation Act 1980. The Director-General of forests heads the Forest Advisory Committee (FAC), a body under the Union Environment Ministry that grants clearances for diversion of forestland. The MoEF must first clear any activity, which requires the diversion of forestland for non-forest use. This process also stipulates a role for the FAC before the grant of clearance. The FAC plays a crucial role because it governs large-scale transfer of forestland for non-forest purposes. The MoEF refers every proposal with complete documentation to FAC and the committee then takes a view on the following parameters:

- Whether the forest land to be converted is part of a nature reserve, national park, wildlife sanctuary, biosphere reserve or forms part of the habitat or any endangered or threatened species of flora and fauna or of an area lying in severely eroded catchment;
- Whether the use of any forest land is for agricultural purposes or for the rehabilitation of persons displaced from their residences by reason of any river valley or hydro-electric project;
- Whether all feasible alternatives have been considered by the state government or other authority and that the required area is the minimum needed for this purpose; and whether the state government or the other authority undertakes to provide at its cost for the acquisition of land of an equivalent area and afforestation. 197

Following this scrutiny, the FAC advises the MoEF on whether the forestland should be allowed to be diverted, and if yes, then under what conditions and restrictions.

^{196 &#}x27;It's not just a matter of FAC anymore,'

⁽http://www.downtoearth.org.in/full6.asp?foldername=20080331&filename=news&sec_id=4&sid=10)

^{&#}x27;Forest Case Updates,' January 2007,

⁽http://www.forestcaseindia.org/f14/Issue%2032%20Jan%202007.doc)

In 2000, Supreme Court considered the feasibility of constituting national level as well as the state level committees. National level committee could serve in the nature of supervisory or appellate authority over the state authorities. But realizing that constituting the state level authorities could take time, the Court suggested that the Central Government should consider setting up national level authority having technical expertise to deal with the cases currently being handled by the courts. 198 But the delay by Central Government in constituting a national level authority led the Supreme Court to constitute a national level authority called Central Empowered Committee (CEC) in 2002 to monitor the cases related to forests and their diversion for non-forest use. The broad task of CEC is to monitor and ensure compliance of the orders of Supreme Court concerning the subject matter of forests and wildlife and other issues. The CEC comprises of 5 membersthree representing the Central Government and two members representing NGO. The salary/remuneration to the members and the supporting staff may be met out of the income accruing to the Special Investigating Team (SIT). The Supreme Court recently included the Director-General of forests as a new member in its CEC.

The CEC could be approached by any individual having grievances against any step taken by the government or any authority in compliance with the orders of the Court. But the limitation is that committee could only dispose off such applications, which are in conformity with the orders passed by the Court. ¹⁹⁹ Thus wide-ranging powers were conferred to CEC- from calling for any documents from the government official to summoning any person and receive evidence from him either through oath or through affidavits. CEC could also pass interim orders in the situations needing immediate actions. ²⁰⁰

Since late 2006, there have been several disputes between CEC and Environment Ministry over FAC's constitution. The Ministry had refused to comply with CEC's suggestions on members to be included in FAC. The dispute

¹⁹⁸ Dutta, Ritwick, and Bhupendra Yadav, Op.cit, p.15

¹⁹⁹ Ibid, p.16

²⁰⁰ Ibid, p.17

showed no signs of ending and the Supreme Court had stayed reconstitution of FAC in December 2006.²⁰¹

The CEC has asked the government appointed FAC to monitor the implementation of orders in forest matters. On the other hand, Environment Ministry has asked the apex court to scrap CEC, as its five-year term was to end in September 2007. It filed an affidavit around the same time seeking termination of the committee, saying CEC was never mandated in the provisions of Environment (Protection) Act, 1986. The apex court ordered that CEC would continue to operate for another three years or until further orders, whichever was earlier.²⁰²

Recently Supreme Court has rejected the Ministry of Environment and Forests plea for discontinuance of CEC appointed in 2002 on the grounds that government had sufficient trained scientific and technical officials to take care of environment and forests.

On 5 January 2007, Supreme Court as part of the ongoing Godavarman case heard a matter related to the constitution of the FAC within the Ministry of Environment and Forests. The Supreme Court has gained upper hand in its dispute with the Union Ministry of Environment and Forests over constituting the Forest Advisory Committee. There was a list of members proposed by the Central Empowered Committee, and the MoEF has raised its concerns regarding the same. The Environment Secretary *Pradipto Ghosh* turned down the names of independent experts suggested by CEC on the grounds that they did not possess professional expertise and technical qualification.²⁰³ Instead, he had suggested the names of former forest service officials and academicians for the three-member committee. According to the Ministry 'these names, which have been turned down, are well known in the field. However, this reputation relates to their action as activists or environmental journalists. It does not relate to their knowledge as professional or

²⁰¹ 'It's not just a matter of FAC anymore,'

⁽http://www.downtoearth.org.in/full6.asp?foldername=20080331&filename=news&sec_id=4&sid= 10) ²⁰² Ibid

²⁰³ 'Forest Advisory Committee- Integrity the Key, More Important than Technical Degrees,' January 5, 2007, (http://www.indiaenvironmentportal.org.in/node/242298)

scientific experts in any of the fields in question. ²⁰⁴ But the court has diminished FAC's role by making its decisions subject to judicial scrutiny. The court had come down heavily on MoEF. Then, in successive hearings MoEF was given another option: of the three non-official members, the government include one out of nine that the court suggests, and the remaining two could be the appointees of government. At the hearing, Supreme Court stayed the notification issued by MoEF appointing FAC, overlooking the suggestions made by CEC and Amicus Curiae. The Court had also expressed reservations about some assertions made by MoEF in its affidavit, with reference to some of the persons suggested by CEC to be on the FAC. ²⁰⁵ But as per the guidelines of Ministry of Environment and Forests, the FAC is also a decision making body and persons suggested by CEC and the Amicus are not eligible to be on the FAC. On the April 27 hearing, the government took a tough stand saying there was no ground for the removal of even one of its appointees. ²⁰⁶

On 24 April 2007, the issue moved ahead and while the justices temporarily agreed to the names suggested by MoEF, it was directed that all decisions of new FAC would be reviewed by CEC. This meant that all projects requiring forest clearance would now have to go through both FAC and CEC before they received their final clearance.²⁰⁷ Thus, the Court allowed FAC to examine projects on the condition that all the clearances would be scrutinized by CEC; and in a number of cases, it questioned FAC clearances and asked for their cancellation or increased compensation. While most of the projects got green signals from both FAC and CEC, some projects like that related to the Steel Plant of the South Korean multinational, POSCO and the Human River project in Maharashtra failed to get the approval of CEC inspite of being cleared by FAC. Later on, in an order passed on 2 May 2008 the Supreme Court listed the names of three non-official members

²⁰⁴ 'Govt, SC Disagree over Forest Panel Members,' January 6, 2007,

⁽http://www.indianexpress.com/news/govt-sc-disagree-over-forest-panel-members/20258/0)

²⁰⁵ 'Supreme Court Hearing on Forest Advisory Committee,'

⁽http://www.forestcaseindia.org/f12/fnews82)

²⁰⁶ Archi Rastogi, 'SC Subjects Forest Advisory Committee's Role to Judicial Scrutiny,' May 30, 2007, (http://www.indiaenvironmentportal.org.in/node/16023)

²⁰⁷ Kanchi Kohli, 'Still Advising the Forest Committee,' June 11, 2008, (http://www.indiatogether.net/2008/jun/env-faccec.htm)

mutually agreed by both the Supreme Court and the MoEF and their future tasks were laid out.

