Chapter III

History of Forest Management in India
Policy issues can be approached in two ways. One can ask 'what are the facts?' and one can ask 'what would one like the facts to be?' In other words the existing situation is transformed to a preferred or desired situation through the mode of policy process. Therefore, it becomes imperative to look at the situation existing at the time, when the country started caring for this important resource and also how this situation was created i.e. how the forests were managed and what were the practices related with forests.

The forested land in India today is far below the scientific norms. For a self-contained economy and proper ecological balance at least a third of the total land area must be kept under forests and natural vegetation. In India it is as low as 19.27 percent (Annual Report 1997-98). The photographic evidence derived from the satellites has confirmed that only 46 million hectares are under real forests as against 63.34 million hectares according to 'State of Forests Report 1997'. While the dense forest (crown density more than 40%) and open forest (10%-40%) occupy about 11% and 8% of the geographic area respectively, while mangroves occupy 0.15% of the total geographic area.

According to the report, the country has lost about 5500 sq. kms. in the last two years, mainly in the states of Madhya Pradesh, Andhra Pradesh, Assam, Orissa, Manipur and Nagaland. However, the report says that there have been significant gains in the forest cover in the states of Maharashtra, Gujarat, Mizoram, Rajasthan, Punjab and West Bengal.

Summary of the data is that the country is far away from its target i.e. one-third area under forest cover. However, adequate forest cover was not a problem in the past. Prior to the colonial rule, India was able to maintain its forests. In fact sustainable forest practices were an in-built phenomenon ever since the Vedic times (Misra 1993).

There used to be three types of forests in India. Remnants of each type still exist in the country and they have their contemporary relevance also. These forests were biotic reserves as we have today, but the way these were managed, was entirely different. It was then a participatory management by the people themselves. These forests were classified as – (a) Mahavanas; (b) Tapovanas; and (c) Srivanas.

Mahavana was a dense and natural forest of great expanse. Such forests were devoid of
habitation and human interference was negligible, if at all. In these forests, biodiversity prevailed at its maximum. They were the main sources of medicine. They remained virgin as no one encroached upon them.

The Tapovana, as is apparent from the name, were the forests where sages did ‘tapas’ (meditation), besides, running the age-old ‘Ashrams’ system, where pupils were taught by ‘Gurus’. These were also away from the human habitation. People went there only for peaceful purposes. It was in these forests that our ‘Upnishads’ and ‘Aranyakas’ were written. Misra (1993) mentions the existence of some Tapovans even today, like the one near Haridwar in Uttar Pradesh. It is pertinent to note that these ‘vanas’ abounded in wild-life, but no one was allowed to kill animals.

Srivanas were essentially the village or town forests. Most often human habitation was within them. They were managed locally, need for which arose because of the dependence of the people on them for fuel, wood, medicines, fruits and many other day-to-day necessities. While people had access to these forests, they also had the duty to conserve, protect, replenish and enrich them. Enriching was done through planting of trees which provided medicines, timber and fuel needed locally.

Srivanas had different types of trees, according to soil, climate and other environmental conditions. They were all, however, tuned to social needs. The concept of social forestry was known to Indians even in that deep past, which we are emphasizing today.

Even in the medieval ages, these notions were respected and carried further as tradition. We have examples of Shershah Suri and Mughal emperor Akbar before us, who emphasized on plantation of trees in their kingdoms, during their tenure.

In Modern times, the first attempt of afforestation in the country came in 1842 through the efforts of Conolly, the then Collector of Malabar. He was ably assisted by an Indian Chatter Menon, a sub-conservator of forests. They raised the pioneer Teak plantations of Nilumbur. The plantations were highly successful and over the years became world-famous. Conolly’s efforts made the British rulers realize the imperatives of improving the forests of South India. Similar efforts were made by Gibson, the Conservator of Forests
in Bombay Presidency in 1847 and by Cleghorn, the Conservator of Forests in Madras in 1856. However their efforts in raising the Teak plantations, though regular, were limited. Besides, no steps were taken either to regulate fellings or to improve forests in central and North India till a few years after 1858 (Lal, 1989).

There was rapid and extensive clearance of forests for agriculture in the densely populated region of Awadh. The attitude of British administrators was to obtain and export large quantities of Indian timber for use by the British Navy, for local construction and industries and to allow free development of agriculture by clearing forests (Guha, 1983).

The state has played a central role in forests management in India since the establishment of the Forests Department in 1864. Sir Dietrich Brandis, a trained German forester was appointed as the first Inspector General of Forests in 1864, can be credited for starting a systematic management of forests in the country. He induced a change in the attitude and the objective of management of forests, changed from obtaining supplies of timber for various purposes to protecting and improving forests and treating them as a biological growing entity (Lal, 1989). For the purpose, the government decided to treat the forests as state property, while up till now the policy of the colonial state had been to recognize the forests as the property of the village communities within whose boundaries these fell (Gadgil and Guha 1993).

