



Policy that
works for forests
and people



Forest Policy in India

N.C. Saxena

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World Wide Fund for Nature – India

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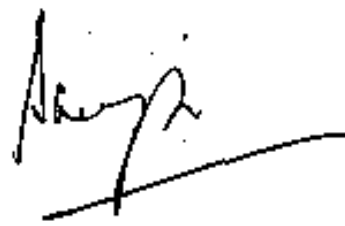
Foreword

This publication is the product of a collaborative forest policy research project between WWF-India and the International Institute for Environment and Development, UK. It is timely in the sense that it contributes to the National Forest Policy debate and the implementation of Joint Forest Management in India. The heavy dependence of village communities upon forests for their basic needs, and a history of exclusion of the local communities from forests, has led to widespread degradation and loss of forest cover. The emerging focus on sharing of responsibility for the management of forests and forest produce between the State and local communities in recent years is a much needed shift from the earlier colonial policy of commercial exploitation.

Twenty three per cent of India's geographical area has been declared as forest lands, which are mostly under the control of the government agencies. Today, there are about 100 million forest dwellers in the country living in and around forest lands and another 275 million for whom the forests have continued to be an important source of livelihood and means of survival. Dr. N.C. Saxena argues that the survival of forests can be ensured only by meeting the needs of the people, and by involving the people in its management. He presents a historical review of various forest policies which have been tested in India, and analyses their impact on both forests and the people, because current issues and dilemmas can be understood only in a historical context.

Dr. Saxena also points out that despite the various steps taken in recent years to promote people's participation, there is still a continuation of subsidised supply to industry and stepmotherly treatment to the forest dwellers. WWF-India has been actively involved in blocking an attempt to lease forest lands to the paper industry.

The move towards decentralisation and democratisation of forest management in India has started a debate among the forest officers, NGOs researchers and academicians and it is hoped that this study will be an important input into the debate.



(Samar Singh)

Secretary General, WWF-India

About WWF-India

The World Wide Fund for Nature – India (WWF-India), formerly known as the World Wildlife Fund – India, was established in 1969 as a Charitable Trust under the Bombay Public Trusts Act of 1950. Today, WWF-India is the country's largest conservation NGO with a network of State/Divisional and Field Offices spread across the country. Its Secretariat is in New Delhi. The organization is part of the WWF family worldwide, with 25 independent WWF National organizations. The coordinating international Secretariat, the WWF International, is located at Gland in Switzerland.

WWF-India started life as a modest wildlife conservation organization with a focus on protecting particular species of wild fauna. Over the years, the perspective broadened to encompass conservation of habitats, ecosystems and support to the management of the country's protected areas network. In 1989, WWF-India articulated its Mission as follows, to suit India's specific ecological and sociocultural circumstances:

"The promotion of nature conservation and environmental protection as the basis for sustainable and equitable development".

The WWF-India's Mission has five broad programme components:

- Promoting India's ecological security; restoring the ecological balance
- Conserving biological diversity
- Ensuring sustainable use of the natural resource base
- Minimizing pollution and wasteful consumption
- Promoting sustainable lifestyles:

In achieving its Mission, WWF-India uses the following *main programme methods*: **field programmes** that serve as demonstration projects, **public policy analyses and debates** through independent research, consultation, and campaigns, **education** activities for key target groups including the youth, professionals and administrators; **communication** through multimedia approaches; **networking** and supporting the work of fellow NGOs in India, and **mobilizing** necessary financial, scientific and technical resources.

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Forest Policy in India

1. Introduction

Twenty three per cent of India's geographical area has been declared as forest land, and is mostly under the control of the government. Of this only about half has a crown density of more than 40 per cent, whereas 15 per cent of area designated as forests has less than 10 per cent of crown cover. Forests are not spread evenly in India, but are concentrated more in the poorer regions in India of low agricultural productivity and poor soils, with heavy tribal concentration. India's forests, generally speaking, have not been uninhabited wilderness. Even in the remote forests people have either been living traditionally or were brought by the Forest Department in the colonial period and settled there to ensure the availability of labour. Today, there are about 100 million forest dwellers in the country living in and around forest lands and another 275 million for whom forests have continued to be an important source of livelihoods and means of survival (Lynch 1992).

Considering the heavy dependence of the people on forests, this paper argues that forests can be sustained only if the forest policy is geared to meeting the needs of the people, and involves them in its management. For almost a century and until 1988, the policy was to use these lands for commercial purposes, and to look upon the people as a liability. This led to deforestation, which increased rural poverty and unemployment on the one hand, and social unrest and conflict over rights on the other. A shift in policy occurred in 1988 as planners recognised the difficulty of excluding people from forests, although the policy instruments of improving the effectiveness of communities in local protection are still not very well understood. This paper presents a historical review of various forest policies which have been tried in India, and analyses their impacts on both forests and the people, because current issues and dilemmas can be understood only in a historical context. The paper then discusses the unresolved issues in the implementation of the current forest policy, and offers some practical solutions.

It may however be clarified here that there is no unanimity in India today how forests should be managed. The view point espoused in this paper is supported by social activists, academics, NGOs, and a few administrators, but equally strong arguments are made by other interest groups, such as foresters and industry, who will like to exclude the people from forest management, advocate meeting their demands from non-forest lands (the social forestry model 1973-88) or alternate energy sources (such as biogas), and continue using productive government forests for industrial purposes. The debate subsistence vs. commerce is rooted in history, and therefore

we begin by analysing the different policy frameworks which have existed prior to the current forest policy.

2. Colonial forest policy in India

At the beginning of the 19th century more than two-thirds of the land mass in India was lying uncultivated (Singh, 1986). As lands close to village habitations were enough to satisfy the subsistence needs of the people, forests remote from habitations were generally under-exploited. Often these virgin forests were concentrated in infertile highlands, where lived India's indigenous communities, called adivasis or tribals, who had been forced in the medieval period to seek refuge in forests from fertile lands by more aggressive communities.

The British presence from the late 18th century onwards started making a difference to land and forest usage in India. Guided by commercial interests the British viewed forests as crown lands, limiting private property rights only to continuously cultivated lands. On forest lands, 'human resource-use practices such as grazing, product collection, and temporary or rotational swidden farming were rejected as a basis for ownership, even when taxes were paid' (Poffenberger and McGean, 1996: 59). Sometimes such forests were under community management, and their annexation by government alienated the people from their erstwhile common resources, leading to their overuse by the same people. Colonial forest policy provided that declaration of an area as government forest should not abridge or affect any existing rights or practices of individuals and communities, who were given three months' time to contest reservation. In actual practice, however, the illiterate communities had limited capacity to comprehend the state rulings, and thus by the turn of the present century some 20 million hectares (m ha) of land was brought under a category of forests called Reserve forests (Stebbing 1926). These were exclusively managed by the Forest Department (FD) for railways and other commercial use; and the surrounding villagers had no rights other than the ones explicitly permitted by the State (Tucker 1988: 140). The other and inferior category of forest was called protected forests¹¹ (PF), also managed by the Forest Department, but the people had rights in them, such as grazing and gathering fruits and other produce of the trees, specifically for household use, but not for sale.

Britain's loss of power after the First World War and appointment of a Forestry Commission in Britain in 1921 led to a reappraisal of the importance of forests. The Commission was established with a mandate to ensure a flow of forest products from within the Empire. From this period large areas of natural forest in India were replaced with uniform plantations of marketable species. This policy was justified in the following terms (Stebbing 1927, as quoted in Hobbey 1996):

The natural forests, frequently under-stocked and composed of large number of species, many of which had little or no marketable value,

were to be replaced by a comparatively small number of valuable species. In 1927-28 it was calculated that plantations would have values seven to forty times those of the original forests.

While uncultivated land remote from habitation was declared by the government as forests and managed under the new forest regulations, lands close to habitation were governed by state specific laws (Ribbentrop 1900: 86-122), and left as open access lands to meet the needs of cultivation and biomass. This buffer to some extent prevented over-use of forests, but with increase in both population and area under cultivation in the post-Independence period, it was no longer sufficient to stop pressure of people on forests. Most village commons, due to lack of management and interestⁱⁱⁱ from all concerned rapidly deteriorated and were unable to meet local demands for fodder and fuel, leaving the villagers with no other recourse, but to turn to forests which increased pressure on them.

3. Forest policy in Independent India

At the time of the country's independence in 1947 the areas under reserve and protected forests were 26 and 15 m ha respectively. Since then the net^{iv} area under the control of the Forest Department has increased to 67 m ha (see Table 1) through several processes.

First, after the abolition of the princely states and landlordism, all uncultivated lands under their control became vested in the State. The larger tracts were handed over to the Forest Department generally as PF, and the rest was vested with the Revenue Department^v.

The second process of extending government control over forests was through acquisition of private forests. These laws were passed by the various state governments in the two decades following Independence. Massive felling of trees took place from these forests by the owners because of the fear that these forests would be nationalised, as indeed they were in the 1950s and 60s. For several years after this take-over an impression has

	1950-51	1988-89
Reporting area	284 (100)	305 (100)
Unculturable/Not available for cultivation	47 (16.5)	41 (13.4)
Area under forests	41 (14.5)	67 (22.0)
Cultivated area	118 (41.6)	142 (46.6)
Culturable area + grazing lands + groves	50 (17.6)	31 (10.2)
Fallow land	28 (9.9)	24 (7.8)

Figures in parentheses show percentages. (GOI 1992)

Period	Main Focus
1. 1952-1976	Forests for timber and industry, neglect of village commons
2. 1976-1988	Commercial forestry to continue with greater vigour on forest lands, but more funds for social and farm forestry on non-forest and private lands to meet people's demands
3. From 1988 onwards	Joint Forest Management, and radical shift from the earlier revenue orientation, conservation as a priority

continued in the villages that if trees are planted on private lands, not only would the trees belong to the Government but land on which such plantation takes place would also revert to the Government. Even as late as 1987 a SIDA team promoting farm forestry in south Bihar encountered tribals' fears that if they planted trees their lands would be taken away by the government (GOB, 1987). The fear was not baseless as the Bihar Private Forest Act and similar other enactments did precisely this in the past, by "nationalising" private trees.