With regard to the case of encroachment of tribals in the forests, report of CEC consisting of the names of three forest officers and two environmentalists thoroughly condemned the encroachments and recommended their immediate evictions. The CEC treats it as a law and order problem. It recommends strong contingent of police force and presence of a magistrate (in case of firing). It asks for immunity to the forest staff under section 197 of Criminal Procedure Code. If the States still fail, it further demands liability of the state government to pay Rs. 1,000 per hectare per month as compensation for environmental losses caused by continuing encroachment and a possible fine of Rs. 100 per month on the defaulting officials. 209

Apart from CEC and FAC in 2007 the Supreme Court constituted a *High Power Committee* to oversee strict implementation of the orders of the Court in northeast region. For example, in 1998 Arunachal Pradesh Forest Authority was constituted under section 3(3) of the Environment Protection Act 1986 to monitor and implement the directions of the Supreme Court. The authority was empowered to issue necessary directions for disposing felled timber, determining the sustainable number of wood based industries, approving timber pricing, and scientific management of forests. In 2001 the *State Empowered Committees* were formed for the states of Madhya Pradesh and Chattisgarh for expeditious disposal of pending interlocutory applications of these States.²¹⁰

Summing up

It has often been argued that Courts in order to protect the right to clean environment have strayed far beyond its limits. For example, Supreme Court has gotten involved in micromanagement to a level that simply cannot be considered as

²⁰⁸ 'Keepers of Forests: Judiciary, Ministry or Community,' CCS-ARCH Briefing Paper, March 2003 (http://www.ccsindia.org/ccsindia/policy/enviro/articles/forestry_brief_paper.pdf)

²¹⁰ Dutta, Ritwick, and Bhupendra Yadav, Op.cit, p.15

falling within its purview – whether it is defining the value of forests across the country, banning transport of timber, determining the location of sawmills outside forest lands, or giving permission for pruning of shade trees in coffee plantations. *Secondly*, it has created a quasi-executive structure (the CEC) that, while legally notified, functions in a manner that is at complete odds with the separation of powers, since it is nominated by and reports only to the Court. The Court eventually had a confrontation with the MoEF, which sought to exercise its statutory right to constitute the Forest Advisory Committee. Moreover, the courts of India do not have the resources or the capacity to investigate and ensure implementation of orders that go beyond individual cases. Courts also have no method to reverse their orders if they are found unworkable.²¹¹

Supreme Court has played an important role in increasing awareness about the sorry state of forest governance in the country. This is often because the government has most of the time failed to implement the laws on environment and especially on forests effectively in turn doing more harm to the nature. But Supreme Court cannot – Constitutionally or practically – manage India's forests.

It is often assumed that if laws were strictly enforced, all would be well in the forest sector. However, due to a number of policy and legal failures, stricter forest law enforcement does not always contribute to legal and sustainable forestry. The disputes relating to environment are treated as cases related to violation of fundamental rights rather than claims under law of torts. But Indian judiciary has demonstrated exemplary activism to implement the laws and acts related to forests. Inspite of the efforts of the judiciary, unwillingness of the political leaders as well as lack of enthusiasm in the government officials to effectively implement the environmental laws has led to large-scale deterioration of forests which to a very large extent was avoidable.

²¹¹ Armin Rosencranz, and Sharachchandra Lélé, 'Supreme Court and India's Forests', *Economic and Political Weekly*, February 2, 2008

²¹² 'Rationalizing the Policy and Legal Environment,' FAO Corporate Document Repository, (http://www.fao.org/DOCREP/008/a0146e/A0146E08.htm)

CHAPTER 5

CASE STUDY OF UTTARAKHAND

The State of Uttarakhand lies in the northern part of India, and shares international boundary with China in the north and Nepal in the east. The state has six National Parks and six Wildlife Sanctuaries. The rural population of Uttarakhand plays a pivotal role in preservation of forest wealth by their traditional practices and self-imposed rules. The contribution and initiative of local communities in conservation of forests in the state has been based on the traditional knowledge of these hill people.

Presently, total forest and tree cover of the country accounts for 77.8 million hectares, which is about 23.68 percent of the total geographical area of the country. As a result, Uttarakhand still has more than 45 percent of geographical area under forest cover. The total number of Van Panchayats in Uttarakhand is 7,348. Out of the total forest area of Uttarakhand, 69.2 percent is with the forest department, 14.8 percent of forest (civil and soyam forests) is under the control of revenue department, 15.1 percent under forest panchayats, and the rest belong to private parties, municipalities, cantonment etc.²¹³ The forests in Uttarakhand have been valued at \$2.4 billion (Rs 10,700 crore) per year in terms of the services they provide.²¹⁴

State Level Initiatives

The agricultural economy of Uttarakhand is heavily dependent on forests for its energy supplies in the form of fuel wood, fodder for livestock, and ultimately soil fertility in the form of leaf litter and animal manure. Over the period of time increasing population with deficient agricultural production, large and unproductive bovine population, scanty returns from non-timber forest products

²¹³ Nehal a Farooquee and R K MaiKhuri, 'Role of the State on Forests: Case of Uttarakhand', *Economic and Political Weekly*, September 1, 2007

²¹⁴ 'Uttarakhand Forests valued at \$2.4 billion,' November 27, 2007, (http://www.wildlifewatch.in/news/649)

(NTFP) and degraded community forests have constituted a vicious cycle of poverty resulting in tremendous pressure on forests in the region.²¹⁵

The jurisdiction of Van Panchayats in the State and their control over forests is tied up to the extent of forest land that is made available to them and the institution's control over forest and forest land has historically been a function of land settlement policies and laws.²¹⁶

The Forest Council Act prescribes how panchayats (Councils) can be formed and imposes duties on village panchayats. As per the rules, 'Forest Panchayat' means a committee constituted for the management of a Panchayati Forest and it includes Forest Panchayats existing on the date of commencement of these rules. The objective is to protect forest areas and ensure that the forest products are being distributed among the right holders in an equitable manner. Kumaon Panchayat Forest Rules enacted under section 28(2) of the Indian Forest Act 1927 provides broad guidelines for the supervision and management of forests under the control of Van Panchayats. These Forest Council rules lay down the broad parameters of management practices to be followed by the Van Panchayats.

The main functions of Van Panchayats are as follows:

- a) To develop and protect forests by preventing indiscriminate felling of trees and to fell only those which are marked for by the forest department and are useful from the point of view of silviculture.
- b) To ensure that there is no encroachment on Van Panchayati land and that no rules are being violated that are being enacted under Kumaon and Sodic Land Act of 1948 and that no land should be encroached without prior permission for agricultural practices.
- c) To construct and fix boundary pillars and to maintain them.
- d) To carry out the directives of the Sub-Divisional Magistrate in developing and protecting forests.

²¹⁵ Nehal a Farooquee and R K MaiKhuri, 'Role of the State on Forests: Case of Uttarakhand', *Economic and Political Weekly*, September 1, 2007

²¹⁶ Videh Upadhyay, 'Water-Forest Management, Law and Policy in Uttarakhand,' June 2006, (http://www.peoplesscienceinstitute.com/research/WaterForestManagement.pdf)

- e) To distribute its produce amongst right holders in an equitable manner.
- f) 20 percent of the area of forest must be closed for grazing every year. 217

The villagers however feel that through the act, bureaucracy exercises excessive control over forest panchayats. Bureaucrats on the other hand believe that in the absence of central control, villagers would clear fell the entire forest.²¹⁸

In 1997, the then Uttar Pradesh Government issued guidelines for involving forest fringe communities in the regeneration and protection of degraded forests (reserved and protected). The Uttaranchal Panchayati Forest Rules was promulgated in 2001, which further amended the existing Van Panchayat (VP) Act, which managed their forests within the ambit of the Indian Forest Act.²¹⁹ While 1997 forest rules did not repeal the Panchayat Forest Rules of 1976, the Panchayat Forest Rules 2001 superseded the 1976 Rules. 220 Accordingly, Uttaranchal forest department has constituted many Forest Area Development Agencies (FDAs) to coordinate the activities of village development in JFM villages. For example, in civil and soyam forest division of the State, the forest department is now responsible for providing technical and managerial inputs while ownership lies with the revenue department. The hill people are seeing this ordinance as a parallel body floated by the new government and marginalizing elected panchayats as per the provisions of the 73rd amendment and also discouraging the traditional systems of forest management. By taking over forest management by the forest department the functioning of van panchayats will fast erode this spirit of forest conservation by the local communities.