The first attempt on forest legislation was made in 1865 by the enactment of Indian Forest Act. The Act mainly aimed at preventing injury to forests. This Act made forests, a state property (Lal, 1989; Gadgil and Guha, 1993; Guha, 1983). The idea of allowing proprietary rights in forests to individuals was abandoned and all government forests were made inalienable. The presumption was that the forests were unencumbered by traditional rights and the burden of proof for infringement of rights of right-holder was on the claimant to prove otherwise (Pathak 1994). While theoretically the forest department was setting aside areas for exploitation according to scientific principles secure in the knowledge that no traditional rights were being curtailed, it has been suggested that a majority of users did not register their claims and failed legally to secure their rights (Singh, C. 1986). Non-comprehensiveness of the Act necessitated a more stringent and inclusive piece of legislation (Gadgil and Guha, 1993). The Act was revised in 1878,
improving on the inadequacies of the earlier Act. It especially provided for the conservation of the “reserved” and “protected” forests, spelling clearly what rights individuals had in the two forests (Guha, 1990).

As far back as in 1873, Brandis had visualized the importance of ‘village forests’. He suggested to form ‘village forests’ as ‘fuel and fodder reserves’, to be managed by the people themselves. This suggestion found expression in the Act. A chapter was inserted to provide for the right of government to constitute ‘village forests’ over any land and ‘reserved forests’. But this could not become operative due to impossibility of determining and separating the rights of the community from the private rights of the Zamindars (Tbvari, 1983).

Meanwhile, heavy felling continued for various purposes like use by railways. To make up for the felling and to raise supplies for the future, some plantations were raised. For example, the plantations of ‘Cajurina’ were made in the coastal areas of Madras. But the efforts were much too small as compared to the cut that was made.

As seen in today’s context, the first Forest Policy formulated in 1894 cannot be said to have come to the rescue of the forests, which is apparent from two major enunciations made in the Policy: firstly, it accepted the claims of cultivation as stronger than the claims of forests preservation and secondly, the public benefit was considered as the sole object of forest administration (Lal, 1989). But at that time, it came as a response to the ‘serious discontent’ among the agricultural classes, caused by strict forest administration. Apparently the Policy was more favourably disposed to village needs (Gadgil and Guha, 1993). The British rulers were reluctant at that stage, to limit individual rights over forests for the sake of securing more protective services from the forests. They sought to restrict only those rights, which were inconsistent with the material imperial interests.

Apparently, in the initial stages the major tasks the forest department was concerned with were forming of reserves and settlement of rights therein. Attempts were also made to restrict felling of trees to the limit of anticipated growth. A praiseworthy innovation was the preparation of ‘management plans’ for various forests, to ensure continuity of silvicultural practices and working of forests on the principles of ‘sustained yield’.10
However, the most serious consequence of colonial forestry was the decline in traditional conservation of management systems around the forests. But this decline did not go un-protested. In fact, it would have been very naive on the part of the administrators to believe that policies would be accepted by all without resistance. The resistance came from the tribals. In some areas tribals resistance to the State’s attempt to curb ‘jhum’ often took a violent and confrontationist form.11 To force the Baigas to give up their ‘dhya’ (jhum) cultivation and take to the plough was found quite impractical, as well as hard and impolitic (Gadgil & Guha, 1993).

Artisanal industries experienced decline because of the restrictions on access to traditional sources of raw material. For example Bamboo, a vital resource to many aspects of rural life, was considered weed by colonial foresters. They tried to eradicate it from the timber producing areas, before realising its worth in paper making. In both cases basket weavers suffered. Repeated protests induced changes in the government policy. For instance, in some parts of Madras Presidency, certain patches were set aside for tribals to continue ‘jhum’. Limits on ‘jhum’ rather than a total ban was advised for ‘Baigas’. But keeping in mind the material imperial interests the administrators took to some innovative ways to implement the policy, that is, pursued commercial forestry without further alienating tribal cultivators.12 More commonly the cumulative impact of market forces and state intervention forced the abandonment of traditional practices in favour of plough or wage labour.

Lal (1989) found four major drawbacks with the forest policy resolution of 1894. First, it allowed forests no intrinsic right to space and in land-use, subordinated forestry to agriculture; secondly, it did not give adequate emphasis to protective and regulative services provided by forests; thirdly, while it advocated the meeting of people’s needs in full measure, it did not stipulate the management of forests on the principle of ‘sustained yield’; and lastly, it did not suggest protection of forest from harmful practices of shifting cultivation and excessive grazing.

In the early 20th century, growth of Indian nationalism had its effect on forests also. People showed defiance to forest laws, which one could see during the movement of Indian Home
Rule League, organized in 1916 and non-cooperation movement, that followed. Damages to forests were caused by fire and unnecessary felling in U. P., Bengal, Orissa and Andhra Pradesh, as a protest against the British.

World War I changed the attitude of the policy makers towards scientific forestry. They ignored Silviculture, forgot the principle of ‘sustained yield’ and oriented the forestry to one single purpose, that of meeting the timber and other requirements of the fighting forces. Fortunately, after the war there again was a change in practices and forests once again started experiencing scientific treatment. Working Plans were prepared for nearly all the areas declared as ‘reserved forests’, important silvicultural problems resolved or nearly so, the technique of reclamation of ‘chos’, ravines and other eroded areas perfected and successful plantations raised in some refractory areas like saline soils of Terai and Bhamber region of U. P.\textsuperscript{13}

Thus it is obvious that the pattern of forest working was not to save forests from injuries, but to obtain maximum earnings to the State Exchequer. This criterion was not discarded for sometime even after independence, probably because then the ecological concerns were not as big a problem, as they are now.

When India gained independence the government of India made no substantive changes to the administrative and policy structure, in particular with respect to the high-profile of the government in the forestry sector and its monopoly holding rights over forests.\textsuperscript{14} The state retained exclusive control over the management and protection of forest resources. Through forest policy 1952 it tried to tackle following forest related problems –

I. Many of the Princely states were integrated into the Indian Union. Systematic management of forests had to be introduced in the forest areas of such states. Though earlier efforts were made there, they largely had been managed on ad-hoc basis either to serve as a source of revenue or to provide game for hunting.