There have been three forest policy pronouncements in India since independence; the 1952 Forest Policy, The National Commission on Agriculture (NCA) 1976, and the 1988 Forest Policy. The broad distinctions in the three policies are shown in Table 2.

3.1 The first post-independence declaration

The Forest Policy, 1952 declared that village communities should in no event be permitted to use forests at the cost of 'national interest', which was identified with defence, communications and vital industries. It wanted forests to be used to produce valuable timber for industry and other national purposes. The policy stated,

The accident of a village being situated close to a forest does not prejudice the right of the country as a whole to receive benefits of a national asset. The scientific conservation of a forest inevitably involves the regulation of rights and the restriction of the privilege of users depending upon the value and importance of the forest, however irksome such restraints may be to the neighbouring areas..... While, therefore, the needs of the local population must be met to a reasonable extent, national interests should not be sacrificed because they are not directly discernible, nor should the rights and interests of future generations be subordinated to the improvidence of the present generation.

USAID, 1991, *Maharashtra Social Forestry Project*, No. 386-0478, Final Evaluation Report, USAID, New Delhi.

WORLD BANK, 1988, *India: Wasteland Development Review*, World Bank, Washington.

WRI, 1990, *World Resources, 1990-91*, World Resources Institute, Oxford University Press, Oxford.

¹ There is no uniformity in the number of dependents as assessed by different authorities. One reason for this variation could be that dependence has not been rigorously defined in these studies.

² Such protected forests declared under the Indian Forest Act, 1927 which were basically for local use need to be distinguished from protected areas (PAs) for wildlife.

³ Analysis of efforts made by the locals in preventing their deterioration has important implications for assessing the potential for village management of Forest lands, and has been discussed in Chapter Three.

⁴ The increase is notwithstanding the fact that between 1952 and 1980, an average 154,571 ha per year of Forest land was converted to non-forest use, mostly irrigation and power dams, and agriculture. Since 1980, according to official data, this average has come down to 14,351 presumably due to the stringent provisions of the Forest Conservation Act, 1980 (Shyam Sundar 1993: 24). The validity of the latter figures has been challenged, see Saxena (1995a).

⁵ This Department is in charge of policies pertaining to non-forest public and private lands. It is called Revenue Department as land revenue was the principal source of state revenues before Independence.

⁶ Both figures are not adjusted for inflation.

⁷ Even wage employment becomes insignificant after the first year of plantation.

⁸ The contribution of forests to state revenues, similar to land revenue, has been falling dramatically since Independence, because of expansion of economic activity outside land. This has enabled the states to ban logging in many regions, especially after 1980 under the pressure of environmental lobbies.

⁹ This empowers the Government of India to legislate despite the fact that the administration of Forests continues to be with the state governments. Forests were centrally administered in India only upto 1935.

^{*} This is distinct from the Forest Conservation Act, 1980, a Government of India legislation which is binding on all state governments. For contradictions between the Forest Conservation Act and the Forest Policy 1988, see Saxena (1995a), although both pronouncements emanate from the same authority.

Forests of Asia, Issues in Development, November, WRI, Washington.

NCHSE, 1987, *Documentation on Forest and Rights — Volume One* (mimeo), National Centre for Human Settlements and Environment, New Delhi.

OSTROM, EUNOR, 1994, *Neither Markets nor State: Governance of Common Pool Resources in the 21st Century*, IFPRI, Washington.

POFFENBERGER and McGEAN, B. (eds.), 1995, *Village Voices, Forest Choices*, Oxford University Press, New Delhi.

PRIA, 1984, *Deforestation in Himachal Pradesh*, Society for Participatory Research in India, New Delhi.

RBI, 1956, *All India Rural Credit Survey, Volume 1*, Reserve Bank of India, Bombay.

RIBBENTROP, B., 1900, *Forestry in British India*, Supdt Govt. Press, Calcutta.

RIDDELL, JAMES C., 1987, *Land Tenure and Agroforestry: A Regional Overview*, in RAINTREE, J.B. (ed.), *Land Tenure and Tenure*, ICRAF and the Land Tenure Center, Nairobi and Madison.

RIZVI, S.S., 1994, *Managing the Forests — Herdsman's Way*, *Wastelands News*, May-July, Society for Promotion of Wastelands Development, New Delhi.

SAXENA, 1995, *Forests, People and Profit*, Natraj, Dehradun, India.

SAXENA, N.C., 1994, *India's Eucalyptus Craze: The God that Failed*, Sage, New Delhi.

SHYAM SUNDAR, S., 1993, *India*, in FAO 1993 *Forestry Policies of Selected Countries in Asia and the Pacific*, FAO, Rome.

SIDA, 1992, *An evaluation of the SIDA supported Social Forestry Projects in Tamil Nadu and Orissa, India*, Swedish International Development Agency, December 1992.

SINGH, ASHBENDU, 1992, *Trends in timber and pulp import*, in AGARWAL, ANIL (ed.), *The Price of Forests*, Centre for Science and Environment, New Delhi.

SINGH, CHATRAPATI, 1986, *Common Property and Common Poverty: India's Forests, Forest Dwellers and the Law*, Oxford University Press, New Delhi.

SINGH, G.B., 1987, *Agroforestry in the Indian subcontinent*, in STEPLER, H.A and P.K.NAIR (eds.), *Agroforestry: A Decade of Development*, ICRAF, Nairobi.

SINGH, SAMAR and ARVIND KHARE, 1993, *People's Participation in Forest Management*, *Commonwealth Forestry Review*, 72, 4, 279-83.

STEBBING, E.P., 1926, *The Forests of India*, John Lane, London.

TEJWANI, K.G., 1987, *Agroforestry practices and research in India*, in GHOLZ, HENRY (ed.), *Agroforestry: Realities, Possibilities and Potentials*, Marinus Nijhoff, Dordrecht.

TUCKER, RICHARD P., 1988, *The Depletion of India's Forests under British Imperialism*, in DONALD WORSTER (ed.), *The Ends of the Earth: Perspectives on Modern Environmental History*, CUP, Cambridge.

- GADGIL, M., 1989, *Deforestation: Problems and Prospects*, Lokayan 7(4), July-August.
- GADGIL, M. and GUHA, R., 1992, *This Fissured Land: An Ecological History of India*, OUP.
- GOB, 1987, *Study on the Participation of Women in the Social Forestry Project* (mimeo), March, Forest Department, Government of Bihar, Patna.
- GOI, 1976, *Report of the National Commission on Agriculture, Part IX, Forestry*, Department of Agriculture and Cooperation, Government of India, New Delhi.
- GOI, 1981, *Development of Forestry and Forest Products: Country Profile India* (mimeo), Ministry of Agriculture, Government of India, July 1981, New Delhi.
- GOI, 1987, *Background Note Prepared for the Seminar on Welfare and Development of Tribals* (mimeo), Ministry of Tribals, Government of India.
- GOI, 1989, *Indian Agricultural Statistics*, Department of Agriculture and Cooperation, Government of India, New Delhi.
- GOI, 1992
- GOI, 1993, *Annual Report*, Ministry of Environment and Forests, Government of India, New Delhi.
- GUHA, RAMCHANDRA, 1983, *Forestry in British and Post-British India*, Economic and Political Weekly, October 29.
- GUHA, RAMCHANDRA, 1991, *The Unquiet Woods*, Oxford University Press, New Delhi.
- GUHA, RAMCHANDRA, 1994, Economic and Political Weekly, 20th August.
- GUPTA, ANIL, 1984, *Socio-Ecology of Landuse Planning in Semi-arid Regions*, Working Paper No. 525, August, Indian Institute of Management, Ahmedabad.
- HIREMATH, S.R., S. KANWALLI and S. KULKARNI, 1994, *All About Draft Forest Bill and Forest Lands*, Samaj Parivartan Samudaya, Dharwad.
- HOBLEY, MARY, JEFFREY Y. CAMPBELL and ANUPAM BHATIA, 1995, *Community Forestry in India and Nepal, Learning from Each Other*, Himalayan Paryavaran, 78-97.
- JODHA, N.S. 1989, *Management of Common Property Resources in Selected Areas of India*, ICIMOD, Nepal.
- JONSSON, S., 1992, *The Wood Markets of Orissa*, ISO/Swedforest, New Delhi.
- JONSSON, STEFAN and AJAI RAI, 1994, *Forests, People and Protection: Case studies of voluntary forest protection by communities in Orissa*, ISO/Swedforest, New Delhi.
- KHARE, ARVIND and RAO, A.V.R., 1991, *Products of Social Forestry — Issues, Strategies and Priorities*, Wastelands News 6(4): 7-17, Society for Promotion of Wastelands Development, New Delhi.
- LEACH, GERALD, 1987, *Household Energy in South Asia*, International Institute for Environment and Development, London.
- LYNCH, OWEN J., 1992, *Securing Community-based Tenurial Rights in the Tropical*

Bibliography

AGARWAL, ANIL and S. NARAIN, 1991, *Towards Green Villages*, Centre for Science and Environment, New Delhi

AGARWAL, ANIL, 1987, *Between need and greed - The wasting of India; the greening of India*; in ANIL AGARWAL, DARRYL D'MONTE and UJWALA SAMARTH ed; *The Fight For Survival*; Centre for Science & Environment, New Delhi.

ANDERSON, ROBERT and WALTER HUBER, 1988, *The Hour of the Fox: Tropical Forests, The World Bank and Indigenous People in Central India*, Vistaar Publications, New Delhi.

BLOCKHUS, JILL M., MARK DILLENBECK, JEFFEREY A. SAYER and PER WEGGE, 1992, *Conserving Biological Diversity in Managed Tropical Forests*, IUCN/ITTO, Switzerland.

BOWONDER B., PRASAD, S.S.R., and UNNI, N.V.M. 1986 Fuelwood Prices in India: Policy Implications *Natural Resources Forum* 10(1): 5-16.

BOWONDER, B., S.S.R. PRASAD, and N.V.M. UNNI, 1988, *Dynamics of Fuelwood Prices in India: Policy Implications*, *World Development* 16(10): 1213-1229.

