PART VI

CONCLUSION AND SUGGESTIONS
CHAPTER 11

CONCLUSION AND SUGGESTIONS

Forest is a valuable component of human environment. For healthy subsistence of human beings on earth it is essential that at least one third of the land area on earth should be under forest cover. Forest helps in keeping air and water fresh and climate good. It maintains the ecobalance in nature. It supplies food materials to those who live in forest and raw materials for many industries in the plains. Undoubtedly, forest is to be protected on environmental and economic considerations and also in the interest of tribal people living there.

Forest was in abundance in ancient India. The religion, culture and tradition of ancient India favoured protection of flora and fauna. Only rational utilisation of forest resources for human needs and welfare was made. However, imperial control over Indian forest initiated by Indian rulers and continued by the British regime brought out a revenue oriented policy towards forest. The Britishers favoured over-exploitation of Indian forests to protect the mercantile interests and to meet the demand of
their army and navy. The Forest Acts of 1865, 1878 and 1927 were instrumental in achieving that object. Even after independence, the revenue oriented policy towards exploitation of forest was not changed and the Indian Forest Act 1927 continued to be in force in Indian territories. States which enacted separate legislation on forest relied on the provisions of the Indian Forest Act without analysing the impact of such a law on forest.

The United Nations Conference on human environment held in Stockholm in 1972 aroused a world wide environmental consciousness. It had its impact in India also. The Constitution of India was amended in 1976 to include environmental safeguards. The Forest (Conservation) Act 1980 was passed to arrest large scale deforestations. Department of Environment and Forest was established at the Centre. Judiciary made landmark decisions to ensure environmental protection. The people of India became more and more aware of the environmental significance of forest. They even started revolts against deforestation. Inspite of all these changes in outlook and approach, the Indian Forest Act 1927 and the legislation framed by different States on the lines of the Indian Forest Act remained the same as before. They do not reflect a policy of environmental protection. Instead, they continue the revenue oriented approach of the colonial era.
The Indian Forest Act 1927 and State legislation relating to forest impose governmental control over forests by classifying them into reserved forests, protected forests and village forests. This three-fold classification has no relevance in protecting the environmental value of forest. It only denotes the differential degree of control exercised by the government over the rights of communities over forest. The controls are imposed to earn maximum revenue from forest. The revenue oriented policy is more evident in the Forest Acts of Tamil Nadu, Karnataka and Andhra Pradesh. These enactments contain special provisions imposing governmental control over valuable species of trees like sandal, catechu, teak and rose wood standing on any land. The State of Kerala has gone a step further. It has, by a separate legislation, imposed controls on valuable trees. The provisions in the Central and State forest legislation empowering the Government to impose duty on timber and other forest produce and the provision for compounding of forest offences also throw light on the revenue oriented policy towards forest.

Even as a revenue oriented legislation the Indian Forest Act is not devoid of defects. The Act prescribes punishment of six months' imprisonment and fine of Rs.500 for offences like felling of trees or clearing of land in
Government forest. This is inadequate. Such punishment is neither effective to prevent the commission of offences nor sufficient to compensate for the loss arising from such commission. There is need to impose prohibitive fines. The States of Tamil Nadu and Karnataka provide good examples. In Tamil Nadu if the offence relates to valuable timber, three years' imprisonment and a fine of Rs.10,000 can be imposed on the offender. In Karnataka the maximum punishment for offences relating to sandalwood extend up to seven years' imprisonment and a fine of rupees twenty five thousand. If such prohibitive fines are extended to all types of forest offences, commission of offences can be considerably reduced.

A law which is framed to implement one policy cannot be effectively used to implement another policy which stands in contradiction to it. The Indian Forest Act 1927 reflects the revenue policy adopted by the British. No wonder it fails to be an effective instrument to protect and preserve the environmental values of forest. Even enactment of another law to supplement the original law may not fully serve the purpose of protecting forest on environmental considerations. The Forest (Conservation) Act 1980 enacted to arrest deforestation is only such a supplementary legislation relating to forest. The Act does not fully transfer the powers over forest to the Central Government. It only makes it mandatory for the State Government to get the sanction of the Central Government before using forest land for non-forest purpose.
Such partial control has proved to be ineffective. States may not favour such controls imposed by law which minimise the revenue accruing to them from forest wealth. So the Forest (Conservation) Act is frequently violated by State Governments on one ground or other. The ill-defined term 'non-forest purpose' in the Act provides loopholes for abuse of power by State Governments.