II. Large forest areas came to be vested in the government as a result of ‘Zamindari Abolition Act’. Most of these forests were in depleted state because of the heavy felling made by former owners in order to corner as much profits as they could, before surrendering their rights to the government.

III. Conflict between agriculturists and foresters for space and use of forest as grazing
IV. Traditional rights and concessions of the local population on forests, exercise of which was damaging to the concept of 'sustained production', needed to be rationalized.

V. People needed to be made aware that the forests produced not only tangible goods but also intangible services, which were vital for environmental stability.

VI. Tree cover was inadequate in the country.

Since policy process is a dynamic concept, it has to respond to the changing realities and to be effective, it needs to tackle all identified variables related with the problem. So alongwith the factors mentioned above, inadequacies of forest policy of 1894 and other forestry related problems, were tried to be addressed with the forest policy 1952. The policy reiterated the principles of colonial forestry, as enshrined in the earlier forest policy resolution of 1894 and reinforce the exclusive rights of the State with regard to the management and control of forest resources. It recognized the protective functions of forests and discarded the notion of “forestry having no intrinsic right to land and should be permitted on the residual land, not required for any other purpose” (National Forest Policy 1952). Target was fixed to bring one-third area of the total land area under forests, suggesting a proportion of 20% in the plains and 60% in the mountainous regions. Adherence to the principles of sustained yield was advocated. Dealing with the problem of grazing, it did not allow continuous and cheap grazing in forests. It sought total exclusion of grazing by goats and restriction on grazing by sheep. The policy indicated a functional classification of forests to facilitate fixing priorities in management.

As an agenda for concrete action, however, the 1952 policy was ambivalent. It stressed that “paramount national needs” were to be the basis for future management and these were listed as follows-

i. The need for evolving a system of balanced and complimentary land use;

ii. The need for checking:

   a) denudation in mountainous regions;
   
   b) erosion on river banks and on undulating wastelands;
   
   c) invasion of sea sands on coastal tracts and the shifting of sand dunes;

iii. the need for establishing tree lands for the amelioration of physical and climatic conditions...
conditions;
iv. the need for ensuring progressively increasing supplies of grazing, small wood and fire wood;
v. the need for sustained supply of timber and other forest produce for defence, communication and industries;
vi. the need for realization of the maximum actual revenue in perpetuity consistent with the above needs.

There was no ranking of these needs and little recognition that the limited forest resource base would be unable to satisfy all the demands which had been listed. As far as making choices between these competing claims was concerned, there were no clear guidelines. By attempting to cater to all groups, the policy did not address the fundamental conflict between incompatible competing uses. However, although the demands of all the claimants had been listed, it needs to be recognized that these represented groups which had unequal power and access to the decision-making process.

Forestry Under Plan Periods –

This policy came around the same time, when the country embarked upon a process of planned development, with clearly defined priorities to achieve self sufficiency in food production and to build up an indigenous industrial infrastructure which would provide the base for sustained economic growth. Forest sector was made subservient to this process, providing raw material for industry and being treated as a revenue-yielding resource by state governments. In the various plans, there have been different points of emphases, though theoretically in conformity with a broad policy. A look at forest practices in these plans is pertinent here.

The major thrust in the first and second five-year plans was on survey, demarcation and rehabilitation of vast forest areas. It was necessitated because of the merger of the princely states and abolition of Zamindars. However, as far as sectoral programme is concerned, the most significant provision was for checking soil erosion and halting the menacing march of the desert in Rajasthan.
Emphasis in the third plan was on the plantation of fast growing species which could meet the industrial requirements, especially those of pulp and paper. As early as 1961, it had been recognized that there was large and growing gap between the demand and supply of forest produces and the plan document estimated that by 1975, the shortfall for industrial wood would be around 4 million tonnes while the expected shortfall of fuelwood was hundred million tonnes.\(^{18}\) Despite this, almost 75% of the third plan outlay on afforestation was targeted towards production forestry. In many cases, these plantations were made after felling reasonably well stocked forests of mixed species.\(^{19}\) This process continued through till the end of the fifth plan period.

The major problem of forests was their low productivity. Fourth plan therefore emphasized on extensive plantations but the allocations were far too low to make any significant impact on the density of the forests. Total afforestation was worth Rs 44.34 crores.

Meanwhile a ‘National Commission on Agriculture’ was set up in August 1970, whose terms of reference included a study and report on forestry in all its aspects. Some recommendations made by it in its report were accommodated in the fifth plan. This plan identified creation of large-scale man-made forests through institutional financing, as a major objective of forestry, as the Commission stated that “production of industrial wood would have to be the *raison d'etre* for the existence of forests”. The plan also proposed a network of the ‘state forest corporations’ for the establishment and management of man-made forests. But their working induced relegation of silviculture and ecology to secondary places by economics—“it should be project-oriented and commercially feasible from the point of view of cost and return” (NCA, 1976).