BRARA, R., 1987, *Shifting Sands: A Study of Rights in Common Pastures*, IDS, Jaipur

CHAMBERS, ROBERT, N.C. SAXENA, and TUSHAAR SHAH, 1989, *To the hands of the poor: water and trees*, Oxford and IBH, New Delhi and Intermediate Technology, London

CSE, 1985, *The State of India's Environment 1984-85: The Second Citizen's Report*, Centre for Science and Environment, New Delhi

CSE, 1995, *Should Paper and Pulp Industry get State Forest Lands for Captive Plantation?* Centre for Science and Environment, New Delhi

DASGUPTA, SUPRIYA, 1988; *Understanding the Tribal Dilemma; Tribal Women and Forest Dweller Economy*, Media Centre, Bangalore

DN, 1988, *Factors in the Jharkhand Movement*, *Economic and Political Weekly*, 30th January, 1988.

DOVE, MICHAEL R., 1992, *Joint Forest Management in India, Report to Ford Foundation*, New Delhi.

FAO/UNEP, 1981, *Tropical Forests Resources Assessment Project, Forest Resources of Tropical Asia*, Volume 3, FAO, Rome.

FERNANDES, W. and S. KULKARNI, 1983, *Towards a new Forest Policy*, Indian Social Institute, New Delhi.

FSI, 1993, *The State of Forest Report*, Forest Survey of India, Dehradun

FURER-HAIMENDORF, C. VON, 1982, *Tribes of India: The Struggle for Survival*, Oxford University Press, New Delhi.

GADGIL, M. and R. GUHA, 1992, *Ecological History of India*, OUP, New Delhi.

10. Concluding remarks

After 1993 commitment of the Government of India to new Forest Policy and JFM has somewhat weakened and these are often used as rhetoric to create a favourable public image and to attract foreign funds. The Ministry of Environment and Forests moved a proposal to amend the forest policy to permit leasing of forest lands to industry but it was not approved by the Cabinet for fear of reprisals from grassroot organisations. The Ministry has also turned a blind eye to the continuation of subsidised supplies to industry and step-motherly treatment to forest dwellers. It is even supporting leasing of forest lands by state governments to industry via the Forest Development Corporations. It also prepared a new Forest Bill designed to reduce the control of people over forests. The most draconian provision of the new Bill is that village forests cannot be constituted from reserve forests, whereas joint forest management cannot be applied on the reserved category. Thus about two-thirds of the forest area (as 46 out of 67 m ha of forest is declared as reserve forests) would not be available for management by the people. At the same time, people's rights of entry and usage in reserve forests will now be subject to carrying capacity, and can be 'rationalised' by Government of India. Further, sacred groves can be acquired by the government. The proposed Act also discriminates against nomadic groups, as it debars them from exercising any rights on forest lands.

Recently, the Government of India sought to dilute people's participation by introducing the concept of van Mukhias who will act as intermediary on behalf of forest officials and receive ten percent of forest revenues. The said GR has still (25.2.97) not been withdrawn, although it is not being pursued vigorously.

To sum up, the evolution of forest policy and its changing orientation over time can best be understood in terms of the competing claims and relative influence of the various interest groups identified above. Four groups seem to have had a major impact over the last hundred years: conservationists; foresters; industrialists; and the social activists (Guha 1994). From 1864 to 1988, forest management strategies were markedly biased in favour of commercial and industrial exploitation, with little attention paid to sustainability or to social justice. However, in the last one decade, as the forestry debate has intensified, State has increasingly responded to the claims of forest dwellers voiced by the activists and NGOs. Their call for a decentralised and democratic system of forest management has finally been accepted, at least in theory, through the programme of joint forest management or JFM. The 1994 Bill seems to be dominated by concern for conservation. Ultimately it is not clear which voice will predominate, although recent developments show that the social activists are losing out after the liberalisation era began in 1991.

**Table 5:
CONTRADICTIONS IN THE NEW FOREST POLICY**

<i>Provisions of the policy</i>	<i>Contradicted by</i>
Minor forest produce should be protected, improved and their production enhanced (section 3.5).	Forest Conservation Act prohibits plantation of horticulture crops, palms, oil bearing and medicinal plants on forest lands, unless prior permission of the Government of India has been taken.
Degraded lands should be made available on lease on the basis of a tree patta scheme to individuals and institutions (section 4.2.4).	Forest Conservation Act bans assignment or lease of forest land to the people or institutions not wholly owned by government.
Rights and concessions enjoyed by the tribals should be fully protected (section 4.3.4.3).	Rights and concessions, including grazing, should always remain related to the carrying capacity of forests (section 4.3.4.1).
Domestic requirement of tribals should be the first charge on forest produce (section 4.3.4.3).	MFPs and substitute materials should be made available through conveniently located depots at reasonable prices (same section).
Land laws should be modified to facilitate individuals to undertake tree farming on their own land (section 4.2.4).	Appropriate regulations should govern the felling of trees on private holding (same section).

lands they cultivate, as these are forest lands, according to government records. The Ministry of Agriculture, vide their circular dated 23rd March, 1984 advised the states to confer on them heritable but inalienable rights, but no progress has been achieved. The Madhya Pradesh government passed a law to give them security of tenure, but the Forest Conservation Act, 1980 has struck down this law. The result is that the tribals, although not being displaced from lands that they have cultivated for decades, cannot get loans from banks as they are not legal owners over this land.

Similar problem has been observed in the eastern tarai districts of U.P., where the FD had settled a large number of poor villagers on forest lands to do Taungia plantations. For the last one hundred years, they were cultivating forest lands in the first few years of raising plantations as well as looking after the new plants. However, despite the fact that recorded rights exist showing their possession over forest lands for cultivation, the Forest Conservation Act has denied to them any right now. Coupled with the fact that the practice of Taungia has been given up, these poor people are now without work or assets.

Policy is to be seen as a dynamic tool which should be adjusted to accommodate diversity. A good policy process also requires careful planning and skilled staff, together with mechanisms to learn from mistakes.

9. Policy and legislation

As forests have been put since 1976 in the concurrent list of the Indian Constitution, and the Indian Forest Service manning all superior bureaucratic positions is an all-India service which has traditionally looked up to Government of India that controls its recruitment and service conditions, the ideas contained in these policy pronouncements carry a great deal of weight. However, many factors have limited their implementation. Firstly, these were all non-statutory and advisory statements issued by the Government of India, not backed by law⁸. Secondly, actual implementation of forest projects and policies is under the control of the state governments, who may have different political compulsions from the Government of India. Thirdly, what gets implemented in the field is generally what is provided in the budget and funded, and therefore many policy prescriptions requiring budgetary support may remain unimplemented, if not supported by matching funds. Fourthly, bureaucracy in India is fairly powerful and its own predilections may act as a filter to what is demanded of it by governments. Radical and swift changes in policies may therefore take more time in their implementation, if these are found unconvincing by the officers. It is generally believed that the Forest Service emotionally identified itself with the first two sets of policies, but has reservations about the 1988 policy, and this has hindered its translation into action.

Fifthly, there are a number of contradictions within the new Forest Policy and with the Forest Conservation Act, both of which were enacted in December, 1988. These are summarised in Table 5.

There are two provisions of the Forest Conservation Act which need to be taken note of. First, it bans assignment or lease of forest land to the people; and second, it prohibits plantation of horticulture crops, palms, oil bearing and medicinal plants on forest lands, unless prior permission of the Government of India has been taken. These provisions should be read with the new Forest Policy, which looks down upon gathering of forest produce by stating that "these (MFPs) and substitute materials should be made available through conveniently located depots at reasonable prices". It also wishes to curtail the rights and concessions of forest dwellers by relating them to the carrying capacity of forests. The new Policy expresses concern for ecology, but read with other provisions and the Act it appears that environment is being used as a new excuse to keep people out of forests, just as "vital industrial needs" were considered enough of a justification to deny legitimate aspirations of the poor in the past.

Legal problems in forest villages — In Madhya Pradesh, over 100,000 tribal families live in about 500 forest villages but possess no rights to the

**Table 4:
ANALYSIS OF GOVERNMENT ORDERS
AND SUGGESTED CHANGES**

<i>Existing</i>	<i>Suggested changes</i>
No thinking on tenurial issues	Protecting communities should have clearly defined property rights over forests in comparison to distant villages
FPC is a creation of Forest Department	Should be an independent and spontaneous entity
FPC has been given mainly protection role, for which wages are delayed and in kind, control and authority is with FD.	FPC should manage and control all natural resources within their domain. There should be genuine partnership
NTEP markets distorted by government regulations	Markets should be freed from over-control
No thinking on changing silviculture	New silvicultural practices required
Focus is on forests	Focus should be on sustained benefits to the people, and on empowerment
No deviation from norms, membership determined by government order	Flexibility and decentralisation should leave many decisions to the judgement of the village
No specific provision about the short-term suffering of disadvantaged groups, such as women and headloaders	Sensitivity on gender and poverty issues is needed

(Saxena, 1997)

are willing to entrust protection to the communities, but hesitate in involving them in management and control of government forests. Unless serious efforts are made to trust the communities with control functions, peoples' efforts in protection may not be sustained for long. Thirdly, government resolutions tend to over-prescribe what communities may or may not do, leaving little flexibility for them to adjust to local situation. Fourthly, the main support to JFM has come so far from environmentalists, academicians, NGOs, and the Ford Foundation in India. While their support is crucial in documenting the dynamics of community behaviour in different ecological conditions and throwing up of policy issues, the hold of this class of people on instruments of policy formulation is rather weak. In addition to forest bureaucracy which is often hostile to the idea of empowering the people, politicians too have not put JFM high on their agenda. They see greater political advantage in espousing schemes which bring individual benefits.

Department to modify the terms of the grass lease pricing and payment system. The need for autonomy and democratic process at the community level are currently not reflected in the state resolutions, but should be given careful consideration when these documents are revised.

Another important element is the response of FD staff to FPC's grievances. In the initial stages, FPCs look forward to getting support from the Forest Department in booking offenders, negotiating with other villages/departments etc. FPCs also need flexibility, and field staff should not throw rule books at them. Many protecting villages have complained that FD unilaterally overrules their decisions without explaining the reasons thereof. In some places protection is preceded by cleaning, weeding etc. for which the Forest Department pays wages to the labour. This must change and the Forest Department must hand over the responsibility of handling funds to the FPCs. This would make financial dealing more transparent and foolproof against misuse of funds. FPCs will also develop a greater sense of accountability in the process.