The 2001 rules mandate that the forest panchayat shall consist of nine members. Out of these, four seats including one for the members of SC/ST shall be reserved for women.²²¹ On the issue of Van Panchayats, some multi-village Van

²¹⁷ Pampa Mukherjee, 'Community Forest Management in India: the Van Panchayats of Uttaranchal,' (http://www.fao.org/DOCREP/ARTICLE/WFC/XII/0108-C1.HTM)

²¹⁹ Nehal a Farooquee and R K MaiKhuri, 'Role of the State on Forests: Case of Uttarakhand', *Economic and Political Weekly*, September 1, 2007

²²⁰ Videh Upadhyay, 'Water-Forest Management, Law and Policy in Uttarakhand,' June 2006, (http://www.peoplesscienceinstitute.com/research/WaterForestManagement.pdf)
²²¹ Ibid

Panchayats have been re-organised without consulting the villagers, in ways that exacerbated inter-village conflicts, Traditionally, villagers had developed an effective multi-village governance system that was both democratic and equitable. Reorganization of Van Panchayats has in fact destroyed the traditional culture of resource sharing. Moreover with the division of forest councils neither the forest area nor the species composition could be evenly distributed among the villages. It has also failed to address any of the major problems like lack of effective and easily accessible dispute resolution mechanisms, inter-village inequity in availability of forest areas, erosion of panchayat authority and limited control over forest based livelihoods and income. 222

Also, in 2001 a new State Forest Policy was declared which gave primacy to environmental stability and social balance while it puts economic benefits from the forest in second category. It also says that extraction of Non Timber Forest *Produces* (NTFPs) shall be in accordance with sustainable practices while taking care that it allows NTFPs to regenerate. Further, the task of extraction of forest produce has been vested with Forest Development Corporation (Van Vikas Nigam). The policy also asserts that accountability for effective forest management rests with the forest department especially when, according to the policy, Van Panchayats have been given powers and financial autonomy to manage local forest affairs. Other features of the policy include - prudent use of fuel wood and other forest produces, reconciling the need for forest resources with their availability and participation of the local people especially women in forest management.²²³ It made certain grave forest offences non bailable while making clear that forest offences committed under the act could lead to imprisonment and/or imposition of fines. Besides, legal rights are accorded to the Divisional Forest Officer to deal with forest offences. The Forest Department has been strengthened through the Amendment Act giving powers to use force to remove encroachments and to remove things and crops forcibly, if needed.²²⁴

²²² Pampa Mukherjee, 'Community Forest Management in India: the Van Panchayats of

Uttaranchal, '(http://www.fao.org/DOCREP/ARTICLE/WFC/XII/0108-C1.HTM)

223 Videh Upadhyay, 'Water-Forest Management, Law and Policy in Uttarakhand,' June 2006, (http://www.peoplesscienceinstitute.com/research/WaterForestManagement.pdf)

224 Ibid

Moreover, under 2001 rules one-fifth of adult residents of the village can propose the formation of Van Panchayat or this could also be done in the resolution passed in a meeting of the concerned Kshetra Panchayat. This for the first time opens a possibility where even if the local residents do not propose a Van Panchayat such proposal could be mooted through the Kshetra Panchayat.²²⁵

The State Government of Uttarakhand has made a policy that every village should have a *Community Forest*, which would be achieved by converting the semi-degraded and degraded forests (civil and soyam forests) to community forests and if need be even reserved forests too would be handed over to the communities. Thus, there would be at least 30 percent of the State's forest being managed by the communities. But over a period of time, the management of forests by communities has weakened due to bureaucratic interference, indifference on the part of communities and lack of proper management planning. Unsustainable utilization has resulted in loss and degradation of habitat and biodiversity and at times, cause animal-man conflicts.²²⁶

In 2006 after the Scheduled Tribe and other Forest Dweller Act 2006 was passed by the Central Government, Uttarakhand Government has recently not only violated this right available to vangujjars communities living inside the forests but has not even bothered to respect the prestigious Forest Rights Act 2006 that commits to mitigate the "historical injustices" on the tribal and other forest dwelling communities in its Preamble. Vangujjars are nomadic tribe scattered on the Shivalik hills of Uttarakhand that have been living in these forests since last three centuries. Vangujjars is a very distinct, only Muslim nomadic tribe of India who are scattered in the entire Himalayan region spreading from Jammu and Kashmir to Shivalik hills of Uttar Pradesh and Uttarakhand in India and from Pakistan, Afghanistan to Iran and Iraq. They still maintain nomadic life with their buffaloes and travel between higher reaches of Himalaya in summer to lower Himalaya in winter.²²⁷ Their summer home falls in the Govind National Park

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²²⁶ 'Capacity building for biodiversity conservation in community forest management in Himalayas,' Rufford Small Grant Project, April 2007-March 2008, (http://www.ruffordsmallgrants.org/files/RSG%20II%20Final%20Report.doc)

World Rainforest Movement, India, (http://www.wrm.org.uy/countries/India/roma.html)

(GNP) in Uttarkashi district. Vangujjars, the forest-dwelling tribals, move with their livestock to the higher reaches of Himalayas during summer and come down to the Shivalik in winter. However, their movement has been curtailed by forest bureaucracy on the ground that since they are coming from Shivalik forest range of Uttar Pradesh, they would not be allowed into their traditional grassland pastures. Due to this, many of these Vangujjar families were stranded on the Assan Bridge near Vikasnagar.²²⁸

In the Shivalik, the Vangujjars pay a 'lopping tax' and a 'grazing tax' in GWS. After paying these taxes they are given permits. This is a record of rights since 1937. The 12 Vangujjar families, which were allocated permits in 1937, have multiplied to about 100 nuclear units. The number of permits remains 12 though.²²⁹ So, in 2007 when the 12 permit holders went to the park authorities for permission they were denied.