Such forest practices pursued by various state governments attracted wide spread criticisms, which ultimately led to amendment in the Constitution bringing the subject of forestry in the ‘concurrent list’, which so far had been on the ‘state list’.\(^{20}\)

The report (NCA 1976) also suggested the revision of National Forest Policy of 1952. Two key considerations were identified—

i. to meet the requirement of wood for different purposes — industrial wood for forest-
based industries, defence, communications and other public purposes, besides meeting the needs of rural community for small timber, fire-wood and fodder; and ii. to satisfy the present and future demand for protective and recreational functions of forests.

Second consideration was, perhaps, due to international environmental concerns being expressed at that time. In the aftermath of Stockholm Conference of 1972 international development aid was linked to environment. Since India had also participated in the Conference and agreed with the cause, though it did not accept the critique, which identified industrialization-urbanization pattern of development as the root cause of environmental degradation, the developmental policies showed reflection of the consideration (Pathak, 1994).

Since the early 1970s, grassroots organizations active in forest areas called repeatedly for a complete overhaul of forest management. State policies, they contended, excluded the dominant majority of the Indian population from the benefits of forest working while favouring the interests of a select group of industries and urban consumers. They asked for a reorientation of forest policy, towards more directly serving rural subsistence interests (Fernandes and Kulkarni, 1983).

NCA 1976 recommendation of ‘social forestry’ can be viewed in this light. It can be said that forestry entered a new phase with this. The commission stressed socio-economic importance of social forestry in the rural community as well as in the management of forest resources. It suggested plantations to meet the requirement of fuelwood, fodder, small timber for rural housing and agricultural need, fencing material etc. as well as industrial wood. From the sixth plan onwards social forestry became a major programme in forestry. There was considerable interest and financial support from donor agencies for afforestation under the social forestry programme, which expanded rapidly through the 1980s. ‘Development without destruction’ was the theme of the sixth plan. A special feature of the plan proposals was an attempt to link forest development with the growth of tribal economy.

Simultaneously, with the beginning of sixth plan in 1980, a ‘Committee on Environment’
headed by N.D. Tewari submitted its report, recommending setting up of a full-fledged new department to look after the environmental problems of the country. Consequently two major developments took place in the period of the Plan. One, the administrative development, was the formation of a separate ‘Ministry of Environment and Forests’ in December 1984, which indicated government of India’s realization that the forests in the country had depleted and needed attention. The other development was legislative. Forest (Conservation) Act 1980 was enacted prohibiting dereservation of a forest and diversion of forest lands to non-forest uses without concurrence of the central government. This was necessary, as in the period between 1951-52 and 1975-76, 4.135 million hectares of forest land were diverted to non-forest uses, of which 60.62 per cent was for agricultural purposes, 11.58 per cent was for river valley projects, 1.38% was for construction of roads, 3.08 percent was for establishment of industries and 23.34 percent for miscellaneous purposes (NCHSE 1987). The legislation was ostensibly motivated by the need to check rapid degradation of forests, it was based on the principle that the only feasible way to achieve this would be to confer more powers on the forest bureaucracy.

The controversy fuelled a broader debate about the orientation of forest policy. While the inadequacies of the existing structure was generally recognized, there were considerable differences over the choice of resource management regime. On the one hand, some members of the forest bureaucracy and conservationists argued that customary access to forests by the growing population of subsistence users was leading to unsustainable pressures on the resource. For them the only feasible way of preserving the remaining forest resources of the country was by increasing the powers of the bureaucracy and strengthening state management. At the other end of the spectrum were radical social activists, NGOs and representatives of subsistence users, who argued that it was the denial of customary rights, and the commercial exploitation of resources under state forestry, which was responsible for the degraded state of forests. The radical reform alternative which they suggested was to return the forest areas to subsistence users, under a regime of
community management. In between these polar positions were protagonists who argued for a less extreme approach, with a judicious mix of state, community and individual control. Other issues which were discussed included the matter of technical competence (i.e. Scientific forestry as practised by forest officials as opposed to the more specialized local knowledge of forest users) and the means of control (i.e. by external decree imposed by the bureaucratic state machinery or an incentive structure based on internal regulation by community-based user groups).

The Central Board of Forestry had appointed a committee in 1974 to prepare a revised National Forest Policy. Drafts were considered by the Central Board of Forestry, which gave its approval in 1982. The consultative committee of parliament attached to the ministry of agriculture (which, at the time, controlled forests) considered the policy in 1982, and members of parliament representing tribal areas were consulted in 1983. The policy was also debated at various levels within the Government of India, including the powerful Committee of Secretaries and was finally officially pronounced in December 1988.

In keeping with the earlier policy documents in its statement of basic objectives the 1988 forest policy lists all the competing claims on the country’s forests.

Social forestry –

Since this programme had become a major activity, its review is relevant here. N.C.A. recommended social forestry to secure people’s participation for generating forest resources by the people, for the people (Biswas, 1993). It favoured, commercial plantations on forest lands and trees for consumption and subsistence on community and private lands. N.C.Saxena (1992) said summarizing it that “the programme of social forestry consisted of two main components: afforestation of village lands and planting trees on private lands called farm forestry. Tiwari (1980) argues that even traditional forestry is social forestry as it caters to the vital though long-term needs of the society like preservation of ecosystem, maintenance of ecological balance, production of oxygen, water conservation, social conservation and raw material for running the vital wood based industries. This view is certainly in conformity with the concept of social forestry, as
defined by Westoby – “social forestry is a forestry which aims at producing flow of protection and recreation benefits for the community”.