For instance, in Gujarat the committees raided the houses and confiscated illegally poached wood. When they wanted to conduct auction of the seized material, not only did the FD not permit them to utilise the money so received, but it objected to the place of auction too, pointing to the rules that auction must be conducted at the Range Forest depot only.

With the exception of clauses in the National and West Bengal resolutions, most state guidelines do not address the long-term rights of participating communities. Clear tenure security enhances the authority of community management groups to carry out protection activities, especially when under pressure from neighbouring villages and private interest groups. It is necessary that the time-frame for such agreements is clear, as well as the basis for extensions. It may be appropriate for the time period of the agreement to correspond to the production cycle (rotation) of the primary products.

8.8 Summing up

We have in this section referred to some of the shortcomings of government policy in the way JFM is being implemented in the field. A short summary of recommendations is given in Table 4.

Despite evidence from several states highlighting the problems discussed in this section, state governments have hardly taken any ameliorative action in removing the constraints of policy, and initiating measures on the lines listed in the above Table. Such an indifference could be because of many reasons. Firstly, state governments treat JFM as another programme, which they think can be implemented without making any changes in other sectoral programmes. JFM however requires a paradigm shift and will be successful only when radical changes are introduced in rights and privileges over forests, policies and laws pertaining to NTFPs, Working Plans, and silvicultural arrangements, etc. Secondly, field officials

inclusion of women through legislation has not led to genuine participation. Often meetings are scheduled in the evenings to suit men, but at times when women tend to be cooking. When attending meetings, women feel marginalised, unlistened to and shy to talk. It is considered against Indian culture to talk in the presence of men, much less to question their ideas. Often they get busy in arranging tea and snacks for the male members and thus are unable to concentrate on the deliberations of the Committee. As a result, there is a bias in favour of those forest products of interest primarily to men. In village Kilmora in a van panchayat in UP (Britt-Kapoor 1994) the female member who has the added advantage of living at the house where meetings are held rarely stayed longer than was necessary to sign the register. In another village Katuul (ibid.) a female member said, 'I went to three or four meetings. My suggestions never got implemented. No one ever listened. I marked my signature in the register. I am illiterate, so I couldn't tell what was written in the meeting minutes. I was told that my recommendations would be considered, but first that the register had to be signed. They were uninterested.'

Given the sex-segregated and hierarchical nature of Indian society, separate women's organisations and staff are needed to work among women, to instil confidence in them, so that they can fight for their rights. Therefore, whenever there is recruitment, more women need to be recruited in the Forest Department. The village level committees should have adequate representation of women. Forestry staff should be sensitised on gender issues through orientation programmes. As women in many societies still feel inhibited in expressing themselves in mixed gatherings, each committee should have a separate women's cell for raising their consciousness and for improving their skills. The quality of women's participation and the control they exercise over decision making processes is more important than the sheer number of women present in such bodies.

8.7 Balance of power between Forest Department and communities

In many states, the Forest Department can cancel or dissolve the FPCs. The mechanism of this dissolution may be worked out in more detail so that the order does not appear as arbitrary. While Forest Departments will require some statement in the resolution to dissolve the management agreement if their community partners fail to uphold their responsibilities under the JFM programme, it is also important that the identity of the user group is respected. In Rajasthan and Haryana, where the GR requires that the user group become registered societies, these would have greater independence, and will continue even if their relations with the Forest Department are severed. In Gujarat, FPCs are registered as cooperative societies, which in addition to being legal entities provide functional autonomy. Once the user group has a separate legal status this can be used for several purposes. For instance, in Haryana 14 groups met together to request the Haryana Forest

have de facto or de jure collection rights. Secondly, the marketing environment for realising the full value from NTFPs is constrained by exploitative governmental regulations restricting sale, processing and transport. At least in JFM areas, markets must be freed from unnecessary government controls so that gatherers are free to optimise returns on their labour.

8.6 Insensitivity to gender issues

Protection of a degraded area under JFM often increases women's drudgery as they have to travel a greater distance to collect their daily requirements of fuelwood and fodder. Despite the good intentions of forest protection, community forest management has often burdened women with additional hardships, or concentrated it on the shoulders of younger women. They also had to switch over to inferior fuels like leaves, husk, weeds and bushes. The widespread shift to use of forest sweepings to meet domestic fuel needs has a negative effect on regeneration and nutrient recycling essential for maintaining soil productivity.

Obviously, merely shifting the protection role from the Forest Departments to the community does not provide any immediate relief to women. Further, the gender-differentiated impact is not restricted to firewood - it applies equally to other forest produce. For example, protecting sal trees with the existing technology of multiple shoot cutting results in the leaves getting out of reach. This affects the making of sal leaf plates, which is a common source of income primarily for poor women in many parts of West Bengal, Orissa and Bihar.

Another problem is of providing adequate share to women in management responsibilities in JFM committees. In this respect, women's rights and entitlements have been almost totally overlooked in the JFM Rules. For instance, Bihar, Karnataka, Madhya Pradesh and Tripura provide for the membership of only one representative per household; Gujarat, Rajasthan and Maharashtra have left the matter open; Punjab has no provision for a general body at all, and in Jammu and Kashmir, it is unclear whether both a man and a woman or either can represent a household.

In cases where one person can represent a household, it invariably ends up being a man (except in the case of widows with no adult sons). This happened in Sukhomajri and Nada in the early '80s, due to which Haryana's membership has now been opened to all adults. Andhra Pradesh, Orissa and Tamil Nadu have attempted to overcome this shortcoming by providing for 1 male and 1 female representative per household and West Bengal for a joint husband-wife membership. Although these are improvements over the usual formula, they still exclude several women and men, as in the case of joint or extended families.

Membership in committees is not synonymous with a share in rights or of benefits. One needs to ensure both, and not one or the other. Forced

West Bengal, the presence of an NGO who provided improved sal plate processing and marketing support allowed village producers to improve incomes to Rs 11.50 for an eight hour day equivalent versus Rs 5 to 6 for other communities dependent on middlemen.

Direct management of the supply of raw materials may also give producers an incentive to increase productivity in terms of quantity and quality. There remains a need to break the dependency of forest communities on moneylenders which often provide unfair prices for forest products due to their loan based leverage. Access to reliable sources of credit would help to achieve this. In some areas local NGOs have assisted communities, such as Samakhya in Andhra Pradesh, and these experiences should be documented and extended to JFM areas. Other NGOs have explored ways to improve processing systems to increase income through value addition.

The state marketing agencies have reached a stage where they are unable to play the roles for which they were intended. The policy frame wherein a state monopoly was considered necessary to counteract severe market imperfections has also become counter-productive and is encouraging market monopolies. If the poor are to enjoy the fruits of their labour (and of the forests which they are supposed to bring up), a drastic overhauling of the policy frame as well as the supportive institutional framework is necessary so that it is consistent with the 1988 Policy objectives.

Practical considerations point out that government is incapable of effectively administer complete control and do buying and selling of NTFPs itself. It is better for government to facilitate private trade, and to act as a watchdog rather than try to eliminate it. Monopoly purchase by government requires sustained political support and excellent bureaucratic machinery. It is difficult to ensure these over a long period and hence nationalisation has often increased exploitation of the poor. For marketing NTFPs, government should not have a monopoly, nor create such a monopoly for traders and mills. The solution is to denationalise NTFPs gradually so as to encourage healthy competition. Government should set up promotional Marketing Boards, as distinct from commercial corporations (which are inefficient, and hence demand nationalisation), with responsibility for dissemination of information about markets and prices to the gatherers. The Boards would help in bridging the gap between what the consumers pay and what gatherers get. Free purchase by all and sundry would also be in tune with the current liberalisation and open market climate. Government organisations may compete in the open market with the private trade, as in the wheat purchase scheme in north India, but government should never acquire a monopoly. Encouraging setting up of processing units within the tribal areas is also to be recommended.

To sum up, with a view to promote people's participation, state governments permit collection of NTFPs from JFM areas. However, this hardly acts as an incentive for two reasons. First, even from non-JFM areas people

is not geared to the silvo-pastoral system of using a forest compartment to produce the kind of biomass which is useful to the herdsman. Thus there is a danger of his getting alienated from the Department and revert to the old unsustainable practice of uncontrolled grazing. The onus is now on the Forest Department to shift to a new silvicultural practice of maximising biomass and NTFPs rather than timber.

Similarly, FD's present management of sal seems to be for timber, and hence only one shoot is allowed to grow. Since sal is an excellent coppicer, degraded forests and hills close to a village should be managed under a coppice or a coppice with standard system for fuelwood and sal leaves.

Although after the advent of the new forest policy in 1988 there has been some effort to involve forest communities in management, little thought has been given to make necessary changes in the technology which will be suitable to achieve the changed objectives. Multiple objectives to maximise outputs from many products will require innovative and experimental silviculture, which must focus more on the management of shrub and herb layers, and on forest floor management to enrich the soil and encourage natural regeneration. Unfortunately there is not much evidence that state governments have appreciated the need for change in silvicultural practices as a tool to promote JFM.

8.5 Marketing of NTFPs

The JFM programme is no doubt oriented towards the subsistence needs of local communities, but once the produce of forests increases through proper protection there is every likelihood of production increasing beyond what can be consumed within the village itself, and hence the importance of marketing. Moreover many NTFPs have traditionally been used by the gatherers to generate cash incomes.

Most state resolutions allocate all NTFPs for community use (however there are restrictions on their processing and marketing, already discussed in section 4.2), while timber sharing agreements vary from fuelwood only in Bihar and timber for subsistence use in Orissa, to 60 per cent of net commercial timber revenues to participating communities in Rajasthan. The restriction on sale of collected items in Bihar and Orissa is unrealistic, as the poor need cash too.

Studies indicate that while collectors of NTFPs are often some of the lowest income groups in India, they often receive only 5 to 20 per cent of the retail value of their goods. Various governments run marketing and cooperative schemes and have established parastatals for this purpose, but these have frequently failed to result in major improvements in prices. Experience shows that open markets may give producers the best chance of gaining a competitive price for their products. In other cases, NGO-run programmes to develop NTFPs, which make processing more efficient and improve market access, can enhance the income of forest communities. In

Experience over the last 20 years from Indian social forestry programmes indicates that in many cases panchayats had difficulties effectively managing community woodlots due to their inherent political nature and often diverse constituencies. Panchayats are political organisations based on electoral system, whereas conflict can be quite harmful for the effective functioning of FPCs. Protection can work only if there is almost unanimity and consensus amongst the user group.