A June 2003 permanent order of the Principal Chief Conservator of Forests, Uttarakhand, said that Vangujjars go through a lot of trouble arranging for permission, but the process should be made easy for them. But in September 2006 came a superseding order, which made Vangujjars sign documents saying they would not come back to GNP. Park officials say that the pressure on forest has increased with the original 12 permit holding families multiplying into 100-odd nuclear units.²³⁰

Even though all the states were bound to enforce this act in their respective states by passing government orders to all the districts, no such enforcement of the act has been done by Uttarakhand Government though most of the neighbouring states like Uttar Pradesh have started process of implementing the act in whole of the State. The Uttarakhand Government has only passed a departmental order from Social Welfare Ministry for forming Forest Rights Committee. Uttarakhand Government is not showing any interest in implementing this act as the political

²²⁸ 'Uttarakhand Denies Entry to Van Gujjars,' April 11, 2008,

⁽http://www.indianexpress.com/news/uttarakhand-denies-entry-to-van-gujjars/295369/)

Archi Rastogi, 'Van Gujjars will be homeless this summer,' May 31, 2007,

⁽http://www.downtoearth.org.in/full6.asp?foldername=20070531&filename=news&sec_id=4&sid=

²⁾ ²³⁰ Ibid

condition of the government is quite volatile and secondly, the state bureaucracy and wild life lobby are conniving with each other in spreading confusion among the larger society and the tribal community that the act is not applicable in national park and sanctuaries.²³¹ The Nainital High Court in its order in petition decided the case in favour of Vangujjars and directed the park authorities to settle the families. according to new Forest Rights Act 2006. When park administration refused to abide by High Court order, Vanguijars filed contempt against park director as a result of which he was removed from the director post. Later on, National Forum of Forest People and Forest Workers (NFFPFW) on behalf of Vanguijars filed public interest litigation under Article 226 of the Constitution to issue 'Mandamus' to the State Government to implement Forest Rights Act 2006. In its order dated 29 September 2008 the High Court in its judgment ordered Uttarakhand Government to implement the Forest Rights Act 2006 within 60 days by forming Forest Rights Committee so that the rights of Vanguijars could be settled according to the act. Thus, no implementation of the act has yet begun. It was reported in the press that Chief Minister had stated that there is no need for this act in Uttarakhand, as all forest rights are already settled.²³²

More recently, the Central Empowered Committee has recommended that the Uttarakhand Government should deploy adequate number of officials to protect the Ganga basin area. On the advice of Wildlife Institute of India, the Uttarakhand Government had mulled over a proposal to stop pilgrims at the temple area and to provide water from Gaumukh for rituals at the site instead of letting thousands of people into the fragile alpine region. The CEC suggested that the system of employing retired army and para-military personnel, as is done in Rajaji National Park, could be considered for Gangotri National Park as well. The report also mentioned that there is a need to augment the infrastructure requirements such as checkposts, chowkis, anti-poaching camps, vehicles, wireless network, highaltitude clothing, and equipment for removal of garbage.

²³¹ 'World Rainforest Movement, India,' (http://www.wrm.org.uy/countries/India/roma.html)

²³² 'Forest Right Act: General Issue of Implementation and Performance of Various States,' (http://sanhati.com/front-page/1201/)

Forest fires have also largely contributed to deforestation. Various measures are being taken to curb the felling of trees. Clearing forests is now an offence under Indian law, unless approved by the concerned authorities. The rising temperature during summer season causing increased dryness, increased activity of human beings in the forest areas, and the type of forest in that region are some of the reasons that lead to forest fires. The most important need at the state level is to strengthen and develop capacity to undertake disaster mitigation strategies. In order to overcome resource constraints and to be effective and sustainable, the action plan for disaster reduction is to be incorporated in the overall economic and social development plans. The Disaster Mitigation and Management Centre (DMMC) of Uttarakhand addresses the State's planning to disaster situations such as earthquake, landslides, flash floods, cloudburst, forest fires, road accidents etc. DMMC of Uttarakhand involves three focal layers of participating organizations - (a) State Level (Ministry/Department of Disaster Management through State Emergency Operation Group under the control of Principal Secretary/Commissioner Disaster Management), (b) District Level (District Magistrate through District Emergency Operation Group under the Control of District Disaster Manager) and (c) Local Level (Tehsil/Block/Village through Site Operation Centre under the control of Site Manager). 233

Joint Forest Management Initiatives in the State

In Uttarakhand, the history of community participation in forest management goes back to almost a century when local people made collective efforts to protect their forests. The concept of managing the forest through community participation emerged in mid-1920s following the agitation against British colonial government's control over forest resources. Van Panchayats (VPs), a village level forest council, emerged in Uttarakhand following the *Van Panchayat Act* in 1931, which allowed handing over management responsibility of designated community forests to the elected body of VPs. Most of the VPs were initiated on degraded sites under the control of State Revenue Department. The VPs have been sustainably managing their forests for decades without any outside

²³³ Introduction, (http://gov.ua.nic.in/dmmc/introduction.htm)

financial support. For example, by December 1999 Nainital technically became first district in the country with legally demarcated forest in the civil land in all its 495 villages.

Though Van Panchayats have been in existence for over seven decades and around ten thousand VP were constituted after the formation of the new state. At present, Uttarakhand VPs cover more than half a million hectares. Through these panchayats, village communities are mandated to govern and use these forests as a common property resource for subsistence needs of the community.²³⁴

More than 90 percent of rural population of the state is fully or partially dependent on forest for fuel besides many other resources. The rural people in most of the remote areas have a unique and special relationship with forests that directly support their livelihoods. Some of the important forest based resources are valuable medicinal and aromatic plants (MAPs), gum and wild edibles etc, which contribute to some kind of environmental income.

Joint Forest Management was initiated in the state in 1992 when it was still part of Uttar Pradesh. The introduction of Joint Forest Management rules can be seen as one empowering the State Forest Department to help it regain technical and managerial authority that it had lost to the Revenue Department eight decades ago. It has enabled the State Forest Department to be a dominant partner apart from Van Panchayat in the management of the Van Panchayat lands. Till January 2004, approximately 1,73,31,955 hectare of forests in Uttaranchal were managed under JFM. Till 2005 there were about 10,107 JFM Committees managing about 25 percent of the forest area of the state. About 0.5 million families are involved in this programme of which around 15000 families belong to Scheduled Tribe. Government forest officials with Village Forest Committee (VFC) members are solely responsible for planning and implementation of the projects. The forest officials formed VFCs having representation of all sections of the society. The

^{234 &#}x27;World Bank Tribunal,'

⁽http://www.aidboston.org/MalikaVirdi/docs/WB_Forests_Malika_Sent_7Oct08.pdf)

²³⁵ Videh Upadhyay, 'Water-Forest Management, Law and Policy in Uttarakhand,' June 2006,

⁽http://www.peoplesscienceinstitute.com/research/WaterForestManagement.pdf) 236 State Forest Report 2005, (http://www.fsi.nic.in/sfr_2005.htm)

major role of VFC members and forest officials is to make people aware of activities, process and benefits of JFM to facilitate their participation to a great strength.²³⁷

Forest panchayats popularly known as *Van Panchayats* are operational in the Kumaon and Garhwal hills since 1931 and were formed to enable the people to manage a portion of revenue forests lying in the vicinity of their villages. The people have traditionally managed forests under van panchayats with minimum interference by the State.

The sources of threats to forests and their functions are unavoidable by the present and future societies of Uttarakhand. The threats can be from the following:

- 1. Threats that originate from competition for other land uses, especially from expanding infrastructure facilities like road networks, housing and shops, and expanding croplands.
- 2. Threats related to the growing global demand for wood.
- 3. Threats exogenous to forests, the most prominent being climate change and loss of biodiversity.²³⁸

Moreover, in areas like Haridwar district the loss of forest cover is attributed to rehabilitation of Gujjars and the Tehri Dam oustees, and also due to rotational felling of Eucalyptus in the areas of Shyampur and Chiriapur etc.²³⁹

The World Bank-funded Joint Forest Management programme has eroded the traditional systems of managing forests, without giving any benefits to the people. The *Village Forest Joint Management* (VFJM) was an important part of a bigger forestry project being financed with a World Bank \$65 million loan over the period 1998- 2002. Through VFJM, introduced under a World Bank funded forestry project, the Forest Department was being empowered to reassert control

²³⁷ Yagya Dev Mishra and Neelam Bhardwaj, 'Farmer's Knowledge about Joint Forest Management,' 2007, (http://www.seea.org.in/vol7-2-3-2007/10.pdf)

²³⁸ Nehal a Farooquee and R K MaiKhuri, 'Role of the State on Forests: Case of Uttarakhand,' *Economic and Political Weekly*, September 1, 2007

²³⁹ State Forest Report 2005, (http://www.fsi.nic.in/sfr_2005.htm)

over Van Panchayat forests and civil/soyam lands, the only surviving village commons. By bringing Van Panchayats within the fold of forest department-controlled Joint Forest Management, the World Bank programme also subtly transformed their status from rights-holders to mere 'beneficiaries'. All Instead of increased control and ownership over forests, 'the policies and programmes continued by the new state at the behest of World Bank have not only increasingly eroded the existing relationship that communities have with their forests, but are becoming instrumental in dismantling the only legally mandated democratic people's institution whereby communities own and govern their forests. These policies and programmes are undermining their authority and are thrusting the Van Panchayats into the market mode, despite claims to the contrary of empowering local forest users.