NCA intended social forestry to be seen as a programme which would free industrial forestry from social pressures. Releasing industrial forestry from social pressure was necessitated because of the paradigm of development the country chose in 1950s. As Madhav Gadgil (1993) points out- “Nehru wanted India to modernize, to industrialize and to catch up with the west. The policy adopted was to industrialize at all costs, which meant subsidizing industry in every possible way.” It meant use of forests for the industrialization of the country. In such a contradictory situation the forests were bound to deplete. The tree cover instead of going up, from 22% to one-third of the total land area came down to 12% by 1988. The launching of social forestry, to remedy these evils, was appreciated by one and all.

A report found the programme a success. It stated “in Uttar Pradesh, the World Bank assisted ‘Social Forestry Programme’ overshot its farm forestry targets by 3430%”, phenomenal and unprecedented degree of success for a government programme. In Gujarat, farm forestry targets exceeded by more than 200% (CSE, 1985). Between 1980-87, the government claimed to have raised 18865 million trees. If survival rate is assumed to be 60%, the average number of new trees per village since 1980 comes out to be 18865. This was by all means an impressive achievement (Saxena, 1989).

However, a closer look reveals the shortcomings of the programme. The way the programme was conceptualized and implemented, led to a marked divergence between the stated objectives and the actual outcome. For example, the programme was started to meet the fuel-wood and fodder needs of the people, but people planted market oriented trees and as a result social pressure on forests remained as it was. The reason behind it was that the people could collect branches, twigs, leaves and grasses from forests and to boost their incomes they raised commercial plantations. Added incentive came from free or subsidized distribution of seedlings.

Species selection has also been questioned in this programme. Foresters preferred the species ‘keeping in mind the end product, while poor usually depend on the intermediate
products (Saxena, 1992; Dey, 1989). Neglect of production of ‘Minor Forest produces’ (MFPs) led to policy makers holding them responsible. That the poor have played a part in deforestation is not in dispute but blaming them is a convenient diversion (Saxena, 1989).

Importance of meeting fuelwood need can be gauged from the fact that most of the extracted wood is used for this purpose. A World Bank report, quoting figures from the ‘Food and Agriculture Organization’ (FAO) stated that the total extraction of wood in India was 264 million cubic meters in 1988, of which 2.40 million cubic meters was used for fuel. Policymakers were at fault when they assumed that fuel-wood is obtained by felling trees. The fact is that it is obtained from twigs and branches of living trees and not by felling trees. They planted Cajurina and Eucalyptus from which poor got little or nothing despite they being promoted as fuel-wood species. Because of its commercial orientation, farmers who planted Eucalyptus on their farms, on being advised to use it as fuel-wood, retorted “Do you burn your currency notes for keeping yourself warm?” In U.P. and Haryana Eucalyptus formed 95 percent of seedlings distributed by the forest department (Saxena, 1992).

Another factor, which contributed to reduce timber supplies to the markets, resulting in price escalation, which further increased deforestation, at the same time encouraging farmers to raise commercial plantations, was the commitment of government funds to match foreign contributions for social forestry projects and which resulted in forest lands becoming starved of funds.

Saxena (1993) provided an alternative suggesting consumption and subsistence to be met from forests and common lands and market demand from private lands. Voices were raised against social forestry programme asking for changes. For example, Vandana Shiva and J.Bandyopadhyay (1985), two environmentalists, led the campaign against social forestry. They referred to government statistics on food production in Kolar district of Karnataka, where there was a dramatic decline in the production of the staple cereals, Ragi due to the increased use of farmlands for Eucalyptus. In part the criticism directed at the programme stems from its failure to achieve a number of its stated environmental goals (Burgess, 1992).
Apparently the success of social forestry programme was due to success of farm-forestry, where farmers made use of facilities provided by the government and benefitted from the market demands. As a result social objectives of the programme could not be achieved.

One favourable thing happened with the policy makers. They realized the symbiotic relationship between the people and forests. It is relevant to quote Para 1.234 to 1.236 in seventh plan which says-

"Forestry programmes have so far been implemented in isolation and therefore the concept of people’s participation in forest development has never been conceptualized and operationalized in clear and comprehensive terms. Since the people’s participation in the forestry, particularly in social forestry is sine qua non for its success, there is an urgent need for evolving a viable, effective and operational model”.

Stimulation should have come for policy makers from a pilot project begun in 1970s in Arabari, in southern West Bengal, to see community participation. This project involved local community to protect degraded public forest lands dominated by ‘Sal’. They in turn were given all MFPs and 25 percent share in timber. Success of the programme led to extension of the programme. By the end of 1989, community based forest protection committees were protecting approximately 152,000 ha forest lands in West Bengal. Existence of strong panchayats facilitated this success.

Rita Brara(1992) in a study in Sikar district in Rajasthan found that foresters instead of seeking participation, alienated local people by their functioning, which she enumerated as following --

i) The implementors were not accountable to local people;

ii) They ignored the knowledge of the inhabitants for whom the schemes were intended;

and

iii) The rationale for such pursuits was not debated with those who were presumed to benefit from such action.
People's participation can help tackle this alienation. Kishore Saint (1992) mentions two contrasting experiments carried out in Aravalis which support this view. In one project in Dhar-Bamadia, where the presence of an outside agency was prominent, an inbuilt bias towards agency management was found with a high level involvement of outside expertise in planning. Lack of participation made people shunning responsibility and not caring for community-management arrangement. Inter-village cooperation problems were faced. Changing the strategy, by removing these obstacles, made the experiment in Patiya village successful.