Unlike panchayats, powers to the FPC are not given under any law, which may affect their powers to check free-riding in the longer run. Thus, most successful FPCs charge fees for collection of forest produce, although this practice is technically against the Forest Act. The illegality can be removed if the allotment of forest land to the FPCs is done under section 28 of the Forest Act. At present it is done administratively.

It is interesting that people's initiatives have been most successful in the states of Orissa and West Bengal, where the number of villages per panchayat is more than ten, whereas in most other states the average is only between 1.2 and 2. The number of hamlets per village may also vary from state to state. It is likely that the very big size of Orissa official panchayats combined with their ineffectiveness ensured that the cohesiveness at the hamlet level was not destroyed.

Due to the increasing importance of panchayats in decision making in India many field activists feel that community forest management must take place at the smallest possible level of those who actually use the resource. This would require statutory changes in the current panchayat laws.

8.4 Changes in silviculture

Some conservative field officials understand JFM as an arrangement in which wages are paid in kind (100 per cent of NTFPs and 25 per cent of final harvest) in place of cash. Others define it as a new management regime in which protection is to be done by the people and technology is to be controlled by the Department. These narrow perspectives assume that the objectives of forest management need not be redefined, and could continue as before to be timber-oriented. However, with a new Forest Policy in favour of local needs and usufructs, silvicultural practices and management options should also be radically altered to meet these new objectives. Foresters will have to accept a reduction in yield in timber from stem or bole of trees, and settle for a diverse menu of biomass-based products.

For instance, local people often prefer production of grasses to wood. In the case of a pastoral tribe, Bashir Khan was persuaded to reduce his stock in order to allow regeneration on the forest patch allotted to him in the alpine pastures. He found that although tree density increased due to control on grazing, the output of natural grasses and carissa bush, which he used to feed to goats and sheep, had gone down. He wanted the coupe to be thinned in order to get more grasses, but unfortunately the Forest Department

the large group, maintaining clear boundaries of their area and by retaining exclusive control over harvests in their territory. Often such groups surrounding a large tract of forest form an apex committee to coordinate their activities and represent themselves to the FD. Although the larger group may facilitate joint protection and dispute resolution, informal partitioning of the resource has no validity in law and may not be sustained over a long period.

Most FPCs want their forest tract boundaries to be formally demarcated. Rough agreements between villages over these boundaries may be sufficient when the resource is degraded, but once valuable products are regenerated, conflicts will ensue in the absence of formal notification. Often forest maps are not available which delays formalisation of boundaries. This is not a simple exercise, since natural, administrative and customary boundaries do not coincide. In practice, under existing customary use, different boundaries apply to different products, e.g. grazing and fuelwood. Boundary disputes between neighbouring FPCs are likely to increase as harvesting approaches.

8.3 FPCs and panchayats

Another legal problem concerns the status of FPCs versus the village panchayats. The state government resolutions recommend FPCs as functional groups. However, these committees have no legal and statutory basis, and it may be difficult for them to manage resources on a long term basis. Their relationships with the statutory village panchayats will need to be sharply defined.

The 1989 West Bengal GR stated that the local panchayat land management committee shall select beneficiaries for constituting the FPC. This indicated that the panchayat, which is outside the user group, would determine who could and who could not participate. Although in 1990, the West Bengal Government allowed every member in the village to be a member of the management group, the hold of the panchayat remained strong. The Orissa order prescribes that the lady Naib Sarpanch (Deputy Chief) of the local panchayat will be the head of the FPC, but the panchayats are not working well and her stewardship is not seen as legitimate by the indigenous FPCs.

There is also some concern that if JFM groups were absorbed by village panchayat, vested interests might exert control over decision making. Since small user communities may comprise of less powerful groups, they may lose authority to elite if the management becomes a direct adjunct of the panchayat. FPCs are recognised only by the Forest Department, all other government departments recognise panchayats making them much more powerful than the FPCs. On the whole, there is need to clarify the relationship of local forest management groups to panchayats; simply subsuming them as part of the panchayat would almost certainly threaten their effectiveness.

Migratory tribes from other states too send their cattle for grazing, and their rights have been upheld by the Supreme Court. Thus, a forest patch does not have a well-defined and recognised user-group, and may admit the rights of the entire population of that region or the entire forest area. This type of 'right-regime', which makes forests open-access lands, is not conducive to successful protection, as rights of contiguous villages protecting forests may come in conflict with those of distant villages, not protecting but still having rights to enjoy usufruct. Some GRs (government resolutions) provide that the existing right holders will not be excluded, but this would mean extending benefits to those who do not contribute to protection. Therefore, at least in JFM areas, use rights should be reviewed in order to put them in harmony with the 'care and share philosophy' which is the basis of JFM. Even in unclassed forests, where no previous settlement has been done, the task is not simple due to the practice of use by a large class of stakeholders. Elsewhere, old settlement rights may have to be modified with a view to make these amenable to formation of viable FPCs. This is easier said than done, as changing customary or legal rights would be perceived as an unpopular step and may face political hurdles. Such a policy can be made acceptable if it is accompanied by other pro-people changes in technology, nature of species, secure rights over produce, etc.

8.2 Inter-village disputes

Depriving communities far from the resource but having traditional rights is a ticklish question. Some close communities have solved this by charging fees from distant villages on the ground that they do not have to protect the resource. In West Bengal, some FPCs negotiated with neighbouring communities to clarify rights and territorial responsibilities when they began to initiate protection activities. As the user groups have a strong incentive to avoid conflicts, they have often demonstrated that they can conduct much of the negotiation on their own or with the help of the panchayat leaders. However the Forest Department holds ultimate responsibility for seeing that management groups do not create conflicts over pre-existing usufruct.

Confusion over forest boundaries is a recurring problem for the FPCs. In one case, members from Chandmura village in West Bengal thought that they were also protecting the Arabari forests. Only when the forest was harvested for timber did they realise that they were not part of the programme. The village took the government to court, thus delaying harvest benefits to others. The problem could have been avoided had there been maps and constant dialogue between the participating villages.

The Rajasthan GR provides for formation of one FPC per one revenue village, which may consist of several hamlets removed from each other. This makes the smooth functioning of the FPC very difficult. Where multi-hamlet forest protection committees have been formed, field experience shows that the component communities keep their independent identity within

the state. This could be enhanced substantially if the group is supported in its efforts by the government. This has often been the case in many success stories of Joint Forest Management, in which Forest Department helps the group in removing encroachments, providing funds and technical help, mediating in inter-village and intra-village conflicts, and taking legal action against free riders. The precise distribution of control and management between the state and the local group should depend on a number of situation-specific factors, such as the ease with which groups can be formed and can retain cohesiveness. The process of sharing decision making and management of forest lands will then proceed at different paces in different conditions.

In this section we discuss the problems which have been noticed in the implementation of JFM, and the policy changes which are necessary to redress them.

8.1 Customary rights

The legal and organisational framework for joint management remains weak and controversial. First, the old rights and privileges of the people (usually established in the colonial period) have continued in most of the PF, and often such rights include free access to expensive timber. This can breed corruption and situations where only the powerful in a village control access to free supplies of trees. Privileges without corresponding responsibility is counter-productive. Second, often more than one village have their rights in the same forest, with the result that it becomes difficult to promote village protection committees. Third, a large number of new settlers in a village (they may be the poorest) have no traditional rights in forests, as their ancestors did not live in the village at the time of forest settlement. They get deprived of benefits, and are compelled to obtain these illegally. Fourth, sometimes people living several hundred kilometres away from forest have customary rights (called *nistar* in central India) in that forest which they have never seen!

In many cases the way rights and privileges are implemented has become a serious disincentive in the evolution of sustainable policies in forest management. There is an urgent need to bring rights in harmony with efficient forest management by the people. This could include a mechanism to allow newcomers to "buy" forest management rights, and allow emigrants or those no longer interested in their rights to "sell out".

As already stated, often villages distant from forests, with no possibility of getting involved in its management, have been customarily using these lands as an open-access resource without any restriction, for grazing and collection of fuelwood and NTFPs. Often the forest officials, while recognising the FPC (Forest Protection Committee of the village) formed in a village with respect to a particular forest tract, give permission for collection of firewood from the same forest area to right holders from other villages too.

of 41 per cent in wholesale prices the increase in timber prices was 148 per cent. Evidence of a fall in timber prices has been forthcoming from several markets. For instance, sal prices have fallen by 25 per cent between 1989-92 in south-west Bengal, causing a concern to the Village Forest Protection Committees (FPCs) which had been protecting sal forests in the hope of earning good incomes (Poffenberger and McGean 1996).

The fall in timber prices after 1987 is also due to liberal imports of logs. There has been a quantum jump in recent years in the import of timber. In 1989-90, the total import was estimated at 1.5 million cu m (Singh, Ashbendu 1992: 72). The total value of imports in 1992-93 had touched Rs 40 billion (pers comm. Ministry), and the quantity imported may well be 50 per cent of recorded timber production from forest lands. In addition, 1 to 1.5 m cu m of newspaper grade pulp, which is almost 50 per cent of the total requirement, is imported (Khare and Rao 1991).

As regards fuelwood, its real price increased by 34 per cent in 10 major cities of India during 1970-82 (Leach 1987), but based on the monthly record maintained at the Labour Bureau, Shimla, it was estimated that firewood prices in some of the major towns of India remained almost constant after 1986 (Saxena 1995).

It is likely that the fuelwood prices have behaved differently in different regions. In north-west India the glut of eucalyptus may explain the decline in fuelwood prices. In some regions the fall could be due to the natural spread of *prosopis* (*Prosopis juliflora*) shrubs on public lands, which provide excellent fuelwood for both consumption and sale at almost zero opportunity costs to the poor. In fact more fuelwood may have been supplied from *prosopis* than from social forestry plantations. In Tamil Nadu alone, the total yield of *prosopis* for fuelwood accounted as a single species for 75 per cent of the total fuelwood consumption (SIDA 1992). In the *prosopis* abundant districts sale of its twigs has emerged as a cottage industry for the poor, specially for women and children.