It is true that forest is a major source of revenue for the State. Timber plays a significant role in industrial development. Quarrying of stones and minerals abundant in forest areas and construction of hydroelectric and irrigation projects in suitable localities in forest area are also the needs of the day. However, if forest is overexploited and destroyed on developmental and revenue considerations and environmental values totally ignored, it may lead to serious environmental hazards, leaving human life in peril. The environmental and revenue/developmental factors should not be viewed as mutually contradictory. Optimum revenue should be realised from forest resources. But such exploitation should not lead to destruction of their regenerative potentialities. Exploitation is to be made on scientific lines. In cases where developmental activities necessitate clearing of forest land, care should be taken to see that such activities do not go beyond the carrying capacity of the life
support system. Environmentally sound development - sustainable development - should be the policy to be followed by the government and the decision makers when granting permission to exploitation of forest resources or starting of development projects in forest area.

In order to ensure sustainable development a cost benefit analysis must be made before development projects are undertaken. Economic costs including environmental costs should be taken into account. If the net benefit of the project is minimum or nil in view of the costs, the project should be dropped.

Developed countries like U.S.A. have incorporated the principles of conservation and sustainable development in their environmental legislation. There forest planning is based on principles of protection, conservation and preservation taking into account ecological and environmental significance of forest. The National Environmental Policy Act 1969 of U.S.A. requires every federal agency to prepare an environmental impact statement before proposing any major federal action significantly affecting the quality of human environment. Before preparing the environmental impact statement the responsible federal official is required to consult experts, consider the view of other federal state and local agencies and the public.
about the proposed action. Similar measures, which ensure sustainable development, should be incorporated in the law relating to forest in India also.

At the early stages, the Indian judiciary was reluctant to appreciate the environmental consequences of development and deforestation. However, in theeighties the judiciary began to play a significant role in protecting the forest environment. Courts decided several cases harmoniously reconciling the conflict between environment and development.

The process of environmental protection through litigation has its limitation. The court can look only into those matters which come before it. There may be a number of instances involving environmental degradation which are not brought before the court. Sustainable development can be more effectively implemented, if the strategy of environmental impact assessment is incorporated in the legislation relating to forest.

Recently the Central Government has issued notification under the Environmental Protection Act 1986 making environmental clearance mandatory for certain listed projects. It would be better if the requirement of environmental impact assessment is clearly laid down in the legislation itself. Such arrangement will give more scope for democratic formulations of the controls on
developmental actions and facilitate judicial intervention in cases where the implementation of arbitrary administrative decisions deteriorates the environment.

Effective environmental impact studies facilitate adoption of the practice of sustainable development. Permission should not be granted for a project before examination of its impact on the flora and fauna in forest. Local bodies can play a significant role in promoting the environment. Each Panchayat, Municipality and Corporation should take steps to see that a good portion of its geographical area is brought under tree cover.

Population growth is a major cause for environmental degradation. It also results in denudation of forest. Hence measures to curb growth of population should have priority in the agenda of action for environmental protection. The poor and needy often encroach upon forest land for food, shelter and fuel. The use of wood as fuel should be minimised by popularising improved chulas, biogas and petroleum gas stoves in rural areas. In order to reduce the thrust on forest for timber, members of the public should be encouraged to minimise the use of wood in construction works and to use substitutes for such works as far as possible. Economic incentives should be given by the State for encouraging such ventures.
Forest should not be cleared for purposes of agriculture. Instead, intensive cultivation on existing agricultural land should be practised using better varieties of seeds and environmentally friendly fertilisers, insecticides and pesticides to increase the crop.

Governmental control over private forest has not been effective in India in protecting private forest from deterioration. In Kerala, much of the vested forest remains under the control of the State Government and are managed like reserved forests. The restraints imposed on owners of private forest by legislation in the States of Tamil Nadu, Karnataka and Orissa helped only to increase illegal felling of trees by the owners themselves. The management of forest by forest officers as is done in Bihar also opened chances for abuse of power by them for personal gain. Management of private forest by the owners themselves with the supervision of the Forest Department as done in Uttar Pradesh and West Bengal is better than the system of total government control adopted in other States. The management pattern of private forest should be designed in such a way as to protect the environmental values of forest.

Serious problems are involved in implementing forest legislation. State Forest Departments do not have
adequate staff, weapons, vehicles, communication facilities and facilities to keep seized goods in safe custody. The training given to the staff is inadequate. Forest personnel are not properly equipped to fight against smugglers and encroachers. The forest departments do not have modern fire-fighting equipments to protect forest from fires. Infrastructural facilities require improvement in almost all States for protecting forest.