According to the environmentalists as well as local people, converting traditional van panchayats into Joint Forest Management supported by World Bank loan will lead to alienation of the local communities from forest and bring to an end their major contribution through traditional wisdom. The functioning of van panchayats will fast erode this spirit of forest conservation by the local communities if forest management is taken over by the forest department.

Many van panchayats opted not to participate in the programme in the name of promoting 'people's participation.' Village Forests Joint Management was creating space for Forest Department to intrude on the only existing example of reasonably autonomous legal space for community forest management in India. Whereas JFM in other states enables villagers to participate in the management of forestlands under Forest Department's jurisdiction, in Uttaranchal, VFJM rules enables the department to become a dominant partner in the management of van panchayat and civil forest lands.²⁴² The VFJM programme failed to enlist all van panchayats to adopt it voluntarily, as it became clear that as per its rules, there would be a significant loss of decision-making space for local villagers and a

^{240 &#}x27;World Bank Tribunal,'

⁽http://www.aidboston.org/MalikaVirdi/docs/WB_Forests_Malika_Sent_7Oct08.pdf)

²⁴² Pampa Mukherjee, 'Community Forest Management in India: the Van Panchayats of Uttaranchal,' (http://www.fao.org/DOCREP/ARTICLE/WFC/XII/0108-C1.HTM)

highly negative impact on collective choice arrangements, undermining of the authority of van panchayats as well as informal community management. The JFM rules were now changed into *Van Panchayat Rules*.²⁴³

The new 'Panchayati Forest Rules' of 2005 are in effect the very rules of rejected VFJM. As a result, van panchayats no longer have the choice anymore of opting out of market-oriented programmes as the very rules that govern its functioning are in the mould of World Bank policy directives and interventions. Instead of devolving greater authority and decision-making control to autonomous self governing institutions, now the forest guards are being placed inside them for extending the Forest Department's control over their functioning. The decision-making autonomy of van panchayats is now subject to supervision, direction, control and concurrence of the Divisional Forest Officer and despite the imposition of bureaucratic controls on their functioning, a large number of Uttarakhand's van panchayats still struggle and survive as self-governing community forestry institutions.

The VFJM rules also provide for forming *Village Forest Committees* (VFCs) where there is no Van Panchayats. This is an effort to link VFJM with local self-government through gram sabhas. These forest committees are expected to be the representative of key local interests with one seat each designated for women, scheduled castes/tribes, backward castes and for persons with a particular interest in forests. It says nothing about strengthening participatory governance by the gram sabhas and forest committees or their respective roles and responsibilities within the local governance structure.

But the joint forest management is a slow process. The basic problem is getting attitudinal changes in the staff of forest department, policy makers and village communities to orient their target crops to this new approach. There is a need not only for an attitudinal change but also to incorporate JFM activities into formal duty structure of the forest department. JFM has to be incorporated into the forest department.

²⁴³ 'World Bank Tribunal,' (http://www.aidboston.org/MalikaVirdi/docs/WB_Forests_Malika_Sent_7Oct08.pdf)

Apart from joint initiatives taken by the community, individual efforts in protecting and sustaining the forests are no less. For example, in 1970s the grassroots protest against destruction of forests famously found its most visible expression in the Chipko struggle, which began in Gopeshwar in Chamoli district in Uttarakhand area when a group of female peasants acted to prevent the cutting of trees and reclaim their traditional forest rights who were then threatened by the contractor system of State Forest Department, and transpired hundreds of such grassroot level actions, throughout the region. After the commencement of Chipko Movement in 1973, over the next five years movement spread to several hill districts in Uttar Pradesh. The Chipko Movement, though primarily a livelihood movement than purely a forest conservation movement, went on to become a rallying point for many future environmentalists, environmental protests and movements the world over and created a template for non-violent environment protest.²⁴⁴ One of Chipko's most salient features was the mass participation of female villagers. As the backbone of Uttarakhand's agrarian economy, women were most directly affected by environmental degradation and deforestation, and thus connected to the issues most easily. The Chipko Movement occurred at a time when there was hardly any environmental movement in the developing world, and its success meant that the world immediately took notice of this non-violent tree hugging movement, which was to inspire in time many such eco-groups, helped in slowing down rapid deforestation, exposed vested interests, increased ecological awareness, and demonstrated the viability of people power. It also stirred up existing civil society in India like never before, which started looking towards tribal and marginalized people and their issues more seriously. The movement made people realize that one does not need governments to protect the environment. Both female and male activists did play pivotal roles in the movement including Gaura Devi, Sudesha Devi, Bachni Devi, Chandi Prasad Bhatt, Sundarlal Bahuguna, Govind Singh Rawat, Dhoom Singh Negi, Shamsher Singh Bisht and Ghanasyam Raturi, the Chipko poet, whose songs echo throughout the Himalayas:

²⁴⁴ 'Chipko Movement, India,' (http://www.iisd.org/50comm/commdb/desc/d07.htm)

Embrace the trees and
Save them from being felled;
The property of our hills,
Save them from being looted. 245

Sunderlal Bahuguna is a Gandhian activist and philosopher, whose appeal to Indira Gandhi resulted in the green-felling ban and whose 5,000 kilometre trans-Himalaya footmarch in 1981-83 was crucial in spreading the Chipko message. He fought for the preservation of forests in Himalayas, first as a member of the Chipko movement in 1970s, and later spearheaded Anti-Tehri Dam movement starting 1980s, to early 2004. Bahuguna coined the Chipko slogan: 'ecology is permanent economy'.

Sunderlal Bahuguna spent his life working to educate Indian villagers, protesting against ecological destruction by the government and protecting Himalayan Mountains. He has also contributed globally through awareness raising measures concerning deforestation, the negative effects of liquor on mountain life, and the health of Ganges River.²⁴⁷ He has been the catalyst of change encouraging thousands of people to work without pay for the good of India's people and ecology. According to him

"The solution of present-day problems lies in the re-establishment of a harmonious relationship between man and nature. To keep this relationship permanent we will have to digest the definition of real development: development is synonymous with culture. When we sublimate nature in a way that we achieve peace, happiness, prosperity and, ultimately, fulfilment along with satisfying our basic needs, we march towards culture." ²⁴⁸

Chandi Prasad Bhatt is one of the earliest Chipko activists, who fostered local industries based on conservation and sustainable use of forest wealth for local

²⁴⁵ George A James, (ed.), Ethical Perspectives on Environmental Issues in India, APH Publishing Corporation, New Delhi, 1999, p.90

²⁴⁶ Harihar Swarup, 'Bahuguna: the Sentinel of Himalayas,' *The Tribune*, July 8, 2007

²⁴⁷ Nichole Flynn, 'Bahuguna Sunderlal,' (http://learningtogive.org/papers/paper280.html)

²⁴⁸ 'Chipko Movement, India,' (http://www.iisd.org/50comm/commdb/desc/d07.htm)

benefit. He is an Indian Gandhian environmentalist and social activist, who founded *Dasholi Gram Swarajya Sangh* (DGSS) in Gopeshwar in 1964, which later became a mother-organization to the Chipko Movement. The aim of Sangh was to start small industries using the resources of forests. Much of his teachings were focused on the protection of Himalayan Mountains from deforestation.