Therefore it may be premature to suggest that the improvement in forest cover or the fall in wood prices is due to the change in forest policies; other factors, such as import, spread of *prosopis* shrubs, and the success of farm forestry may offer better explanation. However, with the success of JFM in certain areas, there are examples of local glut of wood, and such instances are likely to multiply as the protected forests mature for harvesting. If the trend of improvement in forest cover continues for a longer period, it could well be due to participatory policies.

8. Constraints to community mobilisation and participation

New policies bring new issues. What is important is to develop mechanisms to address these issues. In Orissa, where success stories in participatory forestry can be located in every district, the total area under protection by indigenous groups is much less than ten per cent of the total forest area of

deal with farmers directly. For several crops like sugarcane, potato, rice, cotton etc. industry has been in touch with the farmers for decades.

7. Impact of the new forest policy and JFM on deforestation

Although it is too early to link changes in the forest cover and prices with the new forest policy and JFM, there is some evidence to show that forest cover in India has improved after 1989, and that timber and fuelwood prices have also stabilised since 1987. Recent remote sensing data show that during the last six years ending 1995 there has been drastic fall in the rate of deforestation, as shown in Table 3.

The above conclusion is supported by a World Bank document (1994) on India which states,

Forest canopy cover has held up surprisingly well under these deprecations. Four biennial estimates of forest surface cover during the 1980s and early 1990s show little variation over roughly last ten years despite net removal before reforestation/afforestation of about 3.3 m ha worth of wood annually. The proportion of forest cover accounted for by dense forest (i.e., crown cover 40 per cent and above) has also increased from 59.1 per cent in 1985-86 to 60.2 per cent in 1987-89. Trends in "Forestry and Logging" output and prices over the last 30 years suggest that there has been some curtailmentⁱⁱⁱ of the exploitation of forest resources since the mid 1970s.

Price changes — The above assessment, which is generally believed by observers of the forestry scene in India (Hobley et al. 1995), is confirmed by the behaviour of prices, both for timber and fuelwood, which have declined or have remained steady after 1987. During the five year-period 1987-88 to 1992-93 wholesale prices increased by 56 per cent, whereas the increase in timber prices was only by 30 per cent. This needs to be contrasted with the earlier five year period of 1982-83 to 1987-88, in which as against a rise

Period	area gained /lost annually in ha
1987-89	(-) 47,500
1989-91	(+) 28,000
1991-93	(+) 2,200
1993-95	(-) 25,000

(FSI 1996)

that the lobbying by the forest-based industry has been totally neutralised by the newly emerged countervailing forces of rural user groups and environmentalists. Forest Policy being a non-statutory document, industry continues to get subsidy, though on a much reduced scale, from state governments. They have also been clamouring to get degraded forests on lease as captive plantations for their exclusive use. Government of India seemed very sympathetic at one stage, but this concession was hotly opposed by the environmentalists, who seemed to have an upper hand ultimately in the ding-dong battle which went on for four years, from 1991 to 1995 (CSE 1995).

In May, 1996 the Forest Corporation of Madhya Pradesh invited tenders to lease out forest lands to private industry for 30 years. It is believed that the Government of India is in favour of such proposals. It may be recalled that two years back when a similar demand was made, several NGOs wrote very strongly against this proposal pointing out how it would adversely affect the forest dwellers as well as farmers who would be deprived of a market for their short gestation crops of eucalyptus and bamboo. Subsidising industry by giving them access to land without realising its market value is against the liberalisation policy of the government. Using degraded forest lands for growing raw material for industry will be setting the clock back to the 1960s, showing that we learnt nothing from the mistakes of the past 30 years of trying to create man-made forests, which were ecological disasters, besides completely alienating the people and leading to faster degradation.

There would be less controversy if industry is leased non-forest desert lands of Rajasthan, saline lands of Gujarat and U.P. or ravines of M.P., which are so degraded that these do not support the livelihood needs of the poor. Forest lands suffer from extreme biotic pressure, and require not capital investment, nor even higher technology, but protection and recuperation, which can be done only by working with the people, where industry has neither expertise nor patience. The West Bengal experience shows that about 2000 peoples' forest protection committees have regenerated more than 300,000 acres of sal forests at no extra investment, simply by protection on the promise of sharing wood and non-wood products with them. If lands on which peoples' livelihoods are dependent are given to industry, they may have to employ muscle power to keep people at bay, thus escalating social tensions, which are already quite acute in several forest and park areas.

Therefore industry should be asked to establish links with farmers who will produce raw material if given a remunerative price, in ways similar to the linking of poplar growing farmers with a match factory in north U.P. This experiment shows that, with technological backup, timber size trees suitable for sawing can be raised on farm lands within 8 years. In fact, due to farmers' enthusiasm for growing poplar its enhanced supplies have led to establishment of several plywood factories in that area, thus providing considerable downstream employment. It is a myth that industry cannot

in its favour. It must be admitted that political will in India in favour of creating communal tenures has been rather weak. Land settlements carried out in the last 40 years have recognised communal tenure only in the north-east Indian states. In many states, such as Andhra Pradesh, the transfer of even non-forest government land to the panchayats has not taken place. Both the land distribution policy of the 1970s and the Social Forestry programme of the 1980s (which virtually amounted to take-over of village commons by the Forest Department) seem to have been influenced by Hardin's ideas (1968, 1971) that there are only two sustainable policies: either the commons should be privatised, or they should be brought under the control of a government authority. How did then the Indian state suddenly do a turn-around, and enact a pro-people Forest Policy and involve communities in management?

Marxists hold that a capitalist State cannot promote radical reforms in favour of the poor. The nature of State power depends upon the mode of production and the classes that own the means of production, and it is in the interest of these classes that State power is exercised. If this view is accepted in toto, and keeping in mind that the Indian State is increasingly becoming pro-free market (especially after 1991), it would be futile to expect the Indian State to promote reforms in the forest sector in favour of the Adivasis, forest dwellers, and women, who cannot easily influence those in power.

Two counter-arguments can be advanced against the pessimistic view expressed above. Firstly, in a democratic country with 70 per cent rural population, rural interests cannot be ignored for long. A subsistence oriented forest policy does not hit the rural elite at all, it in fact reduces the control of the centralised bureaucracy, besides curtailing the outflow of forest products to industries. Hence such a policy should not attract political impediments, which are inherent in distributive programmes such as land reforms. Secondly, the Indian political system has generally been resilient and responsive to public opinion, which can be built without a proletarian revolution being a necessary pre-condition. Several environmental battles have been won in the recent past; scrapping of the Blue Pine Project in Bastar (Anderson and Huber 1988), withdrawal of the Forest Bill 1980 (Fernandes et al. 1983), cancellation of leases of common lands to a paper mill in Karnataka (Hiremath 1994), to mention a few; which shows that radical restructuring of policies does not require a new constellation of the ruling classes.

The nature of State power in India is itself rather complex. People-oriented policies have a legitimising role for State power. Deforestation and land degradation weaken the State, whereas land rehabilitation policies make people depend more on the State authority, and thus strengthen the State. In West Bengal JFM programmes, the lower level forestry staff, including Beat and Range Officers, have been quite enthusiastic about participatory methods, although conventional wisdom would have suggested their sympathies to be on the side of coercion. Rather than feel threatened by

agencies for building up meaningful people's participation in protection and development of degraded forest lands. By 1997, eighteen state governments had issued enabling resolutions (GRs) permitting partnerships with local people. These states have 80 percent of the country's forest lands and 92 percent of tribal population. The Joint Forest Management (JFM) programme is likely to be the central point of future forest development projects funded by the Government of India and the donor agencies.

Thus in the previous policies people and the environment were seen, all too often, as antagonistic. The forest – people interaction was conceptualised as a zero-sum game, in which both parties could not win. According to the JFM philosophy, the conflict model is neither necessary nor useful. On the contrary, ways can be sought in which the interests of people and of long-term sustainability are harmonised in a mutually supporting manner.

The salient features of the Joint Forest Management scheme

- Access to forest lands and usufructory benefits will be to those villagers who get organised into a village association;
- The beneficiaries are to be given usufructs like grasses, lops and tops of branches, and non-timber forest produce. On successful protection of forests, they are to be given a portion of the proceeds from the sale of trees after they mature. This varies from 20 to 60 per cent of the timber sold;
- Along with trees for fuel, fodder and timber, the village community may be permitted to plant fruit trees such as *Emblca officinalis*, *Tamarindus indica*, *Modhuca indica*, etc. as well as shrubs, legumes and grasses;
- No grazing in the forest land protected by the village communities is to be allowed. But the villagers can cut and carry grass free of cost to promote stall feeding;
- No ownership or lease rights over the forest land including assignment of the forest land will be given to the beneficiaries/voluntary agencies;
- In case of failure to protect the area from grazing, encroachment etc. the usufructory benefits could be withdrawn;
- The benefits of people's participation should be to the village communities alone and not to commercial or other interests.

6. JFM and the political feasibility of reforms

A policy reform of the magnitude envisaged in the new Forest Policy and JFM guidelines cannot be implemented unless there is strong political will

forestry programmes should pay special attention to undertaking integrated area development programmes to meet the needs of the tribal economy in and around the forest areas, including the provision of alternative sources of domestic energy on a subsidised basis, to reduce the pressure on the existing forest areas.

The Policy stresses the importance of NTFPs, and states in para 3.5 that 'minor forest produce should be protected, improved and their production enhanced with due regard to generation of employment and income'.

As regards supplies to industry, the first part of Para 4.9 states:

As far as possible, forest-based industry should raise the raw material needed for meeting its own requirements, preferably by establishment of a direct relationship between the factory and the individuals who can grow the raw material by supporting the individuals with inputs including credit, constant technical advice and finally harvesting and transport services.

It is also stated in the same para that 'the practice of supply of forest produce to industry at concessional prices should cease. Industry should be encouraged to use alternative raw materials. Import of wood and wood products should be liberalised.'