The field staff of the Forest Department in Kerala are not satisfied with their service conditions. They are not given adequate incentives for the risky jobs undertaken by them. The frequent transfers and the lack of quarter facilities in the place of duty prevent them from leading a settled life. Political interference to save offenders and smugglers hinders honest discharge of their duties. This, together with the inadequate facilities in the Department makes some of the officials corrupt and lenient towards offenders and smugglers. The situation in other States also are not different. The service conditions of the field staff should be improved by adequate incentives by way of promotion, risk allowances and risk insurance coverage. Quarter facilities should be given to the field staff.
Forest check-posts have failed to prevent illicit transit of forest produce. The clever techniques played by offenders often make detection of offences and the arrest of offenders difficult. Nationalisation of timber trade may considerably reduce the illicit transaction in timber. Saw mills shall be run by Government and not by private persons. Timber cut from private lands may be permitted to be sold in the Government saw mills at reasonable prices fixed by Government. Processing of timber after it is cut into planks may be left to private agencies so as to meet the needs of wood articles.

Law relating to possession and transit of valuable trees like sandal wood is not uniform throughout India. Absence of inter-State co-ordination creates problems at the border. Inter-State problems can be minimised if a central forest legislation is applied uniformly throughout India.

Restrictions imposed on the cutting and possession of sandal wood, grown in one's own land may be relaxed. Sandal wood is of high demand for industrial use. If private land owners are free to cut, possess and sell the sandal trees grown on their land, more people will come forward with programmes for raising of such trees. If sandal wood is available in plenty in the market, people may not smuggle sandal wood from Government forest at the
risk of their lives. People may also be encouraged to cultivate other valuable trees like teak, rose wood and ebony so that unlawful intrusion into the Government forest for these trees can be minimised.

Effective implementation of forest laws requires co-ordination between forest, police, revenue and excise departments. While police can help in arresting the offenders, the Revenue Department can assist the forest personnel in identifying, surveying and recording the area of Government forests. Encroachments could then be quickly found out and steps taken to evict the encroachers. The Excise Department can help arresting of offenders who cultivate narcotic plants in forest areas.

Effective implementation of forest laws also requires co-operation and help from the members of the public. In order to make the public law-abiding they should be made aware of the beneficial effects of forest through extensive educational programmes. They should be associated with the management of forest. Forest management with public participation has proved to be a success in West Bengal, Uttar Pradesh and Orissa. In those states forest protection committees constituted by members of the public have been helpful in protecting forest from offenders. They have also made substantial contributions in programmes of regenerating degraded
forests. Strategies of this type may be adopted in all States in India so as to protect forest from deterioration.

Prosecution of forest offenders involve some problems. Failure to produce before the court notifications and other records relating to forest have resulted in acquittal of the accused. This could be avoided if a legal cell is created in the Forest Department. The cell may keep up-to-date records and notifications relating to forest and can assist the prosecution to successfully conduct the cases involving forest offences.

There are defects in the forest law which also contribute to acquittal of the accused. The Indian Forest Act and State legislation relating to forest do not define the term 'forest'. Some offences are not properly defined. Abetment is not made an offence. Legal provisions delegating legislative powers to the State Government do not clearly lay down the guidelines. If these loopholes in the law are plugged, the number of acquittals can be reduced. There is also the need to establish a Forest Court in each district for speedier disposal of cases relating to forest.

In India, the stress on natural forest for fuel and fodder is attempted to be reduced by a scheme of
social forestry. The programme has succeeded in extending the area under tree cover. However, objection has been raised regarding the species of trees planted in social forestry. Planting of acasia, eucalyptus, polyalthia, casuarina, subabul and alianthus in social forestry programmes is not welcomed by Indian farmers since they yield only timber. It is also alleged that since the wood of eucalyptus is widely used in paper and pulp industries, the real beneficiaries of these trees are industrialists and not the rural poor. It is also proved that eucalyptus is not an ecologically suitable species to be used widely in social forestry programmes. Eucalyptus reduces the fertility of the soil by absorbing all available water in the subsoil. It prevents the growth of other plants and micro-organisms in the soil due to the inhibitory alkaloids present in its leaves. Therefore planting of eucalyptus has to be limited to wastelands, hill-slopes and other areas where the soil is not fit for the growth of any other species of plants.

Monoculture is objectionable in social forestry. It has a negative impact on forest environment. Climatic conditions in forest favour the growth of a variety of flora and fauna within the shade of the leaf canopy. This will be lacking in the case of monoculture. Instead
of monoculture, if trees having more leaves and spreading crown are selected and planted in mixed plantations, it can create climatic conditions more or less identical to that of a natural forest. This would promote the growth of more flora and fauna, more deposit of humus and more yield of fuel and fodder and gradual natural regeneration of forest.

Another serious criticism levelled against the social forestry programmes in India is that social forestry encourages farmers to change the land use. There occurs a shift from food crop cultivation to farm forestry. Hence supply of fuel and fodder trees for farm forestry fails to seek cooperation from small farmers in some areas. Social forestry programme will be more successful if the species of trees supplied to farmers are those of their choice.