Dhoom Singh Negi along with Bachni Devi and many village women first saved trees by hugging them in the 'Chipko embrace.' They coined the slogan: 'what do the forests bear? soil, water and pure air'.

The prominent women leaders were Gauri Devi and Ganga Devi who formed vigilance parties during the Chipko Movement to protect Reni forest from deforestation. Infact the women of this movement were very strong willed, very creative and extremely empowered to protect forests from deforestation even at the cost of their husbands and their lives. The women participation in Chipko Movement not only protected the ecology and environment but also developed world's consciousness on environmental aspects.

Since 1980s, one man's quiet effort has pioneered a village movement to restore the forests of Uttarakhand's denuded hills. With no financial assistance apart from the contributions of villagers, *Sachchidanand Bharti* has transformed large parts of the once-denuded Dudhatoli range in Uttarakhand's Pauri district into the best and thickest forests in the state. Around the time in 1980s, forest department decided to cut down a stretch of silver firs near Dera village. Because of his efforts, hundreds of firs were saved from the official axe — a small success that laid the foundation for big changes and, most importantly, helped give people of the area a sense of their rights and the importance of unity. As deforestation spread out of control, not only did the villagers had to deal with severe resource scarcities, but also animals of the forests became a menace driven by the vanishing tree cover toward human habitation. Instead of killing the animals off, as happened elsewhere, villagers in Dera began building walls around their fields and settlements, on Bharti's suggestion. By late 1970s, the deforestation problem had

²⁴⁹ 'From dead rock, the trees return,' January 27, 2007, (http://www.tehelka.com/story_main26.asp?filename=Cr012707FromDeadRock.asp)

sufficiently alarmed government to spur it to official action and they began planting pine trees in empty patches in reserved forests. In 1980, Bharti with the help of the forest department established a nursery of indigenous mountain species — oak, fir, cedar and alder. This effort later grew into the *Dudhatoli Lok Vikas Sansthan* (dlvs), which undertakes indigenous tree plantation across the range and holds annual environmental awareness camps in 150 villages that are part of it. From the start, dlvs have also been a tremendous tool for women empowerment who are left to manage home and field as men migrate for work to the plains. It is the women who bear the brunt of resource scarcity around them. To encourage their participation, Bharti formed *Mahila Mangal Dals* in every village he worked with and entrusted them with taking part in securing their future. After the first plantation drive, the villagers who took part made a collective decision to enforce a 10-year ban on forest activity. Within a decade, the people of Dudhatoli regained a large part of their lost forest cover.

In another case, environment activist *Vishweshwar Dutt Saklani* has single-handedly regenerated once-barren hills in and around Pujargaon in Uttarakhand into lush green forests.²⁵¹ A personal tribute to lost brother and wife led Visheshwardutt Saklani on a mission to turn the forest once barren, into lush green hills and rightly earned him the title, *Vriksha mitra* or friend of trees. Vishweshwar has planted 100 hectares of land with oak, cedar, walnut and rhododendron.

In 2004 Indian women attended the Global Women's Assembly on Environment: "Women as the Voice for the Environment" organized by UNEP at Nairobi (Kenya) in October 2004 which underlined the necessity of creating and maintaining harmony between macro economics, human rights, gender equality and environmental conservation for sustainable global development. The address by *Bali Devi*, the first ever by a grassroots Chipko woman from Garhwal to an international audience, included the concerns of women of the entire state duly received through points sent in by the various groups and individuals. These

²⁵⁰ Ibid

²⁵¹ 'Uttarakhand green man inspires many,' June 5, 2007,

⁽http://www.ndtv.com/convergence/ndtv/story.aspx?id=NEWEN20070014451&ch=6/5/2007%209: 50:00%20AM)

covered women's right to land and natural resources, growing impact of multinational companies on mountain agriculture and traditional seeds and thereby increasing food insecurity in the region, displacement of people through a vast network of small and large dams, physical, social and environmental disruption through mining, increasing market influences over social infrastructures and thereby the marginalization of women, undermining of traditional knowledge systems through imposition of alien, foreign models and patterns in agriculture, tourism, etc.²⁵² Bali Devi Rana is the head of the Mahila Mangal Dal (Women Welfare Group) of village Reni, Chamoli Garhwal in Uttarakhand. Bali Devi is the first grassroots woman to have attended and addressed an international gathering abroad.

The Chipko Movement inspired *Vandana Shiva* for the development of a new theory called as '*Ecofeminism*' that specifically explains the link between the women and the ecology. It inspired for development of literatures and discussions on 'Women and Ecology' that were in great demand in the market. Thus Vandana Shiva's Ecofeminist Movement brought imperialism inscribed in the colonial practices, into the centre of the environmentalist debate.²⁵³

Apart from the various forest related problems, one issue that needed to be addressed urgently is Bhojpatra, a unique tree having tremendous medicinal qualities that is on the verge of extinction at Gangotri forests in Uttarakhand due to its massive uprooting. Compounding the problem, thousands of Kanwarias, pouring into Gangotri to collect Ganga water are also wrecking heavy damage to Bhojpatra forests. Environmentalists are now calling for a complete ban on the collection of Bhojpatra also known as Himalayan birch from Gangotri where its trees are vanishing fast. As the Kanwar mela reaches its peak in Uttarakhand, attempts are being made by various environmentalists specially women like *Shanthi Thakur* and *Harshwanti Bisht* to stop Kanwarias, who are devotees of Lord

²⁵² 'A Grassroot Mountain Woman at an International Gathering in Kenya,' October 28, 2004, (http://andolan.prayaga.org/2004/10/28/a-grassroots-mountain-woman-at-an-international-gathering-in-kenya/)

²⁵³ 'Is Chipko Movement Towards Forest Appraisal,' (http://www.streetdirectory.com/travel_guide/7628/recreation_and_sports/is_the_chipko_movement_towards_forest_appraisal.html)

Shiva, from proceeding towards Bhojvasa. 5.5 hectares of area at Bhojvasa, 14 km from Gangotri has been fenced with angle iron poles and barbed wire. 254

Summing up

The case of Uttarakhand is interesting because it presents a case of gradual loss of forest ownership and user rights and yet maintaining the participation of people in the management of available forests. Uttarakhand still has more than 45 percent of geographical area under forest cover. Out of the total forest area of Uttarakhand, 69.2 percent is with forest department, 14.8 percent of forest (civil and soyam forests) is under the control of revenue department, 15.1 percent under forest panchayats, and the rest belong to private parties, municipalities, cantonment etc. A notable aspect of the India Forest Act as amended and applied to Uttaranchal is the fact that unlike in other states 'Village Forest' may be constituted not only out of reserve forest but also out of protected forest or any forest, which belongs to government forest. People have traditionally managed the forests under van panchayats with minimum interference by the state. But despite the stringent policies, acts and constitutional safeguard measures, Uttarakhand in particular and the country in general has lost forest wealth and continue to lose more everyday.

The continuous shrinking of forest area for the rural population and increasing encroachment for bringing more land under infrastructure development, the cultivation and abandonment of less productive land in Uttarakhand have put the state's rural people in a tough situation. Such policies have alienated a vast majority of local communities from forests across the country.