According to Para 4.3.3 production forests, which were in the past used exclusively for timber, 'while meeting national needs should also be oriented to narrowing the increasing gap between demand and supply of fuelwood.' Para 4.4.2 bans the giving of mining leases without a proper mine management plan appraised from the environmental angle and enforced by adequate machinery.

5.1 The June 1990 guidelines and Joint Forest Management

The implementation of the Policy was facilitated by the Government of India by issuing a resolution on 1st June 1990 making it possible for the Forest Departments to involve people in the management of forests. It may be pointed out that even before 1990, some circulars from the Government of India and state governments had talked about 'participation'. But earlier it was understood as getting people to agree to and go along with a project which has already been designed for them. With some exceptions people's participation was never expressed in a manner which would establish their rights over land or its produce.

The June 1990 resolution breaks a new path as it for the first time specifies the rights of the protecting communities over forest lands. It also recognises the likely contribution which NGOs could make as intermediaries between the people and government. The order exhorts the state forest departments to take full advantage of the expertise of committed voluntary

Once the channels of money dried up, the plantations disintegrated (Unnikrishnan 1994, as in Hopley, 1996). In a mixed economy, where both government and private sectors work, it is generally the government sector which looks after the infrastructural or welfare needs of the people, whereas market needs are met by the private sector. Thus, health, education, and roads etc. which are non-commercial programmes come under the domain of the government in India, whereas the private sector has been primarily responsible for commercial production. It was strange that in forestry this distribution of responsibility was not being followed, and the reverse was being attempted. Forest lands were to meet the commercial needs of the economy and farm lands were to produce 'fuelwood and fodder'. This conceptual weakness was perhaps one of the main reasons for the failure of the two programmes. Despite rhetoric to the contrary, village lands in actual practice produced commercial polewood or urban fuelwood, and did not meet the subsistence needs of the poor. The poor were at times displaced from common 'wastelands' which once provided biomass (Hopley et al. 1995).

5. The 1988 Forest Policy

The new forest policy announced in 1988 is radically different from the two previous policies: According to this, forests are not to be commercially exploited for industries, but they are to conserve soil and the environment, and meet the subsistence requirements of the local people. The policy gives higher priority to environmental stability than to earning revenue. Derivation of direct economic benefit from forests has been subordinated to the objective of ensuring environmental stability and maintenance of ecological balance. It discourages monocultures and prefers mixed forests. The focus has shifted from 'commerce', and 'investment' to ecology and satisfying minimum needs of the people, providing fuelwood and fodder, and strengthening the tribal-forest linkages. Para 4.3.4.3 of the new Policy reads as follows:

The life of tribals and other poor living within and near forest revolves around forests. The rights and concessions enjoyed by them should be fully protected. Their domestic requirements of fuelwood, fodder, minor forest produce, and construction timber should be the first charge on forest produce.

Similarly Para 4.6 of the Policy lays down:

Having regard to the symbiotic relationship between the tribal people and forests, a primary task of all agencies responsible for forest management, including the forest development corporations should be to associate the tribal people closely in the protection, regeneration and development of forests as well as to provide gainful employment to people living in and around the forest. While safeguarding the customary rights and interests of such people,

petroleum based fuels harmed the farmers in many ways. Industry preferred getting bulk and subsidised supplies from government forests rather than buy from farmers. Ultimately, much of eucalyptus wood was being sold as fuelwood at less than the expected price. Farmers' produce as fuelwood competes with wood supplies from government, and with coal and petroleum products. These commodities have administered prices. In relation to fuelwood, the price of kerosene declined by 17 per cent, and of LPG gas by 100 per cent during 1970-84 in India (Leach 1987). It also competes with supplies of fuelwood brought to the market by gatherers from public lands. In forest areas, fuelwood is sold from forest depots at a subsidised rate. Because of these prices fuelwood prices have remained low after 1985.

Another policy which reduced farmers' profits is the legal framework which does not permit a farmer to freely cut and transport wood products. A study by IIM Ahmedabad (1995) of charcoal makers in Gujarat showed that a simple operation of converting prosopis into charcoal, which can give employment to thousands of people, requires several permissions. Harvesting, conversion, and transportation are all subjected to departmental controls involving cumbersome and time consuming procedures. This brought uncertainty in the marketing operations leading to low price for farm output, and further planting declined after 1988.

4.4 Summing up

Policy decisions over the last three decades which have supported industrial plantations on forest lands and Social Forestry on village lands have not been able to stop the degradation of India's natural forests. Forests were over-exploited on account of government concessions to forest industries in the zeal for industrialisation, which had made forest raw material available to industries at much below the cost of regeneration, in fact almost free. As such there was not much incentive for industries to invest in regeneration. The unsustainable exploitation of forest raw material dried up the sources of supply much sooner than expected by the forest industries themselves, and pushed the frontiers of exploitation into ever more remote areas (Gadgil, 1989: 15-18).

Furthermore, this exploitation occurred at the cost of local needs and broader conservation functions of the forests. To raise new plantations, natural forests were clear-felled even in ecologically sensitive regions, such as steep slopes. Such clear felling and lack of proper regeneration led to landslides, soil erosion, and siltation of rivers, reservoirs and tanks downstream (Nadkarni 1995: 3). Local people were deprived of their biomass supply, and were also hit by reduction in employment in the informal sector that depended on NTFPs.

Reasons for indifferent progress of plantations on village lands are much more complex and diverse. Social forestry was used only as an adjective to turn on the channels of money. The officials and contractors ran the show.

Monopoly and poor regulatory monitoring adds to overuse of resources. This is demonstrated by an example in Orissa where traders obtain monopoly rights for the tree *Oroxylon indicum*, the bark of which is used for making incense sticks. The trader who enjoys the monopoly does not only remove the bark, but often cuts the entire tree, thus causing great harm to the forest. Several cases of injury to forests caused by the traders' men have been reported by the Forest Department itself, but the lease still continues.

4.3 Impact of social forestry

On the whole social forestry did succeed in increasing the availability of wood, albeit for a short period. This temporary success was due to the popularity of farm forestry in commercial regions during the early period of the programme. Sustainability of tree planting on village lands after the first harvest, with some exceptions, remained doubtful. Briefly the shortcomings in the programme were:

- Local people were not involved leading to high mortality.
- Village panchayats (local elected councils) perceived the woodlots as sources of communal income, rather than as sources of fuelwood to meet village needs. The nature of species was also such that it tempted the panchayats to sell in the markets, rather than distribute in the village.
- Panchayats could not enforce the discipline required for managing plantations.
- Projects were designed around the ultimate felling of the planted trees; degradation often set in after the trees were harvested.
- The targeted area under village lands could not be made available for afforestation because of encroachment, competition from other departments, competition from grazing and other existing local uses and poor productivity.
- There was no continuity in the management and control of thousands of scattered pieces of planted village lands creating enormous problems of protection.
- Projects failed to define, establish and publicise the rights to the trees and the procedures for marketing and allocating benefits. The shares which would go to the individuals, village, panchayat and the Forest Department were not clearly laid down. Insecurity about benefits led to indifference on behalf of the people.

Even in farm forestry, where the main species was eucalyptus, the initial enthusiasm of farmers could not be sustained, as farmers did not get the anticipated price for their output. The policy to subsidise industry and

A large number of families have the expertise and skills of processing bamboo, and make hats, baskets, etc., but they are prevented from getting the full price for their labour, because stocking bamboo and selling bamboo products requires permission from the FD. Freeing the artisans from such constraints can itself lead to widening the base of entrepreneurial activities in the village, as these value added activities can very well be undertaken in their own cottages.

In Orissa, one company has been given monopoly collection rights for 29 NTFPs items for ten years. Thus a private trader has been given exclusive rights of collection and marketing. There is no check on the price paid by him to the tribals, although on paper the price is fixed by the Collector. These orders creating private monopolies are ad hoc, arbitrary, and act against the principles of natural justice, as no tenders or offers have been invited before bestowing monopolistic powers to a private agency. These orders smack of favouritism, and lack of probity and openness. State monopoly has provided room for private monopoly, and is aiding and abetting market imperfections, besides pouring money into the coffers of bribe takers at all levels.

Ban on processing by the poor

According to Orissa's laws, processing of hill brooms can only be done by the lease holder, TDCC (Tribal Development Cooperative) and its traders. Tribals can collect hill brooms, but cannot bind these into a broom, nor can they sell the collected item in the open market. Thus the poor are prevented from both doing value addition through processing and the right to get the best price for their produce. A very tragic case has been brought to light (for details, see Seminar, July 1995 and The Telegraph, 11th June, 1995) in which assurance was given by the Collector of Raygada to a women's cooperative society that it would be allowed to collect and market hill brooms, so that the primary gatherers, who are mostly poor tribal women, might get the benefit of higher prices in the market. The Society started functioning, but without a valid licence. Rather than helping them with processing and finding the best price, the state government machinery decided to launch a prosecution against the women and their organisation. Their stocks were seized, and despite assurances from senior cause huge financial loss to women, so that for decades no other group dares government officers, the full stock was not released. Thus even when cases of exploitation are brought to notice and publicised in newspapers, the hold of traders and corrupt elements is so strong on administration that no remedial action is taken for several months. In the mean time the stock has deteriorated and lost all value. The intention of the monopolistic trader seems to be to break their monopoly.

Let us consider another example of a natural forest predominantly of sal (*Shorea robusta*). This forest represents to poor forest-fringe-dwellers a source of livelihood yielding seeds for sale, branches and leaves for fuel and manure. The decision to convert this sal forest to industrially more valuable species like teak may satisfy the needs for higher revenues which may or may not be used for the welfare of these same people, but would certainly deprive them of an output from the forest which they were enjoying.

Other writers have been less charitable about the intentions of the government. An ex-Forest Secretary of Madhya Pradesh writes,

This (the policy of giving priority to industries and subsidising industrial raw material) is clearly discriminatory. The rights of a huge section of society cannot be wiped out in order to benefit a few industrialists. For instance, the Orient Paper Mills was promised a lakh (100,000) ton of bamboo per year from four districts of the state. This eliminated all bamboo from Rewa, Panna, Satna and Shahdol. When such a situation arises the Forest Department tells the villagers to fend for themselves because there is nothing in the forests for them (NCHSE, 1987; iv).