The need for smaller groups of resource-dependent users to assume an active primary role in local forest management is receiving increasing acceptance (Sarin, 1996a).

Realizing the importance of people's participation, government of India announced a new forest policy in December 1988, emphasizing on the same. The new policy seems to be people friendly. It recognized the role of tribals in forests and sought to ensure that communities living within and around forest areas, especially the tribals, get their domestic requirement of MFPs. Dealing with the industrial requirement of timber, it stated that forest based industries must get their raw materials from wood raised through farm forestry. It also said that the practice of supplying forest produces to industry at concessional rates would cease. It stipulated that the forest lands should not be diverted to non-forest uses and advocated ending of system of private forest contractor.

Thus the policy showed ecological orientation, though the objectives remained same as in forest policy 1952. However despite identification of inherent contradictions in the approaches and attitudes between people and the state and people and the industry, it did nothing to resolve them. It is also criticized for not dealing with encroachments on forestlands due to uncontrolled expansion of population.

But the philosophy of joint forest management has been appreciated by all the concerned people. The Arabari experience and that of a number of other projects such as the Hill Resources Management Society in Sukhomajri in Haryana demonstrated that local groups had an important role to play in the management of state forest lands (Chopra, 1990). Following the adoption of the forest policy resolution, a process of consultation
commenced for the amendment of the Forest Act to "bring it in conformity with the new Forest Policy". A draft of the proposed bill was prepared and circulated to the state governments for their comments. The detailed contents of the proposed bill 'Conservation of Forests and Other Natural Ecosystems' (CFONE) became public in 1994.

Since its circulation in the public domain, CFONE has been reviewed and subjected to extensive criticism. As its name suggests, the bill reaffirms the conservation-oriented philosophy which was enunciated in the 1988 forest policy. In translating these principles into legislation, however, the bill makes explicit choices between competing claims in the forest sector and has differing implications for the various social groups. Despite the extensive references to participation in forestry programmes which were initiated during the period up to 1994, and in the official rhetoric, the Bill reasserts the control of the forest bureaucracy. It also alters the balance of decision-making authority between the Centre and the states, in continuation of the process started by the Forest (Conservation) Act.

The bill relies on the use of carrying capacity to determine the extent to which rights are to be admitted (section 12) and exercised [section 15 (2) (d); section 22 A; section 76 A] on reserved forests. While this is in keeping with the forest policy of 1988, it has been argued here that the concept is not necessarily an easy one to make operational and relies on the subjective judgment of the concerned forest official in particular circumstances. This stress on the use of carrying capacity, without clear guidelines about how it is to be calculated, is an important source of ambiguity. In other procedural matters, too, the bureaucracy retains its control, and there are significant new powers of entry, inspection, investigation and prosecution (Chapter XI). While these are inevitable under a system of state control, the bill makes no attempt to make the decision process more accountable except in some limited areas, where Judicial appeal has been permitted. In all other cases, only review process is an internal one within the hierarchy of the forest bureaucracy. Such a regulatory framework can be subject to considerable manipulation and systematic abuse and generates incentives for corruption. Furthermore, it reduces the security of the rights of resource users by making these subject to a decision structure which is not transparent and reduces their incentives to cooperate with the bureaucracy.
The bill also reduces the space available for the participation of user groups in forest management and protection, despite an expanded chapter on village forests. The statistics reveal that the majority of the forest land is not available for co-management arrangements. This undermines the importance of the programme of joint forest management which was initiated by the Government of India in 1990 and has been promoted as a radical decentralization of state forest policy. Furthermore, the bill allows the takeover of village forests by the state government [section 34 AA (1) (j) ] without specifying any right of appeal against such decisions, thereby reducing the functional autonomy of local user groups. This explicitly contradicts recommendations of the Eighth five-year plan, where it is suggested that a "major initiative in decentralizing power will be to enable the villagers to decide for themselves their own priorities and to take up activities accordingly".

The bill extends the center’s decision-making powers in the forest sector by preventing the state governments from granting licenses or giving permission to supply forest produce to specified industries (section 40 A1). Further the central government is given the direct power to make rules on a variety of subjects (section 76 A), and it is specified that central government rules are to take the precedence if any conflict with those issued by the states [section 76 (3)] emerges. The center is also empowered to override the prescriptions of departmental working plans in areas of ecological importance in order to let such areas "recover and to revert to a state of nature" (section 88).

The bill provides for exclusive state monopoly in the purchase, transport, sale and possession of forest produce and allows the state government to rescind existing contracts in this regard (section 40 A). Although nationalization of the trade in forest produce is aimed at eliminating forest contractors and ensuring better prices for producers and gatherers, this has not always been achieved. Gadgil and Guha (1992) argue that tribals have not benefited substantially from this process of nationalization; while the evidence suggests that remuneration has typically increased, the major beneficiaries of nationalization have been state exchequers. Legally nationalization does curtail the activities of contractors, but it has been suggested that the close links between traders, politicians and the forest bureaucracy permit middlemen to retain their influence. It has been reported that middlemen often re-enter the trade either illegally or as government
appointed agents, squeezing margins and reducing returns to primary producers. Saxena (1993) also has evidence to suggest that there has been a decline in the volume of non-timber forest produce collection in some areas following nationalization, which has resulted in lower incomes for the rural poor.