Many efforts have been taken by the State Government as well as local people in protection and preservation of the forests. The local people are more active and vigilant in the preservation of the forests as forests are their main source

(http://www.deccanherald.com/Content/Aug82007/national2007080717761.asp)

²⁵⁴ 'Bhojpatra on verge of extinction,' *Deccan Herald*, August 8, 2007,

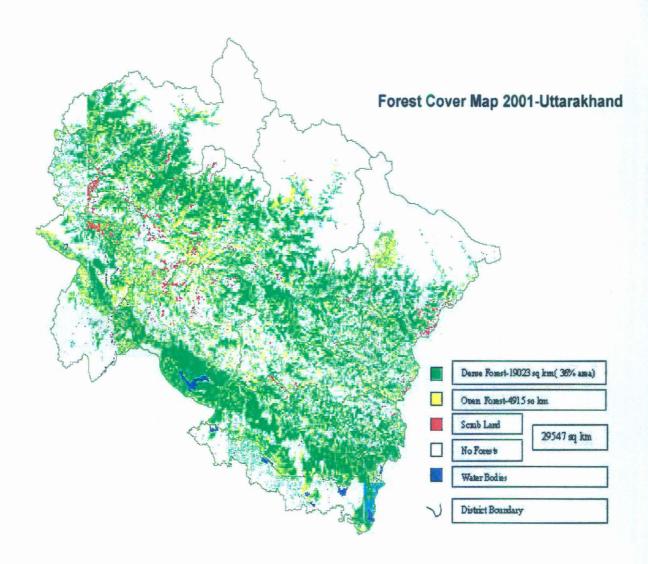
Nehal a Farooquee and R K MaiKhuri, 'Role of the State on Forests: Case of Uttarakhand,' Economic and Political Weekly, September 1, 2007

²⁵⁶ Videh Upadhyay, 'Water-Forest Management, Law and Policy in Uttarakhand,' June 2006, (http://www.peoplesscienceinstitute.com/research/WaterForestManagement.pdf)

of livelihood and the economy is mainly dependent on forest products. So more steps could be taken to maintain and preserve the forests. For example, state needs to denotify the reserve forest area so that the people can have alternative source of income from the forest produce. But the problem becomes grave when there are allegations, even from officials in the chief minister's office, that the government is driven by an agenda written by contractors. They say many of the ministers are known forest or building contractors while others have strong links with the liquor mafia. The forest cover is fast dwindling and is continuously under pressure from timber smugglers under political patronage and a corrupt forest department. If the forests are being protected, it is not because of forest officials but because of the efforts of the local community.

²⁵⁷ Uttaranchal, January 2001, (http://www.indiaenvironmentportal.org.in/node/14851)

Forest Department, Uttarakhand, India



(Source: http://www.uttarakhandforest.org/)

CONCLUSION

Forests help to maintain fertility of the soil, protect watersheds and reduce the risk of natural disasters such as floods and landslides. More than half a billion people living in extreme poverty depend on forests for their livelihoods. Forests worldwide have been threatened by uncontrolled degradation and conversion to other types of land uses, influenced by increasing human needs, agricultural expansion, and environmentally harmful mismanagement. Forest conservation has little appeal when compared with the economic benefits. The impact of loss and degradation of forests can be seen in the form of soil erosion, loss of biological diversity, damage to wildlife habitats, degradation of watershed areas, and deterioration of the quality of life.

The deterioration of forests mainly started with the coming of Britishers who saw forests basically as renewable resources. It was during this period that the apid deforestation took place as forests were considered the source of revenue for both state and the people. The Forest Act of 1927 brought into focus the idea of reserved forests, that is, power of the state to declare any forestland which is the property of the government or over which the government has propriety rights or any part of the forest produce of which the government is entitled, as reserved forests. 258 The village forests were established when state assigns to a village community rights over any land, which has been constituted as a reserved forest. Then there were protected forests in which state has propriety rights to any part of the forests. The protected forests cannot be created out of reserved forests. Private forests were not the property of the government but authorized the State Government to regulate timber cutting, cultivation, burning or clearing of vegetation on private forestland. Thus with this act the forests became a source of revenue and raw material and ignored the fact that forests contribute immensely in maintenance of eco system and preservation of the environment.

Even the 1988 policy did not take into account the issues relating to forest management and technology, integrated fuel wood management, grazing

¹⁵⁸ Gurdip Singh, Op.cit, p.333

management, demand side management, various forestry institutions, research and training, role of forestry for agriculture, role of forest in national food and water security etc.²⁵⁹

In 2000 Indian Cabinet approved the amendment in Forest Act of 1927 to shift the emphasis from commerce to ecological conservation to consolidate the existing forest and related laws. The changes were aimed at empowering Centre to direct the States on how to protect and improve the forests. The other changes included change in shifting cultivation to restore the affected areas, and giving village communities greater say in managing the forests. The State Governments shall be empowered to relax curbs on felling and transport of certain species from private land to encourage social and farm forestry. There was also a proposal for the establishment of "Tree Authority" for urban areas and parts of rural areas to mobilise support for plantation and preservation. ²⁶¹

Thus, we can see that despite many policies and legislations, which were being implemented by the government of India from time to time, the condition of environment and particularly the forests kept on deteriorating. The main reason for this is the over reliance of the government on development of the country which superseded the issues of environment completely. This resulted in the destruction of forests on a large scale. Moreover, the half-hearted approach of the government is also responsible for heavy deforestation.

But inspite of all these efforts, today the condition of forests is deteriorating as natural forests have been depleting fast. The MoEF has been coming out time and again with all kinds of stringent policies and legislations and even Supreme Court has intervened on this aspect. But still the permission of cutting natural forests is being granted at a much larger scale from time to time for various projects. The forests have been greatly destroyed due to various development projects like dams, mining operations, timber supply etc. The tribal communities also to certain extent destroy the forests by using them as source of fuel, food and

²⁵⁹ Ibid, p.335

²⁶⁰ Ibid, p.336

²⁶¹ Ibid

building material. This issue of forests had large-scale impact on tribal people as the nature of programmes that were being implemented for developmental purposes were extremely harmful for tribal people. The lack of rights on forests and non agricultural land led to crisis of livelihood which was faced by tribal people since the colonial times.²⁶² If this continues, in next 4-5 years the natural forests would be destroyed to unbearable limits. At this rate our country is moving towards a serious environmental crisis.

The problem has been aggravated due to the fact that either most of the policies and formulations are not implemented properly or they are just written on the papers only. Some of the main reasons are continuing deforestation and the practice of moving boundaries of government forests which have made the security of forest resources tenuous. Also, inspite of all the legislations concerning forests that have been made, efforts of the NGOs and voluntary agencies as well as the social sector there is lack of political will and enthusiasm among the government as well as among the people to help in the protection of forests. The situation is getting worse by corruption and lack of transparency in the reform agencies. The problem could only be solved if people are made more aware of the benefits of forests.

Moreover, inspite of the efforts from all the sections of society condition of forests are still deteriorating at a very fast pace. The lack of awareness and infrastructure makes implementation of most of the laws relating to environment extremely difficult and ineffective. One of the major reasons for the depletion of forests is that even large-scale farmers in many third world countries like India are not educated on how they can maximize their results when reusing the soil. Therefore the soil is used up and left as a desert while farmers burn more forest to make another farm. The farmers must overcome their ignorance of sustainable forest products and difficulties of distribution, harvesting of forest products without destroying the forest that can be more profitable in the long term.