The total number of cane, bamboo and basket weavers in 1981 was 8.2 lakhs, of which 6.9 were in rural areas. A common problem of all bamboo artisans is that of raw material shortages. The major cause for this is their diversion to paper and other industries, which often procure the raw material from state government at throwaway prices, much to the disadvantage of the artisans.

Monopoly over NTFPs — NTFPs require simple and easily handled processing and packaging technologies and usually they have a longer shelf life, and so can withstand small variations in market demand. Rather than improve the bargaining power of the poor, government policies have often acted in favour of traders and created monopolies.

Almost all important NTFPs are nationalised; that is, these can be sold only to government agencies. The nationalisation of these commodities, carried out in different states in various years from 1960s to the end of 1970s, presumably with the intention of helping the poor, has affected their interests adversely. Nationalisation reduces the number of legal buyers, chokes the free flow of goods, and delays payment to the gatherers, as government agencies find it difficult to make prompt payment. This results in contractors entering from the back door, but they must now operate with higher margins required to cover uncertain and delayed payments by government agencies, as well as to make the police and other authorities ignore their illegal activities. This reduces tribals' collection and incomes.

thirty years. The alienation of forest lands from the people who need it for satisfying their needs, and consequently forests turning into open access lands has been one of the main cause for degradation as well as for increasing misery of the people. Till the mid-eighties the response of the government to this crisis of deforestation was to bring more land under the reserved category (which increased from 26 m ha in 1951 to 46 m ha in 1988), and plant non-browsable and market-oriented single product timber trees in order to reduce pressure from local population and increase state revenues. This strategy became counter-productive and hastened the degradation process it was designed to prevent.

Subsidised supplies to industries and giving them priority have reduced availability of forest products for the people and resulted in their further alienation from the forest turning it into an open access resource. A study done by a voluntary agency (PRIA, 1984:35) showed that one-third of deforestation in Himachal Pradesh was due to excessive exploitation by forest-dwellers, and the rest due to commercial interests. Often the two processes of industrial extraction and unregulated use by the people follow each other, as the indiscriminate tree felling by the contractor-official-politician nexus has a corrupting influence on the forest dwellers, who also wish to 'make hay while the sun shines'. Moreover, the selective logging of a few large trees creates openings in the crown cover leading to better grass production, which invites cattle and goats. Their browsing makes regeneration difficult, and then the area is invaded by exotic, non-palatable weed species.

Finally, deforestation has often been associated with sudden policy changes or periods of uncertainty, like takeover of private forests, abolition of landlordism, setting up of Forest Corporations, and political unrest. Thus deforestation, rather than being a continuous phenomenon, could be interpreted as a one-shot operation often directed by governmental activity. It occurs as a result of not just local pressures on resources, but also 'any momentary disruption of the institutional framework responsible for resource protection and management' (Dove et al. 1992). Policy itself induced an environment of suspicion and distrust, which led to deforestation.

4.2 Impact on the people

Whereas the adverse effect of deforestation on local economy is well understood, the impact of industrial plantations is not so well documented. Plantations have usually been of single species, equally entailing loss of diversity and access, and often on a large scale, and in practice hardly pursuing an objective of benefiting the local people, beyond wages. This was recognised even by the Inspector General of Forests, Mr. Dalvi, who while addressing the 1981 International Conference on tropical forest management at Dehradun illustrated the inherent conflict arising out of forest plantations in the following terms:

as in the past, used for producing timber. In order to reduce pressure on forests, the NCA recommended growing trees on lands accessible to village people. To quote from its report:

Free supply of forest produce to the rural population and their rights and privileges have brought destruction to the forest and so it is necessary to reverse the process. The rural people have not contributed much towards the maintenance or regeneration of the forests. Having over-exploited the resources, they cannot in all fairness expect that somebody else will take the trouble of providing them with forest produce free of charge.One of the principal objectives of social forestry is to make it possible to meet these needs in full from readily accessible areas and **thereby lighten the burden on production forestry**. Such needs should be met by farm forestry, extension forestry and by rehabilitating scrub forests and degraded forests.' (GOI 1976:25).

Thus social forestry was seen by the NCA as a programme that would release industrial forestry from social pressures. Forest lands were still to be used for production of commercial timber, but in order to keep people out it was necessary to make them produce what they consumed free of charge, using village lands.

4. Consequences of the past policies up to 1988

Thus even after Independence legislation and policy together continued to reinforce the primacy of timber for commercial purposes. We shall argue that these policies have neither been sustainable in terms of checking the process of deforestation, nor have they improved peoples' access to forests for meeting their basic subsistence needs.

These are being briefly mentioned here.

4.1 Deforestation

No firm data are available in respect of the extent of loss of forest cover in India or its annual rate of deforestation. For the period 1975-81, the World Resources Institute (WRI 1990) cited a 2.3 per cent deforestation rate corresponding to a loss of 1.5 million ha a year. During the period 1981-85 the remote sensing data revealed loss of forest cover by one million ha a year, which was less than the rate during the earlier period. However, it is significant that after the change in forest policy in 1988 the rate of deforestation has drastically come down, although a direct co-relation between the new policy and regeneration of forests may be difficult to establish.

Unlike in other developing countries, extension for agriculture and shifting cultivation, the two familiar causes for deforestation, have not been the main cause of deforestation on forest lands in India, at least in the last

wood would have to be the *raison d'être* for the existence of forests. It should be project-oriented and commercially feasible from the point of view of cost and return' (GOI, 1976: 32). It recommended that Forest Corporations should be created to attract institutional finance. The NCA also suggested that it would not be in the interest of the programme to tackle forest on poor quality sites, where even with the best efforts the growth potential would be limited. It said:

There should be a changeover from the conservation-oriented forestry to more dynamic programme of production forestry. The future production programme should concentrate on clear felling of valuable mixed forests, mixed quality forest and inaccessible hard wood forests and planting these areas with suitable fast growing species yielding higher returns per unit area..... Resources for industrial raw material, both for internal consumption and export, should be stepped up through large-scale industrial plantations.

Thus the entire thrust of forestry during the first four decades after independence was towards the production of a uniform industrial cropping system, created after clear-felling and ruthless cutting back of all growth, except of the species chosen for dominance. Far more emphasis was placed on plantation rather than on management of existing trees. For instance, the 6th Five Year Plan (1980-85) of Madhya Pradesh stated,

To produce 25 m cu m of industrial wood it would be necessary to subject 5.5 m ha of production forest lands to the intensive management, that is, to clear-felling and planting. with the massive plantation programme being launched in the state, there would be extensive monocrops of teak in the forests. .. we should clear-fell and plant roughly one lakh hectare annually if we want production of industrial wood to keep pace with demand in future.

As regards efforts made to meet tribal demands for fruit, medicinal herbs etc. from forest lands, the same Plan document admitted, 'no special programmes were taken, which could directly contribute to the upliftment of the tribal economy. The programmes executed were essentially the forest development programmes which benefited the tribals only indirectly, .. (through) wage earning opportunities.'

Social forestry — As already discussed in section 2, the degradation of village lands led to increased pressure from the people on forests. By the mid-seventies the realisation became clear that if peoples' demands were not met it would be impossible to save forests. This was then sought to be achieved through a Social Forestry programme on village and private lands. It is significant that social forestry was not tried on forest lands, except in small measures in SIDA Projects of Bihar and Orissa, as such lands were,

In budgetary allocations too, emphasis was laid on the conversion of 'low' value mixed forests into 'high' value plantations of commercial species such as teak and eucalyptus. Forestry at that time meant raising trees in order to get sustained yield of timber in perpetuity. Exotic species were introduced to create man-made forests. Between 1952 and 1980 over three million ha of plantations were established, the major proportion of which were to fulfil industrial needs (CSE 1982). Out of Rs.670 million spent on afforestation during 1966-74, roughly Rs 560 million⁴ was on production forestry alone (GOI, 1981: 45). The use of bamboo for paper manufacture accelerated from a low of 58,000 tonnes at the end of the Second World War to over 5 million tonnes by 1987 (Hobley, 1996).

In Madhya Pradesh, which alone contains 23 per cent of India's forests, the Chief Minister, in a message for the Forestry Souvenir, said in 1976, 'Madhya Pradesh has taken great strides in the development of scientific forestry. There is much greater emphasis on man-made forests, designed to meet industrial requirements'. Thus scientific forestry was equated with raising of industrial plantations. A diverse forest ecosystem was converted by government into a single species 'timber mine'. The foresters, who were to conserve the forest ecosystem, became the main agents of reducing the diversity of forest species. As already discussed in section 2, the forest policy during the colonial period was also commerce-oriented, and thus this orientation has persisted for about a century up to 1988.

Forces which shaped the above policies — Three set of factors have been at work in shaping the above policies. First, development until the mid-seventies was associated in the minds of planners with creating surplus from rural areas and its utilisation for value addition through industry. Hence output from forest lands was heavily subsidised to be used as raw material for industries. The impact of such policies on forests or forest dwellers was not considered to be serious, as the resource was thought to be inexhaustible. Secondly, tribals and other forest dwellers, with little voice or means to communicate were remote from decision making, and politically their interests were not articulated. Thirdly, foresters were trained to raise trees for timber. Other intermediate and non-wood products were not valued, as indicated by their usual description as 'minor products', leading to adoption of technologies which discouraged their production. The combination of these forces led to perpetuation of a timber and revenue oriented policy which harmed both environment and the people, but was argued to be meeting the goals of the nation-state.

3.2 The National Commission on Agriculture 1976 and the Social Forestry Phase

The National Commission on Agriculture (NCA) too put its stamp of approval on this commercial approach in the following terms: 'Production of industrial



Forest policy in India

Most of the 23% of the country's geographical area which has been declared as forests falls under the jurisdiction of the government. With the forests mainly concentrated in regions of low agricultural productivity and poor soils and about 100 million people dependent on them directly and another 275 million dependent indirectly, it is needless to say the pressure on the forests is enormous. Thus it has been argued that the only way these forests can be sustained and protected for the present and the future is by involving the people in their protection and meeting their needs.

The paper presents a historical review of the various forest policies which have been tried in India and analyses their impacts on both forests and people, because current issues and dilemmas can be understood only in a historical context. It also discusses the unresolved issues in the implementation of the current forest policy and offers some practical solutions.

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