Forest-based industry has been subjected to a number of controls under the bill and the central government has been given powers to refuse licenses unless there is evidence of sufficient forest produce [section 40 AI (b)]. There are increased powers to regulate manufacturing (section 40 B), the sale of timber (section 40 C) and the establishment of sawmills and sawpits (section 40 D), apart from new provisions relating to the powers of entry, search and confiscation. Offenders under these sections are punishable with stricter penalties than under other sections, which reflects the greater potential for ecological damage due to industrial activity compared to subsistence use.

However despite these increased controls over industry, the bill also offers some positive incentives to commercial interests. Owners may register as tree growers, which grants them exemption from regulations on the use and transport of forest produce [section 35(1),38 A, 38 G]. The bill also exempts plantations of registered tree growers from the laws on land ceiling (section 38D). This is in direct contradiction to the 1988 National Forest Policy, where the need to conform to existing land ceiling laws was explicitly mentioned in this context. These concessions to registered tree growers can also be exploited by large landowners, who can transfer lands currently held under fictitious names (benami) to plantations and thereby legalize their evasion of land ceiling laws.

CFONE marks the end of a period of relatively low conflict in the forest sector, especially due to the attempts of the state to decentralize control under the program of JFM. A number of groups which had been active critiques of state policy had become involved with the implementation of this initiative and were acting as intermediaries between the state and local users. The circulation of the draft document generated considerable controversy, since it appeared to reverse the state’s efforts at encouraging participation and co-management in the forest sector and marked a return to the state-centered approach of the 1982 bill. By emphasizing the primacy of bureaucratic control and the conservation philosophy, CFONE reopened the debate over the direction of forest policy.
and it has not been introduced to Parliament till now.

In the meantime in 1990 the central government sent a circular to the States governments recommending the adoption of joint forest management, in which resource users would be involved in the protection and regeneration of forest lands in return for rights over the use of certain forest products. The government of India directives do not contain an official definition of JFM, but the words of Marcus Manech of Ford Foundation adequately define it. He says “JFM is the sharing of products, responsibilities, control and decision-making authority over forest lands between forest departments (of government) and local user groups.”

Today JFM strategy is in operation in all the states except U.P., Assam, Nagaland and Manipur but contents vary from state to state. Timber sharing basis is- fuel wood in Bihar, timber for subsistence use in Orissa, upto 60 percent of net commercial timber revenues to participating communities in Rajasthan. Likewise management units also differ- panchayats in Orissa, Village Development Committees in Bihar and Forest Protection Committees registered under Indian Societies Act in Haryana and Rajasthan. National resolution states that participating communities should be involved for a ten year period with option to renew the management agreements. Some common features of National and State notifications are:

i. all resolutions provide user groups with usufructs rights only. Land is not to be allocated or leased;

ii. resolutions generally recommend village level committees as functional management groups;

iii. village level groups are to operate under the supervision of forest department officials;

iv. in most resolutions the tenurial period for usufructs rights is not mentioned; and

v. most of the resolutions limit community management and benefits to degraded forest lands.

The working of JFM schemes in several parts of the country is being closely monitored and reported upon, but it is too early for any conclusive evaluation of the initiative. So far there have been mixed reactions. For example JFM is highly successful in West Bengal, but in Parlakhamundi division in Orissa villagers are reluctant to allow afforestation on the
village commons as they would have to walk further to graze their cattle (Pathak, 1994). The peasants of Mathwad have been repeatedly petitioning against afforestation. When a plot of forest land affecting the neighboring villages of Bhitara, Sakharja, Khudar, Sirkhari and Anjanwada was to be put under protection, the villagers pleaded against it. 

Therefore we will have to wait before reaching any conclusion. Meanwhile the government in order to further the philosophy started a scheme called “Association of Scheduled Tribes and Rural Poor In Regeneration of Degraded Forests”. The scheme was started in 1992 - 93 on pilot basis with 37 projects in nine states, namely Andhra Pradesh, Bihar, Gujarat, Maharashtra, Rajasthan, Orissa, West Bengal, Madhya Pradesh, and Karnataka (Performance Budget, 1998-99).

Another project “Formulation of National Forestry Action Programme” has been signed with UNDP and FAO in June 1993 as one of the many strategies to operationalize the National Forest Policy 1988. The objective of the project is preparation of “National Forestry Action Programme” and long term, medium term and short term perspective plans as well as identification and quantification of investment and technical assistance proposal for financial assistance in line with the Forest Policy 1988. Implementation of this plan is assumed to contribute to sustainable development and use of forest resources (Ninth Five-Year Plan 1997 - 2002 and Annual Plan 1997 - 98).

Whether one particular strategy succeeds or fails is dependent on various factors, one thing is a fact that forest cover is not increasing, it is actually decreasing and to reach the policy objective of one-third area of the total land area under the forests, we will have to make some serious efforts.
NOTES

1. The present report is based on the Indian Remote Sensing Satellite IRS-1B Data.

2. State-wise data of forests is given in the Appendix.

3. ‘Modern Times’ refers to the British period here, because of the scope of the study and also because, before that forest practices did not pose much problem due to their inherent sustainable approaches.

4. At that time, administration was in the hands of the Directors of East India Company.


6. The Indian Forest Act of 1865 was the first attempt at asserting state monopoly rights over forests and its provisions were made more comprehensive and stringent by Indian Forest Act of 1878.