²⁶² Archana Prasad, Tribal Livelihood and Globalisation: The Potential of Non-Timber Forest Produce Development in Central India, NMML Monograph, 2005, p.1

In my study I have taken up the case study of Uttarakhand where few years back in some of the districts the contractors ordered cutting of trees in the forests but couldn't succeed mainly because the local people, especially women, resisted this move. They used to stick around the trees so that nobody could cut them. Local people didn't give up even when police with guns arrived and threatened them. This gave rise to the Chipko Movement. Similar thing happened in Apiko movement in south as a result of which numerous trees were saved. In our country these are some of the noteworthy examples that saved countless trees. As a result of these protests there was a ban on felling of trees in these large areas and it gave rise to numerous policies and legislations against widespread deforestation. As a result there has been a drastic reduction in the process of deforestation and felling of trees for development and construction purposes.

The people who have contributed to the famous Chipko and Apiko movements were ordinary local people who did extra-ordinary job of saving the forests. Inspired by this, sometime back some local residents in Delhi succeeded in protecting the greenery of the famous ridge area. Similarly people in Mumbai came forward to protect mangrove forests on the coastal regions of Mumbai.

Thus, in mid 1970s when environmentalism as an organised movement emerged in contemporary India, the struggle was against specific government policies and projects. Indian environmentalism was given an impetus in late 1970s by movements directed to specific ends. But over the period of time it continued to be limited to stopping particular projects, refining environmental regulations and generating a new ecological vocabulary. India's environmental problems are gaining global significance because of the rapid population growth, aggressive speed of urbanization and lack of infrastructure. This consequently puts tremendous pressure on natural resources. Rapid population growth continues to be a matter of concern for the country as it has manifold effects, one of the most important being environment degradation. It has led to the overexploitation of natural resources.

There have been arguments from the Centre as well as the State Governments that if trees are being felled for development purpose, additional saplings are also planted in its place so that green cover could be retained. But it is also true that those saplings cannot take place of natural forests. In many big cities education is seen as a means to protect the environment. Even then we often get reports of trees being cut for some or the other reason. This is so because in cities there is a pressure for continuous development. So when forests or trees come in the way all kinds of pressures are exerted on the government to give clearance to those projects. It is often said that for each tree cut there would be sapling planted in its place, but whether the saplings or small plants have been properly planted or became full trees is not taken care of.

Every aspect of government decision-making has a direct or indirect but significant bearing on the environment. More recently also it can be seen that the government is still not very much concerned about protection and prevention of forests as well as the environment inspite of all those international treaties and conventions that have been pressurizing the Indian government to take steps for protection of the environment. It can be seen from the fact that in recent election manifestoes of the major political parties, the issue of environment has been totally neglected let alone talk about the forests. All the parties were mainly concerned about the populist policies that can fetch them more votes and the issue of caste and religion continued to dominate the elections. The issues like forests and broadly the environment, which are becoming issues of grave concern have been totally skipped and none of the political parties as well as the election rallies has touched upon this aspect. Not a single political party has promised to improve the state of environment. Even if there is a mention of environmental aspect, not much emphasis is given to this arena and not much attention has been devoted to this issue. Trees are being decapitated for wider roads, multiplexes, parking lots etc just for the sake of development. Presently, the UPA government does not have a cabinet level minister for the environment and forests although the Minister of State has the independent charge.

Moreover, the debate of balancing livelihoods, development and wildlife is rooted in forest management system. State Forest Departments and the Ministry of Environment and Forests control over one-fifth of India's land area and its resources. Today forests can be destroyed with one clearance from the MoEF without informing or consulting local people. In the name of development more

than five lakh hectares of forests were destroyed between 2001 and 2006 alone triggering massive protests and even violence.

The issue of forests or environment on a larger scale has been seen as elitist, that does not concern the majority of the population. The larger rural poor sector specially want development as top priority. But the fact is that issues of climate change and deforestation have disastrously affected the poor specially farmers and fishermen. It is only when the pressure is exerted from international actors the issues of conserving and preserving the environment gets attention.

Apart from this the coverage of environmental and ecological issues in the Indian media, more specifically, newspapers that a common man has access to, is restricted to disasters, conventions and occasions. This phenomenon has been true almost all over the globe. The public understanding of global environmental change and sustainability issues has been badly served by the media. There has been little consistency in the consistent coverage of the greatest challenges to environment. India has constant ecological concerns that have a potential to rock the country's economic and social structure and yet, journalistic coverage of the environment has been sporadic, confined to sudden bouts of coverage of big dams, or disasters, or the 1984 gas tragedy and so on where politics and environmental issues have more or less merged. But, media and public attention have only been concentrated on the projects which involve displacement and rehabilitation of local communities.

In order to increase the green cover and to preserve the existing forests, afforestation and social forestry programmes should be implemented at local level. More emphasis should be laid on compulsory environmental education at the school level in order to make people aware of environment protection. Environment protection should not be a responsibility of government alone but people and local leaders should be encouraged to make dedicated efforts to eradicate the problems concerning environment. Moreover, special efforts should be made for educating the local people and local leaders about the adverse effects of large population. Interdisciplinary understanding, cooperation and coordination and increased public participation and support are important components in the

process towards sustainable development. Forest planning should take account of the demands of local people in terms of social needs and forest resources.

Thus, certain steps could be taken to have an effective implementation of the policies concerning the forests as well as the environment. Some of the measures are as follows:

- ♦ There is a need to establish policy implementation and tracking capacity in the Ministry of Environment and Forests
- Need to improve economic and informational instruments for forest policy
- Need to make the polluter liable for compensation to the victims as also for the cost of restoring of environmental degradation
- To bring momentum to the institutional reforms
- ♦ Urgent need to resolve conflict between law and the policy
- ◆ To create a framework for the union of conservation concerns and livelihood needs²⁶³

Human demands on forests are set to increase exponentially, not just from increase in human numbers, but also from our pattern and level of consumption, the nature of our technology for forest exploitation, and our aspirations for growth and increase in wealth. The vast potential of forests has not yet been fully realized. The effective management of forests can increase the production of woods, which in turn would help generate income as well as employment. Concerted action needs to be taken to increase people's perception about the values and benefits of the forests. Need of the day is to make penal provisions on forests more stringent so that the violators are dealt with sternly.²⁶⁴

Thus, there is a need for holistic development instead of ongoing particularistic kind of development which is increasing the rich-poor divide and which in turn is creating the problems of poverty and pollution. The developing country such as India should look for the ecologically sustainable and socially just

²⁶⁴ Gurdip Singh, Op.cit, p.336

²⁶³ James Mayers and Stephen Bass, *Policy that Works for Forests and People: Real Prospects for Governance and Livelihood*, Earthscan Publications, Sterling, 2004

model of development, which would suit the needs of the country, instead of blindly aping the developmental model of west, which is highly destructive of the environment. Even the premier institutions like World Bank have been arguing that there needs to be a "human face" of the neo-liberal policy.²⁶⁵ Though many claims have been made about adopting the strategies, which are environmentally suitable, when it comes to economic gains and benefits the environmental concerns always take a back seat. At this rate there will soon be a time when the nature will be destroyed beyond reparable limits.

With more international involvement many countries, including India, will take effective steps to bring deforestation to sustainable levels. Many countries like US, Brazil, and many European Union countries are taking steps to reduce the problem for a more sustainable environment. But the financial gain and high competition for development still exists with deforestation, and for some it is the only way of survival.

A few acres of a pristine forests are much more valuable than many hectares of an already degraded stretch. The need of the hour is that we should be aware of the protection of forests around us and should modify our lifestyle according to the need for protection of environment. Forests have become more important to us than ever before, as our very survival is fully dependent on forests in view of changing climate situations and degradation of environment.

²⁶⁵ Archana Prasad, Op.cit, p.55

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