Social forestry programmes should be made more extensive. Local authorities, public corporations, companies, voluntary organisations and the members of the public including tribal people should be actively involved in implementing the programme. Industrial establishments should be encouraged to plant suitable species of trees in and around their premises so that problems of pollution may be minimised and the timber
can be used for industrial and other purposes. Social Forestry programmes should also be co-ordinated with the programmes of soil conservation and waste land development.

There exists a symbiotic relationship between forest and the tribal people. Deforestation, illegal encroachments into forest and development projects in forest area affect the tribal life. Forest legislation has adversely affected the interests of tribal people. The law did not contain adequate provisions to protect their rights in forest. Tribal people have not been destroyers of forest. They use forest resources in a sustainable way. The law relating to forest should permit the tribal communities to exercise their age old rights in forest. Care should also be taken to see that the tribal members are not made tools by plainsmen to smuggle timber and other valuable forest produce. In the present deteriorated condition of Indian forest, the tribal people need not be encouraged to practice shifting cultivation. They should be trained in modern cultivation methods. Training tribal people in making useful fancy articles out of bamboo and other forest produce will reduce the problem of unemployment among the tribal people. Tribal people displaced when
Development projects are undertaken should be properly resettled. Instead of resettling tribal people at places chosen by the Government, the tribal members should, as far as possible, be permitted to select areas of their choice. This will enable them to easily adapt themselves to the new surroundings. The task of forest protection can be effectively and successfully carried out if the Forest Department seeks co-operation and involvement of tribal people. Tribal members should be employed in sufficient number in the Forest Department as watchmen and guards. For appointment the minimum educational qualifications should be relaxed in the case of tribal candidates. If possible, they should also be given higher posts. The traditional tribal wisdom has to be meaningfully and profitably used in the protection and management of forest.

There exists a close interrelation between the flora and fauna in forest environment. Legal measures for protection of wildlife are therefore of considerable importance in protection of forest. The provisions in the Wildlife (Protection) Act 1972, should be strictly implemented so as to protect wildlife and its habitat. Punishments provided in the Wildlife (Protection) Act should be enhanced. Such deterrent punishment may protect the wildlife by preventing the commission of offences.
The provision for compounding of offences should be deleted from the Act so as to prevent the culprits from escaping criminal liability by payment of an amount. In situ conservation of wildlife should be given more importance. The law relating to national parks, sanctuaries and biosphere reserves should be unified and uniformly implemented throughout India without regard to territorial barriers. Forest officials and the members of the public should be encouraged to take a sympathetic approach towards wild creatures, should be educated on the role played by living creatures in maintaining the ecobalance and made aware of the need to protect wildlife. Voluntary organisations should be encouraged to take part actively in the programmes for conserving forest and wildlife. Extracting and processing the skins and tusks of wild animals dying naturally alone shall be permitted. Official marks shall be affixed on such articles. Provisions should also be made for collecting and processing, through Government controlled agency, the ivory collected from domestic elephants dying naturally. Such measures shall ensure that the valuable forest produce is not unneecessarily wasted and also that wildlife is not wantonly destroyed for procuring the forest produce.
Protection of forest together with its fauna and the tribal communities can gradually build up the eco-balance in forest. In order to achieve this end there needs a thorough reorientation of the law and policy relating to forest.

The new Forest Act should provide for effective environmental impact study before development projects are undertaken in forest areas. The guidelines for this should be clearly laid down in the Act. The law should also provide for co-ordination of Central, State and local agencies and the members of the public in the planning and implementation of policies relating to forest. Provisions should be made for creation of a strong enforcement machinery at the Central level, with adequate trained staff. They should be provided with weapons, vehicles and other infrastructural facilities to protect and preserve forest from smugglers and encroachers.

Deterrent punishments should be prescribed for violation of the law. Imprisonment should be made compulsory. Prohibitory fines also may be imposed on offenders. There should be no provision for compounding. The law should shift the burden of proof from the prosecution to the accused.
The law relating to private forest should be made uniform throughout India. In some States private forests are vested in the Government. The remaining private forest in the country need not be taken over by the Government. Instead, the law should provide for management of private forest under the supervision of the Forest Department, in accordance with management plans designed with an environmental perspective. People should be permitted to plant whatever species of trees they want irrespective of their timber value, provided felling is done on scientific lines and without causing ecological problems. Clear felling should be totally banned even in plantations.

The law relating to forest should also clearly lay down the guidelines for implementing social forestry programmes. The Forest Department should be authorised to lease lands for planting useful trees. The new forest legislation should also recognise the traditional tribal rights in forest. The Indian Forest Act 1927 and the State legislation relating to forest with their outdated revenue policy and scheme should be replaced by such a new forest legislation framed with an environmental perspective. The new law should be uniformly applied throughout India.