7. The legal basis for the states acquisition of proprietary rights over forests is questioned by C. Singh (1986).

8. It is interesting to note that this was imposed on the people who were ignorant of Western concept of property.

9. Dr. J.A. Voelcker, a German expert, was invited by the Government of India to examine the conditions of Indian agriculture and suggest ways to improve it. He, in his ‘Report on the Improvement of Indian Agriculture’ in 1893, while dealing with wood placed highest emphasis on creation of ‘Fuel and Fodder Reserves’.

10. These plans gave detailed accounts of the forest working. The principle of ‘sustained yield’ implied that the annual cut did not exceed the annual increment in forest.

11. A major rebellion took place in Bastar state in 1910. The tribals in order to draw attention to their grievances, went on hunger strike outside the King’s place at Jagdalpur. Simultaneously police stations and forest outposts were burnt, stacked wood looted and campaign against outsiders. For details see Gadgil and Guha (1993).

12. In ‘taungya’ method of agro-silviculture developed in Burma in 19th century - ‘jhum’ cultivators were allowed to grow food crops in the forest provided they grew timber trees alongside.
13. For instance, the natural regeneration of ‘Deodar’ in Himalayas, the artificial regeneration of ‘Teak’ in south India and the establishment of natural regeneration of ‘Sal’ in various parts of the country. A ‘Cho’ is a sandy stretch exposed by a change in the course of a river.

14. Even in 1981-82, 94.8% of the total forest area was state owned, 2.7% was owned by corporate bodies and 1.1% was owned privately. For details see Desai (1991).

15. Some of the large Princely states like Travancore, Hyderabad, Mysore and Jammu-Kashmir had organized forest departments and introduced fair measures of regularity in their forest working and some like Bhopal and the states in central and eastern Indian states agency had engaged trained foresters and brought their forests under a reasonable state of working.


17. For details see First and Second Five Year Plans.

18. GOI, Third Five Year Plan, Planning Commission, New Delhi.

19. Afforestation was mainly monoculture plantations of fast growing commercially valuable species like Eucalyptus and tropical Pine. For detail see Guha (1983).

20. Inserted by the Constitution (42\textsuperscript{nd} Amendment) Act 1976, 5.57 (w.e.f 3-1-1970 as 17A) in Concurrent list.

21. This represents a little over 5% of the forest area, it may be argued that this is not a large amount. However, this rate of diversion is significant given that Forest Policy 1952 proposed to increase the area under forests.


23. The conservationists’ position is argued by Matthai, Report of the Matthai Committee on Forest.

25. This process is described by Matthai who comments that the slow pace of policy reform “is a sad commentary on the dilatory way in which such an important subject has been handled by Government”. Matthai, op. cit, p. 152.

26. In Haryana the slogan in the 1980s had been: “Plant one acre under Eucalyptus and pocket Rs. one lakh after six years or earn upto Rs. hundred a tree”.

27. The two experiments were carried out in Dhar-Bamadia micro-watershed and Patiya village in southern Rajasthan, they are inhabited mostly by Bhils.


30. Particularly the programme of Joint Forest Management which was initiated in 1990 to consolidate co-management schemes which had been started by a number of State Governments. The social forestry programmes have been a central component of the State’s efforts at afforestation.

31. The Eighth Five Year Plan document, in the Chapter on Environment and Forests, lists the “need to decentralise control over nature and natural resources” as a major task. GOI, *Eighth Five Year Plan* (New Delhi: Planning Commission, Government of India, 1992), p. 92. It further elaborate that “Decentralisation, in the context, means transfer of control from the Government to the people collectively” (Ibid., p. 94).

32. The alternative approach incorporates the use of the local knowledge of resource users to determine ecological steps. 33. The Bill does not define carrying
capacity, despite explaining a number of new concepts in section 2, which provides the interpretation of the terms which are used in the document.

34. Under section 17 and 18, appeals can be made to the District Court and High Court, respectively, against claims which are rejected at the time of forest settlement. Under section 52C, appeal can be made to the Court of Sessions against the confiscation and seizure of property belonging to persons accused of forest offences.

35. Pathak provides anecdotal evidence of such misuse of powers by forest officials. Pathak, Contested Domains, pp. 89-93. While corruption has often been cited as a major issue, there is little systematic evidence about the extent to which it is prevalent in the Forest Department.

36. The explanatory notes to CFONE claim that the chapter on village forests is to be read as conforming to the participatory emphasis of the 1988 Forest Policy. Guha, “Forestry Debate and Draft Forest act”, p. 2195.

37. One indication of this is the number of workshops and seminars organised by the Ministry of Environment and Forests on the theme of Joint Forest Management. The Annual Report of the Ministry make explicit reference to the programme. GOI, Eighth Five Year Plan, p. 94.

38. Gadgil and Guha, This Fissured Land, pp. 230-2. It is reported that the profits from the trade in tendu leaves in Madhya Pradesh increased from Rs. 52 crore in 1988 under the policy of private trade to Rs. 275 crore after the elimination of this practise. N.K. Singh, “A New Leaf: Patwa retracts tendu policy”, India Today (February 15, 1991), p. 58. These profits were supposed to be shared with the gatherers, but they have yet to be distributed to the primary village tendu leaf cooperatives.


41. N.C. Saxena, “Women and Wasteland Development in India: Policy issues”, in

42. MEF, National Forest Policy Resolution 1988, Section 4.9.

43. Some preliminary analysis and field experiences may be found in D. Arora (1994).

44. Pathak (1994) has argued that forest dwellers have been peasants for long. For details see Pathy, J. (1984). *Tribal Peasantry: Dynamics of Development*. New Delhi: Inter India Publication.